Papua's Threatened Forests: Conflict of Interest Government versus Local Indigenous People

HIDAYAT Herman^{1, 2, *} and YAMAMOTO Sota²

1: Indonesian Institute of Sciences, Gatot Subroto Street No. 10, Jakarta, 12710 Indonesia 2: Research Center for the Pacific Islands, Kagoshima University, Korimoto 1-21-24, Kagoshima, 890-8580 Japan *Corresponding author E-mail: hermanhidayat246@gmail.com

Abstract

The main threats of Papua's forests include increases in logging (both legal and illegal), oil palm plantations, and mining. This study examined local community perceptions of forestlands, highlighting the rising crisis of illegal logging, and government perception of forestlands, emphasizing the problems of the expansion of oil palm plantations and the increase in mining activity (Freeport Grasberg Company and Tablasupa Nickel Mining Company). "Political ecology," which highlights the role of stakeholders, was used as the theoretical framework for analysis of the illegal logging crisis, the expansion of oil palm plantations, and increased mining activity.

We found that illegal logging, expansion of oil palm plantations, and mining activity have led to forest degradation, environmental damage, river pollution, land disputes, human rights violations, and economic marginalization of local indigenous communities. In general, officers of non-governmental organizations (NGOs) and indigenous communities, such as the Amungme and Kamoro in the Jayawijaya Regency and the Muyu and Malind in Merauke, oppose the expansion of mining and oil palm plantations and are outraged by corporate forest and human rights violations.

Key words: forestry sector, illegal timber trade, mining, palm oil, special autonomy, stakeholders

Introduction

The forests of Papua (Irian Jaya) are among the last frontier rain forests in the Asia Pacific region. According to the MINISTRY OF FORESTRY (2005), the Irian Jaya forest covered about 34 million ha of Papua in the mid-1990s. By 2004, however, Forest Watch Indonesia estimated that its size had decreased to 30.4 million ha of natural forest cover, of which 10.2 million ha and 1.1 million ha, or 37% of the total territory

(MCBETH 2007), was considered degraded forest and deforested, respectively. Thus, the rich biodiversity and forest resources of Papua are seriously threatened. The principal threats include logging (both legal and illegal), the expansion of oil palm plantations, and increased mining. For example, illegal logging on behalf of Koperasi Peran Serta Masyarakat (KOPERMAS) accounted for more than 120 in 2003 in the Sorong Regency of West Papua, and was enabled by the manipulation and corruption of the local elite (bureaucrats, military officials, and politicians). KOPERMAS activities have led to conflict between local indigenous peoples and the local elite; while the local people are paid minimally for the illegal KOPERMAS timber trade, members of the local elite are handsomely paid. A similar situation occurred with the mining sector of the Freeport Company. Although the company is one of the largest corporate taxpayers, having paid the Indonesian government approximately USD 899 million in taxes and dividends in fiscal year 2010, the company's operations have led to forest degradation, river pollution, environmental damage, and conflict with the local Amungme and Kamoro people.

Because palm oil constitutes a lucrative business that brings in significant state revenues in the form export taxes and dividends, the Indonesian government plans to support the expansion of the palm oil estate in Papua. By 2011, about 1.5 million ha of Papua had been planted with oil palms, and another 2 million ha of plantations were planned in preliminary proposals (OBIDZINSKI *et al.* 2012). Additionally, the Merauke Integrated Food and Energy Estate project (the MIFEE project), backed by the Ministry of Agriculture, allocated another 1.6 million ha for agriculture, of which 600,000 ha was set aside for palm oil plantations. This mega-project for palm oil, rice fields, and food production will eventually threaten virgin forests and protected areas, including peat lands, water catchment areas, and residential areas, including of the villages of indigenous peoples.

After the Suharto regime stepped down in May 1998, centralized natural resources management shifted to a decentralization model, in which local governments were given land in which they could manage the natural resources. This "reformation" regime (1999-2004) emphasized democracy, accountability, good governance, and transparency with respect to natural resources management (HIDAYAT 2004). Decentralization gave local government's administrative, fiscal, and political authority. The political decision to transfer authority from the central government to local governments relied on the assumption that the local governments had sufficient capability and capacity to manage administrative affairs, fiscal matters, and politics (LITVACK *et al.* 1998). This policy of local autonomy was realized as part of a broader political decentralization in Indonesia enacted by Law number 22/1999 and subsequent Law number 32/2004. Conceptually, the local autonomy policy formed part of a new governance system that enabled greater democracy, accountability, participation, independence, and social welfare.

Decentralization and local autonomy were viewed as more consistent with democratic principles such as plurality, transparency, accountability, and local rule. In practice, the local autonomy granted to Papua Province via regulation Number 11/2001 afforded recognition of customary forest rights for indigenous peoples and additional land tenure systems. It also established the Papua's People Council (Majlis Rakyat *Papua*), which supplied the province with a greater share of revenues from natural resource utilization and exploitation. However, the central government's continued interest in the administrative, fiscal, and political matters related to natural resource management caused local conflicts and constrained implementation at the local level because of a lack of "government regulation" (peraturan pemerintah) (interview on 20 May, 2012). Thus, through enacting local regulation, local governments have issued concession permits for logging, industrial timber plantations, palm oil plantations, and mining to private entities. As a consequence of these concessions, local governments enjoyed new revenues from export taxes, dividends, and royalties from private companies, all of which empowered the economic and social development of local communities. The central government is reluctant to grant full authority to implement special autonomy to local governments created a conflict of interest between the central and local governments in terms of political authority, dividends, royalties, and export taxes on natural resources.

Thus, in this study, we examined two critical issues. First, we examined local community perception of forestlands with a focus on the rising crisis of illegal logging that threatens the Papua's forests. Second, we examined government perception of forestlands, highlighting the problem of expansion of palm oil planting, the MIFEE project, and mining activities (Freeport Grasberg Company and Tablasupa Nickel Mining Company).

Study Site and Data Collection

The fieldwork was carried out in May 2012 (Jayapura Regency, Sentani) and June 2012 (Manokwari Regency) (Fig. 1). The research method entailed in-depth interviews with purposefully selected informants familiar with the objective of 'guided' questionnaires, including two forestry agency officers, two officers of social and political agencies, two government officers, three academics, two tribal heads (Ondoafi), two NGO staff members, and five local farmers. Manokwari and Jayapura were selected for fieldwork based on two rationales. First, many local communities heavily depend on the Manokwari Regency site for forest resources. Additionally, the locals actively maintain customary forest rights and depend on the forest for subsistence (primarily meals), such as *sagu (Metroxylon* sp.), *gembili (Dioscorea* spp.), *talas* (e.g. *Colocasia esculenta*), etc. Second, the Jayapura Regency was chosen because of the government's interest in issuing logging concessions to the Tablasupa Nickel Mining Company in the Cyclops conservation forest. These government concessions have generated forestland conflicts and led to forest degradation. Other regions evaluated included the Merauke and Boven Diegul regencies, where palm oil plantations and



Fig. 1. Map of West Papua and Papua provinces, Indonesia.

the MIFEE project are located; the Jayawijaya and Sorong regencies, where Freeport is located; and the Raja Ampat, Bintuni, and Manokwari regencies, where data were collected on the illegal logging crisis using books, literature, newspapers, and website information.

A "political ecology" theoretical framework was applied in this study. This framework emphasizes combining ecological concerns (forest conservation and local forest rights) with political economics (logging, estate plantation, and mining concessions). This framework considers both government and private corporate interests in a side-by-side and ever-changing dynamic tension between natural ecology and human-based change and among diverse groups within society, from the local individual to regional and transnational entities (PETERSON 2000).

