ON THE FINGERTIPS OF GOVERNMENT: FOREST FIRES AND SHIFTING ALLEGIANCE OF STATE OFFICIALS IN INDONESIA¹²

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This paper explicates the dynamics between lower rank state officials and indigenous people in order to address a broader question of why state interventions are still unable to stop forest fires from occurring in Indonesia. This study was conducted in 2015 and 2016 in Mantangai, a former site of Indonesia's Mega Rice Project in Central Kalimantan. The research deploys an ethnographic approach comprising participant observation of people's actions in both farming and forest areas and interviews with more than 75 people including farmers, fishers, loggers, hunters, and state officials at the sub-district and village levels. The findings show that state interventions have been ineffective because of the shifting allegiance of lower rank officials, from state to society. These lower rank officials show an attitude of disobedience by "allowing" people to set fires in the forest and farming areas. I argue that the shift is driven by the situation that the local state officials endure during fire events, consisting of problematic enforcement and disempowering bureaucracy on the one hand, and formidable socio-cultural pressure on the other. These dynamics create a particular juncture that stirs their positionality and they, in turn, use their power to stand with the society and outdo the state's strategies.

Keywords: Forest fires, State interventions, Shifting Allegiance, Ethnography, Indonesia.

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² The field research was part of the South Dakota State University (SDSU)/Institut Pertanian Bogor (IPB)— National Aeronautics and Space Administration (NASA) research project "Incorporating, Quantifying and Locating Fire Emissions from within Tropical Peat Swamp Forests in Mantangai, Kabupaten Kapuas, Kalimantan Tengah" led by Mark Cochrane (SDSU). I would like to thank Borneo Orangutan Survival Foundation that facilitated my trip to the sites from 2015-2016. Also, I appreciate the support and guidance to the leader of Human Dimension Team Andrew P. Vayda, Timothy Jessup, and my field supervisor Jenny E. Goldstein during the project.

The first day I arrived for fieldwork, the smoke haze had already sheathed the area. The weather was exceptionally hot and the surroundings looked yellowish. The fires were getting stronger and spreading wider every day. By the end of September, the Indonesian president came to Central Kalimantan, mobilizing thousands of state personnel and local citizen simultaneously to extinguish the fires. After a few weeks, the fires dropped off gradually. <u>However, it was not because of the state forces' efforts;</u> <u>rather, the rain season has finally started</u>. —Mantangai, Central Kalimantan, October 2015

This paper investigates why state interventions in Indonesia have not been effective in stopping forest fires from occurring. By placing attention on everyday practices of government, this paper also examines how the dynamics of lower rank state officials at the village and sub-district levels reshape the relation between state and society. Since devastating forest fires in 1997, the Indonesian government has placed more attention on causal factors and has developed initiatives to prevent and to resolve this environmental catastrophe.³ One general initiative to mitigate the problem is to regulate indigenous people's activities.⁴ The use of fire in their slash and burn agriculture has been considered one of the main reasons forest fires occur in the area (Dennis 1999). After the fire event in 1997, the state issued and reinforced regulations to prohibit fire use in the forest, especially among those who still use fire in crop cultivation. Yet, for almost 20 years forest fires have been occurring annually in Indonesia.

My study focuses on the fingertips of government in dealing with forest fires. By fingertips I mean here the lower rank state officials, the local bureaucrats at village and subdistrict levels, as opposed to higher rank bureaucrats who rule from the center of the state. My emphasis on the daily practices of state actors at these levels is intended to elaborate the

³ The attention to forest fires in Indonesia from both the state and international organization started in 1982-1983 when "The Great Fire of Borneo" occurred. At that period, an estimated 3.2 million hectares of forest burned. In the following years, several remarkable fire events occurred in 1987, 1991, 1994, and 1997-1998 (Dennis 1999).

⁴ The initiative to control people's behavior was formulated after a fire event in 1994. Prior to 1994, most forest fire projects focused only on prevention of fires. Dennis (1999) further explains "[i]t was only after 1994 that there was a shift of interest to understanding the causes and impacts of the fires in addition to practical prevention and control of fires."

contested arena in which the discourse to govern—forest fires in this case—is delivered to indigenous people in Central Kalimantan. I argue that the forest fires still occurring are not caused solely by state policies, but also are a result of the shifting allegiance of the state's lower rank officials that facilitates the local community in overcoming the state's strategies. Paying attention to local level officials in their everyday practices of governance is significant for understanding how, even in the presence of coercive state forces, indigenous people can still manage to set their fires in the farming and protected forest area.