Results and Discussion

Problem one: Illegal logging

The illegal logging crisis

The pressure on Papua's forests has increased dramatically in recent years. According to TELAPAK AND ENVIRONMENTAL INVESTIGATION AGENCY (2005), Papua has become the main illegal logging hotspot in Indonesia. The report describes how approximately $300,000 \text{ m}^3$ of *merbau*¹ logs per month are smuggled from West Papua

¹ Merbau is the most commonly used name for the genus Intsia spp. Merbau is also known as "kwila" in Papua New Guinea, "ipil" in the Philippines, and "kayu besi" in Borneo/Kalimantan. Intsia bijuga and I. palembanica are mostly found in Papua-Indonesia and Papua New Guinea, and I. palembanica is found principally in Malaysia. Within Indonesia, merbau is virtually confined to the province of Papua. The dark timber is widely used for high-end general construction, exterior joinery, flooring, outdoor furniture, etc. Prices of merbau timber vary, but are around USD 150-200/m³ for the logs and USD 450-600 for sawed timber at the point of export (see TELAPAK AND ENVIRONMENTAL INVESTIGATION AGENCY 2005: 5).

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regions such as Sorong, Raja Ampat, Bintuni, Fakfak, and Manokwari to woodprocessing factories in China. As reported by OBIDZINSKI *et al.* (2007), cross-border, illegal timber trade in Kalimantan and Sarawak also involves a systemic "conspiracy" among government officers, timber traders, and local people. Illegal logging is systemic in Papua and is backed by powerful international syndicates of brokers and fixers in Indonesia, Malaysia, Singapore, Hong Kong, and China, each providing a specific link in the chain. Additionally, the logging and timber smuggling operations are supported and managed by high-ranking Indonesian military, police, and other government and law enforcement officials.² Telapak and Environmental Investigation Agency (EIA) findings suggest that approximately 2.3 million m³ of Indonesian timber were smuggled to the Chinese market. Indonesian government estimates are even higher, at around 9 million m³, valued at IDR 18 trillion (USD 1.86 billion). This illegal logging occurred during the political transition from the Suharto regime to the reformation period (1999-2004), which featured a "democratic" system of governance involving greater regional autonomy, accompanied by weak law enforcement, for many Indonesian districts.

In 2001, the Indonesian government passed a law granting special autonomy to Papua. The law established the Papuan People's Council, recognized traditional tribal or adat land tenure systems, and granted a greater share of the revenue from natural resource exploitation—i.e. 80% of income from forestry, mining, and fishing and 70% from oil and gas—to the Papua local government.

Two factors drive the growth of illegal logging. The first is the internal conflict of interest between the central government's Ministry of Forestry and local government agencies. Forestry management in Papua is chaotic, with many overlapping and conflicting regulations issued at the national level in Jakarta, the provincial level in Javapura, and at the district level. For instance, the Ministry of Forestry (central government) issued a decree permitting the allocation of small-scale local concessions of 100 ha for community forestry activity. The spirit of this decree during the reformation era empowered economic and social development among the indigenous local people and led to the creation of the KOPERMAS system, through which local communities could obtain permission to log on their customary forests in local cooperatives. More than 300 community logging co-operatives (KOPERMAS) exist in Papua. However, there have also been widespread reports of abuse of these logging licenses by the military, the police, and the forestry agency. The forestry agency reportedly acts as a "foster father" (bapak angkat), encouraging local communities to sell merbau timber to traders and resorting to intimidation if local communities are reluctant to sell.

The Ministry of Forestry has criticized the abusive practices of KOPERMAS: "KOPERMAS permits are only fronts for private businessmen to exploit our forests. These KOPERMAS permits are illegal" (DOWN TO EARTH 2005). KOPERMAS activities have led to conflict within local communities, which often feel powerless against the foster fathers. For example, in the Sorong Regency, a local community was promised IDR 100 million (USD 10,920) for 3,000 m³ of *merbau*, but received only IDR 25 million (USD 2,750) plus sacks of rice and noodles. In another case near Sorong, members of a community were paid only IDR 100,000 (USD 11)/m³ of *merbau* under pressure from a military police officer. In both examples, the greatest portion of profits went to the foster fathers and brokers. Meanwhile, the local communities benefit minimally from this illegal timber trade. The price of *merbau* is USD 120/m³ at the point of export in Papua, but costs USD 240/m³ upon arrival in China (Table 1). Furthermore, of the 120 KOPERMAS permits issued in the Sorong region through early 2003, over 40% were located in Raja Ampat district, despite much of the area's being designated as protected nature reserves (TELAPAK AND ENVIRONMENTAL INVESTIGATION AGENCY 2005: 7).

Furthermore, by 2002 the Ministry of Forestry had issued 54 logging permits that covered an area of 13 million ha, or almost one-third of Papua's total land area. Many of these concessions are linked to Indonesia's biggest forestry conglomerates, such as Kodeco and Korindo (from South Korea), Wapoga Mutiara Timber, Kayu Lapis Indonesia, and the Diajanti Group, as well as the military foundations such as Hanurata (ASOSIASI PENGUSAHA HUTAN INDONESIA 2011), which controls five concessions in Papua and shares its headquarters in Jayapura with a detachment of troops from the army's special forces. Military personnel are frequently employed as "security" personnel for logging operations in Kalimantan and Papua. The growth of both logging concessions and KOPERMAS concessions throughout Papua, especially in West Papua, are leading to unprecedented and unsustainable levels of exploitation of the province's forests, thereby leading to forest degradation in Papua. According to the Ministry of Forestry, deforestation averaged 118,000 ha/year over the past decade. An official release on 15 January, 2003, stated that timber was already illegally flowing out of West Papua to Malaysia, China, and other countries at a rate of 600,000 m³ per month, or twice that revealed in the Telapak/EIA report, and at a cost to the government of IDR 7.2 billion in lost revenues.³

The second factor that drives illegal logging is the external involvement of integrated international syndicates from Jakarta, Malaysia, Singapore, and Hong Kong,

Country	Normal price (USD/m ³)	Illegal timber trade (USD/m ³)	
Indonesia (Papua)	120-150	11-20	
China (on arrival)		240	
China for flooring price		468	
Retail price in UK and USA ^{*1}		2,228	

Table 1. The price of merbau from logging to processing in the market (USD/m³).

*1: Figure is for 26 m² of flooring, the average amount produced from 1 m³ of logs (source: Lawson 2006).

as well as China and India, the ultimate destination of the illegal timber. The bulk of the profits from this illegal trade enriches bank accounts in Singapore and Hong Kong, while the forest communities in Papua are paid very little and are left to count the cost. Brokers based in Jakarta and Surabaya, both of which are major Javanese ports and timber trading centers, frequently control illegal logging operations on the ground in Papua. These brokers are typically linked to senior military, police, and forestry officers, who ensure safe passage from Papua to international waters.

Malaysian traders (of Chinese origin) from Sarawak frequently act as logging gangs on the ground in Papua. The role of the Malaysian presence in Papua is to provide the heavy machinery for tree cutting and the technical expertise required to fell the *merbau* trees. Machine operators typically come from Sarawak. Singapore acts as a major regional hub in the illegal logging business. Singapore-based shippers arrange transport for the logs and provide Letters of Credit for illegal timber deals. Singaporebased traders have the international connections needed to find buyers for the logs. Hong Kong-based brokers sell huge quantities of merbau to the timber manufacturing industry in mainland China. Huge volumes of illegal merbau logs are moved out of Papua and into the emerging markets of China and India. Consumption of merbau in these two countries is escalating rapidly for processing into flooring and furniture products for both domestic needs and for export, mainly to the United States, Japan, and Europe. In the 9 months prior to September 2004, China exported 193,000 tons of wood flooring worth USD 240 million, which constituted a 77% increase over the same period the previous year (TELAPAK AND ENVIRONMENTAL INVESTIGATION AGENCY 2005: 26). The United States is the largest market for Chinese wood flooring exports, accounting for 30% of all sales, worth USD 96 million annually. Other important markets include Canada, Japan, and the United Kingdom.

Half of all tropical logs shipped worldwide are targeted for China,⁴ and Indonesia has become China's largest supplier. Chinese import statistics show a dramatic rise in the volume of Indonesian logs entering the country between 1997 and 2001. In 1997, the volume of imported logs registered as Indonesian was just 31,000 m³, but by 2001, the volume had soared to 1.14 million m^{3.5} During this period, imports of Indonesian logs through Nanjing ports grew by 8.30%, and the growth was fueled by illegal timber.

An additional factor drives illegal *merbau* trade. China is already the world's biggest consumer of many commodities, such as timber, steel, copper, coal, oil, gas, and cement. The Chinese government banned logging in its own forests and implemented a huge tree-planting program to prevent devastating floods like the one that occurred in 1998. As a result of low tariffs on timber imports, China's timber and wood product imports have skyrocketed from 1 million m³ in 1997. Imports of logs alone had reached 16 million m³ in 2002, and by 2010, they were projected to reach

⁴ See OLDFIELD et al. (1998).

⁵ See WWF (2002).

100 million m³. Today, China is the number one buyer of timber from countries most affected by the scourge of illegal logging, including Indonesia, Papua New Guinea, Cameroon, and Gabon.⁶ The country is also the main buyer of wood from Russia. Additionally, China uses large portions of exports from Liberia (47%), Myanmar (42%), and Cambodia (78%), all countries in which the sale of stolen timber has fueled armed conflict.⁷

Taking action to stop illegal logging

The economic, social, and ecological damage inflicted by illegal logging and subsequent deforestation in Papua is great. After Susilo Bambang Yudhovono was elected Indonesian President, he declared a "war on illegal logging" in a speech on 11 November, 2004, near Tanjung Puting National Park, Kotawaringin Barat, Central Kalimantan, and he followed his announcement with a presidential decree to stop illegal logging (Inpres 4/2005). President Yudhovono instructed the National Police Chief Da'i Bachtiar to lead a coordinated crackdown on illegal loggers in cooperation with the Ministry of Forestry (MS Kaban) and the Minister of the Environment (Rachmat Witoelar). The effort, which involved a 1,500-member team under the control of the national police, was instructed to take action against anyone involved in illegal logging over a 2-month operation dubbed "Hutan Lestari" (Sustainable Forests). The integrated team consisted of officials from the police, military, Attorney General's Office, the Ministry of Forestry, Immigration, and Customs. The goal was to rapidly crush systemic corruption and the integrated syndicates of illegal logging. Between 2001 and 2003, the Papua police reported 19 cases of illegal logging entailing the seizure of approximately 100,000 m³ of merbau logs, charges against 250 heavy logging companies, and indictments against 62 suspects, of whom 42 were Malaysian citizens. Nevertheless, based on a confidential report asserting that 300,000 m³ of merbau illegally leave Papua every month, the seizures in the Hutan Lestari operation were negligible.

According to the confidential report, by late April 2005, the *Hutan Lestari* operation seized more than 340,000 m³ of logs, 19,000 m³ of timber, five boats, and 22 barges. The task force apparently issued summonses for 157 people; 35 were detained, and 14 case files were submitted to prosecutors. For example, in November 2004, Papua police seized the vessel MV Fitria Perdana. The vessel was carrying 5,000 m³ of *merbau* timber heading for Biak Island.

There was also an external effort to halt illegal logging. In December 2002, the Indonesian and Chinese governments signed a bilateral agreement pledging to work together to halt the shipment of "stolen wood." Unfortunately, these measures had minimal influence on the illegal timber trade in the field. China has failed to respond to the Indonesian government's requests to implement the agreement. Indonesian Forestry

⁶ See "Papua Refuses to Revoke Logging Licenses," THE JAKARTA POST, 25 March, 2003.

⁷ See "Court Issues Unclear Ruling in Papua," THE JAKARTA POST, 12 November, 2003.

Minister MS Kaban asserted that the Chinese "did not care where [their] commodities come from." He claimed that all Chinese imports are considered legal under existing Chinese trade regulations. As a result, in the two years since the bilateral agreement was signed, not a single piece of stolen wood has been seized upon arrival in China. The failure of this agreement highlights China's lack of commitment to a ban on illegal logging and to implementation of meaningful law enforcement and hard sanctions. Despite the lack of action by China, there is much that could be easily done by Indonesia. For example, *merbau* log vessels travelling from West Papua to China carry falsified Malaysian papers, including Certificates of Origin and entry permits (TELAPAK AND ENVIRONMENTAL INVESTIGATION AGENCY 2005: 28). According to a Telapak/ EIA report, a leading American distributor of hardwood flooring, Goodfellow, Inc., is selling products made from logs illegally felled in West Papua by the China Business Company. Goodfellow's president and CEO issued a public statement that the company is "committed to marketing products only where there is complete and documented legal chain of custody," and that its suppliers would soon be discussing this issue with Indonesian officials.8

Other actions to stop destructive logging, such as effective measures to stop smuggling syndicates and international trade in illegal timber, are also needed in consumer markets such as China, the USA, Japan, and the UK and in producing countries such as Indonesia. The UK, the USA, Canada, and other G-8 countries are currently negotiating new measures to halt imports of illegally cut timber. For example, on 18 March, 2005, G-8 environment and development ministers met in Buxton, England, and committed to action against the illegal timber trade.⁹

Government perception of forestlands

The government's policy of issuing logging and estate plantation permits eventually created land conflicts between indigenous peoples and private companies in Papua. The government does not recognize customary forest rights, as they are not written into law in Indonesia. Instead, the government argues that natural resources management is left to the state, based on the 1945 Indonesian Constitution, Article 33, Verse 3, which states, "Land, water, and natural resources within Indonesia shall be controlled by the state and used for the welfare of all Indonesian people." Furthermore, the state interprets Article 22, Verse 2, as giving the government the authority and responsibility to manage all significant natural resources for the welfare of the entire nation, especially within the forestry and mining sectors. When the Suharto government came to power in 1966, economic development was the overriding paradigm for overcoming the economic crisis inherited from the Sukarno regime. Suharto's economic planners took immediate steps to strengthen Indonesia's weak economy through a Five-Year Development Plan (Pelita I 1969 to Pelita VI 1997) that

⁸ Letter from Richard Goodfellow dated 18 April, 2005 (cf. http://www.downearth-indonesia/org/story).

⁹ See DOWN TO EARTH (2005).

covered many sectors. The Suharto regime issued the Basic Law of Forestry number 5/1967 and government regulation number 21/1970, which created a logging forest concession mechanism for the government to exploit natural resources, including those in the forestry sector, to achieve a economic growth, ignoring the customary forest rights of indigenous peoples. As a result, the forestry sector began to develop the legal framework required to permit private companies and state forest enterprises (Inhutani)¹⁰ to harvest and export timber. Sumatra and the Kalimantan islands were the first targets for exploitation because they had the largest stocks of commercially valuable tree species and were closest to the Asian markets of Singapore. Hong Kong, Taiwan, South Korea, and Japan (HIDAYAT 2004: 50). Excess log exploitation led to deforestation, and the government issued an export-logging ban in 1984. The goal of this regulation was to establish domestic "sawed timber and plywood industries," which actively invited additional logging concession holders, other companies, and government capital. As a result of this policy. Indonesia received added value from its forestry industries and became the largest plywood exporter in the world by the mid-1990s. It also benefited from foreign exchange earnings, taxes, and job creation for local people in the province and districts (HIDAYAT 2008: 65-66).

In contrast, in many Indonesian districts, the economic condition of indigenous local communities, especially those that formerly depended on timber and non-timber forest resources and products, worsened considerably after implementation of the Foreign Act (number 1/1967), the Domestic Investment Act (number 6/1968), and the Forestry Act (number 5/1967) on logging forest concession, which eventually led to land conflict and contributed to forest degradation in many districts (TJITRADJAJA 1993, HIDAYAT 1997).¹¹ The Suharto regime failed to recognize the customary forestry rights of indigenous peoples and instead only allowed the collection of very limited forest products and strictly prohibited the cutting of trees and utilization of their own forestlands. Therefore, land conflicts between local forest dwellers and logging concession holders have been widely reported in Indonesian outer islands, such as the conflict over 18,600 ha that occurred from the end of the 1980s through the end of the 1990s between the Muara Gusik villagers and ITCI (a private company). Land conflict also occurred in 1991 on part of the 299,975 ha industrial timber planting concession area between the Arara Abadi Forestry branch of the Sinar Mas holding company and the local people of the Bengkalis and Kampar districts of the Tarik Serai, Tasir Serai Timur, Pinang Sebatang Barat, and Koto Garo. The local communities claimed that part of an acacia plantation in those villages belonged to the local people through customary forest rights and asked for the return of the concession area (HIDAYAT 2011:

¹⁰ Inhutani's major shareholder is the state. Inhutani was established to carry out logging concessions in outer islands such as Sumatra, Kalimantan, Sulawesi, and Papua. In contrast, Perhutani, which is also owned by the state, was established for planting and selling the teak from plantations concentrated in Java Island. Inhutani is mostly non-profitable. The company is rife with corruption in the form of collusion between Inhutani officers and Ministry of Forestry officers.

¹¹ These land conflicts occurred in many districts in Sumatra, Kalimantan, Sulawesi, and Papua. Macro-mapping by logging concession holders enabled the annexation of customary forest rights of indigenous peoples and/or local communities.

137). After these land conflicts, a new Forestry Law number 41/1999 was issued to replace number 5/1967 in the spirit of reformation that emphasized accountability and transparency after the Suharto regime stepped down (May 1998). The reformation laws recognized the customary forest rights of indigenous peoples based on Forestry Act number 41/1999.

The failure to recognize the customary forest rights of local communities led to land conflicts over forest resources. But land conflicts were not just about establishing rights; they were also about access. RIBOT and PELUSO (2003) define "access" as "the ability to derive benefits from things." Benefits include materials (land, forest products), people (manpower), institutions, and symbols. Power is also a benefit, and power can be in the form of material goods (wealth and arms), culture (dignity and charisma), or social status (position of power). Local communities claimed customary forest rights and access to their own land based on a moral claim, despite the fact that they had no legal standing.

Conflict over forestland access and resources management has been one of the impediments to achieving sustainable forest management, particularly "natural forest" management activities such as logging permits (HPH) and industrial timber planting concessions (HTI). To date, only some management units of HPH and HTI companies have been able to realize sustainable forest management using "social management¹²." Social management performance has been evaluated by several indicators, not just those directly related to conflict resolution but also those related to social capacity development as a whole, including "conflict management" indicators (HASAN and NURROCHMAT 2012: 245-247).

The government invited both domestic and foreign investors to participate in several sectors, including oil palm plantations, the mega MIFEE project, KOPERMAS, and mining exploration. These investments were initially launched as "national development" initiatives to generate increased foreign exchange earnings, tax revenues, gross domestic product (GDP), and jobs. However, these investors required huge swaths of land to extend their businesses in logging, plantations, and mining, and eventually caused land conflicts with local communities in many districts in Papua.

Problem two: Palm oil and the mega MIFEE project

There are two critical threats to Merauke's forest. The first is the MIFEE project. It was established in 2009 with the goal of providing food and energy for Indonesia and for export by developing estates based on rice, palm oil, sugar cane, cacao, and soybean in Merauke. The MIFEE project has been designated as a national special economic zone. The second threat is the expansion of palm oil areas.

As of early 2011, palm oil plantations covered 7.8 million ha in Indonesia;

¹² Social management is a range of activities that aim to improve benefits and reduce the impact of forest management activities (both logging and industrial timber activities) on the lives of local communities across generations (based on Indonesian Ecolab Standard Institute/LEI 5000 year 2000).

previously, between 2006 and 2010, palm oil cultivation covered only 5.9 million ha (SLETTE and WIYONO 2011). In 2010, these plantations produced 22 million tons of crude palm oil (CPO); by the end of 2011, CPO production had increased to 23.6 million tons (OBIDZINSKI et al. 2012). Of this quantity, 15.5 million tons of CPO was allocated for export. Investors received IDR 122.7 trillion in foreign exchange earnings, and the government received just IDR 14 trillion in CPO taxes (KOMPAS 15 September, 2011). Most plantations and CPO production sites were located in Sumatra and Kalimantan, but as new land available for plantations became more limited, the annual development of new plantations gradually declined in Sumatra and Kalimantan. Thus, Papua Island (Irian Jaya) was identified as the next target area for palm oil production in the 2000s. By 2011, oil palm plantations covered approximately 1.5 million ha of Papua, and another 2 million ha of plantations were planned (Papua Province Bureau for Plantation Estates, April 2011). In 2008, the Papuan governor issued a policy for accelerating poor/rural development through oil palm plantations for biofuel production (USAID 2009). The role of palm oil investors was significant in establishing CPO processing sites such as Perkebunan Nusantara XIII Company, which was established as a government-owned CPO factory in West Kalimantan in the 1980s. Additionally, big investors and multinational groups such as Sinar Mas, Wilmar, Golden Hope, Asian Agri, Cargill, and Lyman control major oil palm plantations in the provinces (OBIDZINSKI et al. 2012). According to official statistics, 337 oil palm plantations covered a total of 3.6 million ha in 2009 (DINAS PERKEBUNAN KALIMANTAN BARAT 2011).

The rich biodiversity of the West Papuan forest is threatened by deforestation. The main threats to Papua's forests are oil palm plantations, logging (both legal and illegal), and mining. The exact amount of land set aside for oil palm plantations is unclear, and figures vary according to sources. According to McBETH (2007), the Indonesia central government plans to massively expand oil palm plantations in West Papua. The conversion of forestland to oil palm estates is planned for four million ha in areas such as Merauke, Boven Diegul, and Mappi and in the Sari, Keerom and Jayapura Regencies. About 90% of the area designated for conversion to oil palm plantation is primary forest that has never been logged (MCBETH 2007). Furthermore, Greenpeace claims that the Indonesian President has asked Papuan Governor Barnabes Suebu to open five million ha of land for conversion into oil palm plantations in a bid to increase biofuel production.¹³ A source in a Down to Earth article quotes the Indonesia's Investment Coordinating Board as follows:

"Over two million ha of land in Papua are available for palm oil development. Most of this (1.935 million ha) is spread through nine districts in Papua Province, with the remaining 150,000 ha in the recently renamed 'West Papua' Province. BKPM classifies this land

¹³ RADIO NEW ZEALAND INTERNATIONAL, 9 October, 2007.

as state and customary/collective land. The BKPM data states that land already taken for palm oil schemes covers around 90,000 ha in Papua, and around 30,000 ha in West Papua, according to Ministry of Agriculture data."

Since 2006, biofuels have increasingly attracted the Indonesian government's interest because of their potential to reduce the country's reliance on fossil fuels (BRITISH PETROLEUM 2010). Because Indonesia has long been dependent on fossil fuel energy for revenues and to finance development, it has become increasingly urgent to conserve remaining oil reserves and look for alternative sources of energy. In 2005, revenue from the oil and gas sector was about USD 19.2 billion (24% of Indonesia's GDP). Unfortunately, production of Indonesian oil has declined over the past decade, while consumption has increased. As a result, in 2004, Indonesia became a net importer of oil, and the government issued many energy subsidies (BEATON and LONTOH 2010). Based on the National Energy Policy of 2006, the Ministry of Energy set guidelines for the use of biodiesel by heavy industries and established blending targets. The government has actively courted investors to apply for land and industrial licenses. The government hoped that by 2010, the biofuel sector would have created 3.6 million jobs in rural areas and helped reduce poverty by 16% (DILLON et al. 2008, MINISTRY OF ENERGY AND MINERAL RESOURCES 2008, OXFAM 2008, OBIDZINSKI et al. 2012). In 2007, the first year that Indonesia's biofuel policy was in effect, investment in the biofuel sector was significant. But by late 2007, the Indonesian Association of Biofuel Producers reported that 17 biodiesel companies had reduced production or temporarily suspended operations. In 2008, only five mills were operational, which caused biodiesel production to fall by 60%. The decline was caused by a drop in the price of fossil fuels on the international market, which rendered CPO-based biofuels uncompetitive. The price of CPO on the international market is variable, but it has recently been on the rise. In March 2008, it peaked at USD 1,410/ton. Throughout 2011, the price hovered around USD 1,000/ton.

Several factors indicate a high demand for palm oil, including rising palm oil prices, which make biofuels economically viable. Indonesia has now become the largest global producer of palm oil, with production of 17-17.2 million tons in 2007 and 22.6 million tons by the end of 2011. Other reasons for increased global demand for palm oil are the trends toward reducing greenhouse gases and reducing reliance on fossil fuels. According to reports of the NGO Down to Earth, the demand for biofuel is also driven by government policy. For example, the European Union (EU) has stated that 5.75% of all vehicles must use biofuels by 2015 as part of a broader set of measures to reduce greenhouse gas emissions.¹⁴ The EU policy has been criticized by some NGOs in an open letter to the EU, and its citizens have declared that implementing the targets:

"...means that the European Union (EU) will risk breaching its international commitments to reduce greenhouse gas emissions and protect biodiversity and human rights; because the proposed targets will, amongst other things, promote crops with poor greenhouse gas balances, trigger deforestation and loss of biodiversity and exacerbate local land use conflicts."¹⁵

Cutting down tropical forests in Papua for oil palm plantations will not only lead to increased global warming; it will also destroy the area's rich biodiversity, which is utilized by indigenous people in every aspect of their daily lives. Therefore, pro-preservation NGOs emphasize the sustainable use of forest resources for local communities, including their use for gathering foods and medicinal plants, for hunting, for collecting timber for home construction, and for their cultural and spiritual significance. Scott Frazier (FRIEND OF THE EARTH INTERNATIONAL 2004) notes the impact of plantations on biodiversity:

- a) 80-100% of mammal reptile and bird species are lost (when plantations are established in primary tropical forests);
- b) Fire is often used as a management tool on plantations. This fire can spread to the surrounding habitats.¹⁶

Frazier also asserts that palm oil production brings pollution. Carelessly and copiously applied pesticides, herbicides, and fertilizers, along with waste product processing, endanger aquatic and terrestrial flora and fauna. Additionally, a critique by the International Crisis Group in 2007 noted that "the social and political tensions generated by natural resources investment have always been an important element of the Papua conflict. Papua and West Papua's timber, estate, and mining are vital to the national economy (income), yet their populations are poorer than those of any other provinces in Indonesia except West Nusa Tenggara." Another concern is the "the potential influx of non-Papuan Indonesian workers from Java, Bugis, Buton, and Makassar." Recently, native Papuans have expressed concerns that they will become a minority, particularly in big cities such as Manokwari, Sorong, Abepura, Sentani, and Jayapura. The influx of other ethnic groups has created the potential for additional conflict between the local communities and other migrants.¹⁷

The mega MIFEE project also threatens forestlands in Papua, especially in Merauke. In June 2008, Bogor Agricultural University, which has studied the MIFEE project, argued that Indonesia will face a crisis in 2010-2025. A lack of sufficient land in Java due to the very rapid increase in population and industries has resulted in the

¹⁵ See DOWN TO EARTH (2007a).

¹⁶ See KARTIKASARI et al. (2012).

¹⁷ See INTERNATIONAL CRISIS GROUP (2007).

emergence of nine megalopolises in Java, but a decline in the food supply is anticipated as Indonesian populations increase to an estimated 300 million in 2025. These conditions could lead to famine, highlighting the need to find a solution in the form of vast areas of land to be used for agricultural development. For this reason, in 2009, Indonesian President Susilo Bambang Yudoyono declared the establishment of MIFEE, with the goal of feeding "Indonesia and the world" by developing a food and energy estate based on rice, palm oil, sugar cane, cacao, and soybean in Merauke. Merauke has been designated a national special economic zone to attract the USD 8.6 billion of investment needed for the project. MIFEE is one of the priority programs of the second term of the Yudoyono presidency (2009-2014). To fulfill its ambition, the Indonesian government invited multinational companies from the Middle East, Asia, and the US, as well as from Indonesia, to participate. More than 30 companies, such as the Bin Laden Group (Saudi Arabia), as well as companies from Oman and the United Arab Emirates confirmed their interest in this project and have already received concessions from the Indonesian government. Asian corporations participating in the project include the Mitsubishi Group (Japan), the Wilmar Group (Singapore), and LG International and Korindo (South Korea) (Table 2). North American firms participating in MIFEE include the International Paper Company (Memphis, Tennessee), which has discussed the development of a mill in either Kalimantan or Merauke with the Indonesian Ministry of Forestry. Domestic companies participating in MIFEE include the Medco Group, the Artha Graha Network, Bangun Cipta Sarana, Comexindo, Sumber Alam Sutra, Rajawali Nusantara, Sinar Mas (Kertas Nusantara), and Diegul Agro Lestari as part of Astra Agro Lestari (Table 2).

Agus Samule, an expert on the Papuan governor's staff, opposes the MIFEE project. Samule has said that going forward with MIFEE would be an act of grave injustice, because it would mean that Papua, and especially the Merauke Regency, would be expected to bear all the consequences of the food crisis in the world and in Indonesia. Instead, he believes that this burden should be borne by districts throughout

Table 2. Company actors of the MIFEE project	t.
Domestic company	Overseas company
Medco Group	Mitsubishi Group (Japan)
Artha Graha Network	Wilmar Group (Singapore)
Bangun Cipta Sarana	LG International (South Korea)
Comexindo	Korindo (South Korea)
Sumber Alam Satra	International Paper Company (USA)
Rajawali Nusantara	Bin Laden Group (Saudi Arabia)
Sinar Mas	
Diegul Agro Lestari	
Perkebunan Nusantara XIII Company	

Source: "Grand Designs for Merauke: MIFEE in Theory and Practice".

Indonesia, from east to west and from north to south.¹⁸ Local NGOs, such as SKP-KAM, Foker, SORPATOM, and AMAN, have also raised strong opposition to MIFEE based on major environmental and ecological concerns.¹⁹ AMAN has stated that, under MIFEE, the conversion of customary forestlands into agricultural estates and utilization by companies amounts to a human rights violation against indigenous tribes and will radically alter the nature of local communities.²⁰ The Malind tribe will become a minority in its own land because skilled migrant workers with better training from other provinces have been invited to work for MIFEE. Moreover, the conversion of protected forests into agricultural lands is potentially a violation of Forestry Act regulations, and will lead to widespread deforestation of Merauke. Furthermore, the MIFEE project contradicts the Indonesian Government's commitment to reduce greenhouse gas emissions by 26% by 2020. It also conflicts with a recent USD 1 billion Reducing Emissions from Deforestation and Forest Degradation (REDD) agreement with the Norwegian Government to preserve Indonesia's rainforests, particularly those in Papua.

In contrast, the head of the regency, Johanes Gebze, has been positive with respect to the MIFEE project. Gebze has favored increasing local autonomy and improving food self-sufficiency. The local and central governments have carried out their own studies and produced draft positions on the MIFEE project. The central government, which had originally crafted MIFEE, drafted the additional government regulation No. 20/2008 regarding National Land Allocation. As a result, the Indonesian president enacted Inpres No. 5/2008, which requires adoption of the MIFEE plan as part of provincial land allocation. Initially, the provincial government recommended the allocation of 5,552 ha for MIFEE, but the Ministry of Agriculture suggested that 1.6 million ha should be allocated for the project. The huge area included not only agricultural land and transmigration sites suitable for food production but also virgin forests and protected areas including peat lands, water catchment areas, and residential areas set aside for the villages of the indigenous Malind tribe. Unfortunately, in the implementation of the MIFEE project by the Merauke Regency and the central government, there has been virtually no effort to improve the destinies of indigenous peoples with respect to raising per capita income, establishing training centers, or providing modern equipment and technology for agricultural production.

The response to the MIFEE project by indigenous tribes, such as the Malind, Muyu, Mandobo, Mappi, and Ayu, has been overwhelmingly negative (Table 3). They tribes have asserted that they are victims of conspiracy by investors and government officers and that they have been manipulated into releasing customary forestland

¹⁸ See MOIWEND (2010).

¹⁹ Office for Justice and Peace of the Archdiocese of Merauke (SKP-KAM), Papua NGOs Cooperation Forum (Foker LSM), Solidarity for Papuans (SORPATOM), and the Indigenous People's Alliance of Indonesia (AMAN).

²⁰ See paper titled "Request for Consideration of Customary People (Masyarakat Adat) in Merauke, Papua Province, to the United Nations Committee for Erasing Race Discrimination" on 23 April, 2010 (http://www.aman.or.id/in/masyarakat-adat/masalah-adat/179.html).

Sector issue	District	Tribe
Merauke Integrated Food, Energy, and Estate (MIFEE) project	Merauke	Malind, Muyu, Mandobo, Mappi
Mining project (Freeport Grasberg Company)	Jayawijaya (Tembagapura) Jayawijaya (Timika)	Amungme Kamoro
Mining project (Tablasupa Nickel Company)	Jayapura (Sentani)	Sentani

Table 3. Local indigenous communities.

Source: KRISTIANTO 2010; interview with informants, May 2012.

rights. The Farmers Association of Indonesia and AMAN have loudly voiced these same concerns. The Malind tribe, which has 50,000 members, is one of the tribes most affected by the food and energy project, and the economic marginalization of the Malind people in Merauke is only expected to worsen. The Malind will lose their customary lands through seizure in the name of development, and they will lose their customary systems and regulations. The unique identity of the Malind tribe will be gradually lost, along with the destruction of the natural features that are the symbol of each clan.

Problem three: Mining activities

We evaluated the mining activities of Freeport Grasberg Company and Tablasupa Nickel Mining Company, located at Mount Jaya and in the Cyclops Forest Conservation Area, respectively. Both firms have been accused of human rights abuses and ecological damage.

Freeport Grasberg Company

Freeport Grasberg Company is one of the world's largest gold and copper mining operations. It is located in Jayawijaya Regency, Papua, and is situated on 16,500-foot, snow-capped Mount Jaya, a few hundred miles south of the equator in Papua New Guinea. Recent estimates suggest that the mine has the third largest reserves of copper and the second largest reserves of gold in the world. Gold production from the mine averages between one million and 1.5 million oz/year; copper production averages 1 billion lb/year. The mine employs approximately 17,000 people, at least 85% of whom are non-Papuans (ROBERT 1996: 15). According to BRYCE (1996), the Grasberg Mine contains gold, silver, and copper valued at USD 50 billion. Politically, Freeport received mining permits and concessions after the Sukarno regime stepped down in 1966. Freeport established close contact with the new Suharto regime in 1967, and was the first multinational corporation to sign a contract with Suharto's New Order Government. Under the contract, Freeport was obliged to house, supply, and transport any government officials, including members of the security forces and soldiers for protection of the mining area. As was typical in newly independent countries during

the Cold War and beyond, the Suharto regime had come to power with backing and assistance from the US government, including the Central Intelligence Agency, because of its foreign-investment-friendly economic policies (ABRASH and KENNEDY 2001).

The wealth of Freeport's mine deepened the relationship between the company and the Indonesian government. Freeport has been responsible for about two thirds of Indonesia's annual gold production, and it is regularly among the largest corporate taxpayers in Indonesia. Parent company Freeport McMoRan Copper and Gold, Inc., reported that it paid the Indonesian government as much as USD 899 million in financial obligations in the first half of 2010 alone. This payment comprised USD 581 million in corporate income taxes; USD 137 million in employee income taxes, regional dues, and other taxes; USD 105 million in royalties; and USD 75 million as the government's share of dividends ("Chronology of Events in West Papua" 2012). The government has thus deemed Freeport to be of strategic importance to the state; its importance exceeds its monetary value, because the government also shares the corporate dividends. Freeport became the first symbol of foreign investment confidence in the Suharto regime, and the Freeport mine was declared one of ten "national assets." The Freeport mine also generated valuable income for Papua (Irian Jaya), accounting for 88% of the province's non-oil exports (BALLARD 2001: 23).

Development of Freeport mining areas began in 1971, and production commenced in 1972. The Freeport mines currently produce 78,000 tons of ore a day, with production increasing from 7,500 metric equivalent tons in 1972, to 66,000 metric tons in 1993, and 220,000 metric tons in 1998. Unfortunately, unsustainable waste management has led to pollution; waste was thrown directly into the Agabagong River, which flows into the Aijkwa River and then into the Arafuru Sea. The mine also dumps 300,000 tons of waste tailings directly into the Aijkwa River every day.²¹ As a result, environmental damage has been great, particularly in the aftermath of a large overbank event at the Aijkwa River in 1990 that saw tailings disgorged over a 30 km² area of lowland forest. The scene was described by one observer: "Dead and dying trees are everywhere, their broken branches protruding from tracts of gray sludge.... Vegetation is being smothered by accumulated sludge that is several yards deep in places.... By the company's own calculation, 51 square miles of rain forest is expected to be destroyed before the century is out" (ROBERT 1996: 16). Freeport, with its careless exploitation of the environment over the course of more than 30 years, has damaged 30,000 ha of rainforest as well as the Aijkwa River. The environmental damage has affected thousands of local people, primarily the Amungme and the Kamoro, who depend on natural resources for their food, subsistence, water, and cultural practices (ABRASH and KENNEDY 2001). In 1977, indigenous people affiliated with the Free Papua Movement issued their own critique of Freeport's environmental record by blowing up one of its ore pipelines.

²¹ Press release, "Rio Tinto's Shame File: Indonesian Landowners' Discontent Represented at Rio Tinto AGM," Mineral Policy Institute, 22 May, 2000.

To counter the intense criticism of its environmental record, Freeport has employed environmental consultants. In a 1999 report written for Freeport, environmental consultants from the consulting company Montgomery Watson suggested that the company "incorporate modern, state-of-the-practice geotechnical stability techniques in sitting and designing the Wanagon and Carstenz (Overburden Stockpiles)." However, Freeport's management ignored and suppressed the consultants' recommendation that dumping at Wanagon be regulated. As a result, just months later, in May 2000, the Wanagon stockpile underwent a massive rockslide that entered Lake Wanagon, generating a flood of water that washed downstream like a tidal wave into the populated valley below, and four workers were killed. The gray sludge rockslide to downstream areas killed the rainforest as far away as 80 km from the mine site, and an area that was once a source of livelihood for local indigenous communities was polluted (ABRASH and KENNEDY 2001).

There are two large indigenous communities in the Freeport concession area: the Amungme of the highland area around the Grasberg mine and the township of Tembagapura, and the Kamoro on the coast and in the lowland plains in the new towns of Kuala Kencana and Timika. Today, there are also almost 100,000 immigrants, the majority of whom have arrived from other parts of Indonesia since 1990. Unfortunately, while work on the Freeport contract began in 1967, the local government did not involve local communities as shareholders or landowners. Instead, Freeport paid no rent or royalties to the Amungme, other than the stipulated "reasonable compensation for dwellings to local inhabitants and cost of their resettlement." Therefore, as the mine infrastructure expanded in 1973 and as the township of Tembagapura was constructed, the Amungme of the Wa Valley continued to protest what they saw as a constant process of encroachment on their land, with neither consultation nor adequate compensation. The protests led to the signing of an agreement that was negotiated at Tembagapura in January 1974 between Freeport, local communities, the Amungme community leaders, and military government officials. As part of the agreement, Freeport agreed to construct 19 buildings in the villages of Wa, Tsinga, and Kwamki Lama and to offer re-employment to Amungme laborers, including school and health clinic workers, in exchange for local landowners' approval of its mining activities. The company responded by injecting large sums of money into indigenous communities and also offered a "One Percent Trust Fund," which designated 1% of the company's annual revenues to a regional development program. Unfortunately, the Lembaga Musyawarah Adat Suku Amungme (LEMASA), the Amungme Tribal Council, represented by LEMASA leader Tom Beanal, refused to acknowledge the fund and unconditionally and absolutely rejected Freeport's offer. LEMASA instead insisted that the Freeport mine be closed in response to the human rights violations and environmental damage done by the Company. The Amungme leaders did not fully understand the implications of the 1974 agreement. Those leaders still alive today insist that they went to the meeting prepared to deny Freeport further access to their lands but were intimidated into signing the agreement by the presence of military officers acting

as mediators.

Freeport has continued its mining exploration and has established a lucrative, highly profitable business. In 1991, Freeport CEO James Robert (Jim Bob) signed a new contract with the Suharto regime to exploit a huge gold deposit that Freeport had discovered at Grasberg in 1988. Circumstantial evidence suggests that the deal was rife with the corruption and collusion for which the Suharto regime has since become infamous.²² After obtaining the extended contract from the Indonesian government, Freeport sought large injections of foreign capital, provided primarily by Rio Tinto of Australia, to finance this massive increase in the rate of mining.

Consecutive protests against the expanded mining occurred in May 1994 and in March 1996. In November 1994, a wave of defiance began in the Tsinga valley, where a group of some 200 members of the Free Papua Movement, or Organisasi Papua Merdeka (OPM), entered the village of Tsinga and raised the banned pro-independence Morning Star flag. Following the event in November 1994, two shooting incidents occurred along the company road between Timika and Tembagapura, resulting in the death of one Freeport employee and injuries to two others. The army responded severely, killing about 30 villagers suspected of being OPM participants, and many Amungme tribal resettlements were destroyed. This event prompted an investigation by Indonesia's National Commission on Human Rights (Komnas HAM) in September 1995, which concluded that identifiable human rights violations had occurred in and around Freeport's project area, including indiscriminate killings, torture, inhumane or degrading treatment, unlawful arrests, disappearances, and destruction of property. Komnas HAM noted that these violations "[were] directly connected to the (Indonesian army's)...acting as protection for the mining business [of the] Freeport Company" (BALLARD 2001: 12).

In 1996, several thousand villagers launched a protest against Freeport in Tembagapura in response to an incident in which a Dany man was hit and injured by Freeport vehicle. The protest targeted the unpopular security department, and over the next few days, the riot spread to Timika, where Freeport facilities and the airport were attacked. Four people were killed, and more than a dozen were injured in this riot, and protesters damaged Freeport's equipment. According to the Australian Council for Overseas Aid and the Catholic Church of Jayapura, Freeport turned a blind eye while the Indonesian military killed and tortured residents of dozens of indigenous communities in the area surrounding the mining concession. "Villagers were beaten

²² There was much debate in the Indonesian Parliament after the Suharto regime stepped down in May 1998 regarding re-reviews of contracts between the Indonesian government and mining, oil, and gas investors. Previous high-income contracts with investors were reportedly corrupted by high government officials under the cronyism of the Suharto regime. For example, during the reformation government of the Abdurrahman Wahid regime (2000-2001) the Indonesian Parliament proposed to renegotiate the contract with the Freeport Company, which carries out strategic gold and copper mining and exploration. The Parliament proposed to increase its share of dividends from the 9% of the original 1967 contract, which had been raised to 12% in 1991, to a full 25-30%. In prior years, Freeport had generated large profits on the international market. The higher proposed dividend was considered very significant; it aimed to increase foreign exchange earnings substantially and sought to provide public funds for education and health care in Indonesia.

with rattan, sticks, and rifle butts, and kicked with boots," one tribal leader told Catholic Church officials, and "some were tortured until they died" (ZIMAN 1998). In response to this tragedy, the OPM took hostage a number of foreign and national scientists working in the Lorentz National Park, resulting in a wave of military repression across the region and several more civilian massacres. Throughout these events, Freeport facilities were used as bases for military operations.

The struggle of the Amungme and Kamoro indigenous communities had begun as an effort to shut down Freeport's operation because of human rights violations and environmental damage. However, over time, the struggle became intimately integrated with Papua's territory-wide struggle for independence. Amungme community members supported the goals of the OPM. As Tom Benal and other Papua community leaders have asked: "Could it be that [the] Indonesian government is drawn from Papua (Irian Jaya) not by its people but by its natural resources? The legislative and executive bodies have proven incapable of responding to the genuine aspiration of the local communities within the context of the Republic of Indonesia" (ABRASH and KENNEDY 2001).

The response from President Abdurrahman Wahid, who came to power in late 1999 as part of the post-Suharto reformation government, was to take steps to review and renegotiate Freeport contracts and to hold Freeport accountable for environmental damage and human rights violations associated with its mining activities. WALHI, Indonesia's largest environmental organization, has accused Freeport in the courts of failing to provide accurate information about the environmental impact of the mine and cases regarding human rights violations against indigenous communities.

The Tablasupa Nickel Mining Company

The Tablasupa Nickel Mining Company has explored and exploited forestland that is part of the Cyclops Conservation Forest. The concession to do so was obtained from the head of the Jayapura Regency on 29 June, 2007. The designation of the Cyclops mountain region as a conservation forest area with an area of 22,500 ha was established by regulation No. 365/Kpts-II-/1987 of the Ministry of Forestry on 18 November, 1987. The highest peak in this area is 1,880 m. Administratively, the area is located in the Jayapura Regency, Sentani Regency, Depapre District, and Jayapura City, Papua Province. There are four natural ecosystems in the Cyclops area: lowland rainforest, mountain forest, secondary forest, and grassland.

Recently, forest degradation in the Cyclops area has occurred, leading to flood, soil erosion, and water shortages in downstream regions such as Jayapura City, Sentani City, and Sentani Lake (popular for eco-tourism). Several factors drive Cyclops forest degradation:

1) The rapid growth in economic development, industrialization, and population in the land adjacent to the Cyclops Conservation Area has led to forestland encroachments for property, housing complexes, and resettlements for migrant workers in Jayapura City. For example, there are at least 56 houses in illegal settlements in Harapan, Ifar Gunung Dayo Baru, and Sereh villages. If regulation against illegal settlement in the surrounding catchment area of the Cyclops conservation area is not implemented, forest degradation will continue to occur.

- 2) At least 49 households of indigenous peoples in this area have been engaged in "shifting cultivation," in which activities have been shifted from the ancestral customs tree cutting for subsistence. This shift has led to soil erosion and forest degradation. Hence, the role of the local government and the Forestry Regency Agency is to cooperate to relocate indigenous people who have been engaged in shifting cultivation in the Cyclops area.
- 3) Finally, and most significantly, the Tablasupa Company has carried out nickel mining activities under a permit granted by the Jayapura Regency on 29 June, 2007. In addition, some type C rock exploration has been carried out by a local businessman from the Sentani tribal (Ondoafi). These mining activities have led to forest degradation, floods, and soil erosion. In March 2007, Sentani City (the capital of the Jayapura Regency) was flooded, resulting in damage to infrastructure, drainage systems, two bridges, and roads, and a halt in transportation for several days (interview on 20 May, 2012).

The forestry agency, various NGOs, and academics have offered many critical commentaries on the forest degradation in the Cyclopes Conservation Area, and suggestions have been made for rehabilitation, reforestation, relocation of illegal settlements, and termination of shifting cultivation. According to George Karma, head of the forestry agency in the Jayapura Regency, the Cyclops area is vital and must be maintained for strict conservation as an upstream water catchment area for the watershed of Sentani Lake and for water resources for the people in Sentani and Jayapura City. Marshall Suebu, head of the Hiroshi Foundation (for maintaining natural resources and environment) in the Jayapura Regency has also suggested better management of the Cyclops conservation area through better cooperation between the local governments in the Jayapura Regency and Jayapura City. Furthermore, Suebu suggested that the local governments jointly and proactively engage in reforestation and rehabilitation with the active involvement of local communities, academics, private companies, and NGOs. A high-priority feature of this effort is the relocation of illegal settlements and an end to the shifting cultivation occurring among some indigenous peoples (interview on 24 May, 2012). Fritz M. Felle, the head of the Sentani tribe, has noted that, until now, there has been no integrated management effort to reduce or eliminate forestland encroachment by such activities as shifting cultivation, fires, illegal logging, rock and metal mining, and illegal resettlement. Thus, law enforcement by the local government for prevention of forest degradation in the Cyclops Conservation Area has not occurred. The ecological impact of encroachment is very serious and includes soil erosion, floods, and water shortages, especially in the dry season.

According to Gady Batubara, director of the water supply for Jayapura City, the supply of clean water during the 4 dry months (June through August) is a serious threat (KOMPAS 20 October, 2010).

Academics such as J. R. Mansoben and Enos Rumansara, both anthropologists from Cendrawasih University, have also presented critiques of the forest degradation crisis in the Cyclops Conservation Area. Both have asserted that maintaining the Cyclops area is of high strategic importance to many stakeholders because of the region's clean upstream water, position as a catchment area, and potential as a carbon sink. As part of an effort to improve Cyclops management, Cendrawasih University held a seminar in conjunction with the local government titled "Safety Program for the Cyclops area and Sentani Lake." Several stakeholders were invited to the seminar, which was held during the Sentani Festival, 19-23 June, 2012. The goal of the seminar was to improve stakeholders' awareness of the need for a proactive conservation effort that includes massive reforestation, forest rehabilitation, and protection of the area from illegal settlements and shifting cultivation (interview on 25 May, 2012).

Conclusion

The operation of large-scale business projects such as mining and estate plantations (especially oil palm) and the MIFEE project captured the public interest for their potential to create jobs for migrant workers because the "neoliberal economy" has removed the potential for capital, technology, and cash flow for investment in the regencies, districts, and rural areas (villages). Papua, in particular, has seen a great expansion of the activities of many multinational corporations, such as Freeport and LNG in the mining sector, Kodeco and Korindo (South Korea), the Djajanti Group, Kayu Lapis Indonesia, Hanurata, and Wapoga Mutiara in the logging sector; and the Sinar Mas Group, Wilmar, and Astra Agro Lestari in the palm oil sector. The Indonesian central government's policy has been to grant concessions for investment by multinational corporations and domestic private companies to generate foreign capital, tax revenues, and foreign exchange earnings from commodities exports, technology transfer, and jobs. For example, Freeport McMoRan has been of the largest generators of income, jobs, taxes, and dividends for the Indonesian government, despite the fact that the company's operation led to forest degradation, environmental damage, and human rights violations against the local indigenous people.

Instead, the interests of the local communities have been largely ignored, especially with respect to customary forest rights upon which indigenous communities depended for subsistence and daily needs. For example, during the illegal logging crisis in Papua in 2000-2003, the government did not immediately address forest degradation, land conflicts, or economic marginalization of local communities. Instead, political manipulation, collusion, and corruption among the local elite, traders, and the military were prevalent.

Indigenous communities responded with protests and demonstrations. The Sentani in Jayapura, the Arfak in Manokwari, the Amungme in the upstream Tembagapura region, and the Kamoro in the downstream coastal area of Timika organized against illegal logging, logging concessions, palm oil plantations, and mining (Freeport) because their ancestral forestlands were encroached upon or seized without proper compensation and/or dividends for indigenous communities, or because of the destruction of their ancestral forests, lakes, mountains, and valleys, all of which are regarded as sacred places. The continuing operation and expansion of the Freeport mining operation eventually led to deforestation, severe ecological damage, and the economic and social marginalization of indigenous communities.

Despite warnings about threats to forests and increased conflict, we conclude that the Indonesian government's interests in Papuan forestland resources lie with expanding oil palm estates (i.e., with the MIFEE project), increasing logging concessions, and increasing mining activities. Expansion of these activities to generate increased revenue from investors, including dividends and taxes, foreign exchange earnings, etc., is an ongoing effort. Conflict will continue because the government's rationale is based on an "economic gain" paradigm, rather than on conservation of natural resources and on customary rights for local people. The priority step is how to realize the Special Papua Autonomy regulation (No. 11/ 2001), which authorized administrative "decentralization" and gave fiscal and political management to the local government. Although this political decentralization was initially designed to promote democratic values, accountability, and transparency in the management in Papua, thus far decentralization has not been fully implemented. The management of natural resources, such as forestry, estate plantation, and mining activities, is still at a crossroads: the central government maintains the bulk of the authority, and it controls the issuing of permits and concessions to investors. Local governments do not currently make significant decisions because the central government still asserts that local government officers do not have a sufficient capacity to manage natural resources. The impact of this policy is that recent large-scale development in Papuan forestry, estate plantation, and mining sectors has not led to an improvement in the infrastructure, economics, agriculture, education, or health of indigenous communities. Instead, there is ongoing, embedded conflict surrounding forestland utilization and concessions among three interested parties (the central government, the local government and indigenous people), each of which interprets the laws, regulations, and local needs differently. This critical condition in the implementation of law could be considered by a Constitutional Court as a way of making a fair decision on natural resource management in Papua.

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