In 2015, Central Kalimantan was the second largest⁵ contributor to the overall fire event in Indonesia with approximately 429,000 hectares burned from June-October—representing 16% of the total burned area in Indonesia (Glauber and Gunawan 2016). The damage cost this region USD 2.4 billion from Indonesia's total loss of USD 16.1 billion (Glauber and Gunawan 2016; Saharjo 2016; Ansori 2016; Alisjahbana and Busch 2017). Recognizing problems from forest fires and international pressure, Indonesia's president through Presidential Instruction No. 11, 2015 then commanded more than 25 state institutions, including the ministry of forestry, police, military, and local governments to participate in preventing forest fires (see also Alisjahbana and Busch 2017; Thung 2018). At the same time, the president also annulled all regulations containing ambiguous instructions about using fire for farming to ensure there would be no grounds for setting a fire for any purpose. These actions were the opening episode of the latest state enforcement to the local community, specifically those who practice slash and burn agriculture.

In this research, I am interested neither in examining the causes of forest fires in Central Kalimantan nor in seeking solutions for that catastrophe since an abundance of research, both

⁵ The largest burned province in Indonesia, according to World Bank report 2016, is South Sumatra. Losing roughly 608,000 hectares to forest fires, this region represents 23% of the total burned area (Glauber and Gunawan 2016).

biophysical-based and socio cultural-based, has been done for these purposes (Boehm and Siegert 2001, 2004; Chokkalingam, Kurniawan, & Ruchiat 2005; Chokkalingam et al. 2007; Page et al. 2009; Herawati and Santoso 2011; Someshwar, Boer, & Conrad 2011; Medrilzam, Dargusch, Herbohn, & Smith 2013; Graham et al. 2014; Ansori 2016; Lubis 2017; Saharjo 2016). My goal in this paper is to explain the dynamics between state officials and indigenous people in order to address a broader question of why state interventions are still unable to stop forest fires from occurring. I think this approach is important for providing a different understanding of fire events, one that thus far has not received attention.

In approaching the issue of forest fires in Central Kalimantan, I choose the dynamics of state officials at village and sub-district levels as my departure point. During the dry season in 2016, the lower rank officials endured a frustrating experience with the state's incapacity to provide sufficient funds, equipment, and personnel to perform the mandated tasks in controlling fires. They also suffered from demands of their superiors and dealt with constant threats to their careers if they failed in their mission: to visit fire hotspots, to extinguish fires, and even to arrest "arsonists." In their exhaustion from these burdensome tasks, the lower rank officials witnessed the reality that the repressive fire ban from the state was not accompanied by any solution for the people who depend on fire for crop cultivation.

Regarding the implementation of policies and people's need to use fire for shifting cultivation, Thung (2018) suggests that state actors at lower levels tend to neglect their task in order to avoid conflict with the people. However, in the case of Central Kalimantan, the policy enforcers, the lower rank officials, not only disobey the state by not doing the expected tasks, but also actively facilitate the breaking down of the state system. The lower rank officials eventually "defected" from their commitment to the state and sided with the community. This shift is

problematic because, even when the lower rank officials tried to maintain their role as state representatives, they acted disobediently, differently than expected, by "allowing" people to set fires in the forest and farming areas. This phenomenon needs to be examined carefully by questioning why the local state officials shifted their allegiance. When and how did this shift take place? What are the implications of such a shift in allegiance?

By answering these questions, I intend to make a contribution by identifying the explicit juncture which preceded such a shift among state officials. Local state actors are situated within the blurred boundaries between government authority and local populations. They have a dual role: on the one hand, as state actors they try to be loyal in enforcing interventions; on the other hand, as members of the community they want to help people in fulfilling their needs. The blurred boundaries between state and society does not necessarily enable the shift. I argue that the shift is driven by local officials' ability to sense the state's weaknesses; their frustration in following problematic enforcements and bureaucratic orders in catastrophic circumstances; and relentless pressure from the society during the dry season. These variables provide a particular context that invokes their sense of belonging to the community and they, in turn, use their power to stand with the society to overcome the state's strategies.

I organize this paper into five parts. The first section, "Studying Forest Fires in Dayak Communities," is an overview of relevant information about the research setting and research methods. I provide a description of the research site and livelihood of Dayak community that the state suspects to be the source of fires. The second segment, "History of Forest Fires and State Interventions," chronologically traces the occurrence of forest fires and elucidates the Indonesian state's responses and interventions to such catastrophes. The main purpose of this section is to offer a brief guide to the political, economic, and socio-cultural contexts of forest fires issues in Indonesia. The third section, "Forest Fires, Interventions, and State-Society Dynamics," discusses the literature review and theoretical framework that I use to analyze the forest fires and state-society relations. The fourth part, "When Nothing Goes Right, Go Left: The Shifting Loyalties of State Officials," narrates the ethnography of everyday practices of state officials at village and sub-district levels in dealing with problematic enforcement and disempowering bureaucracy on one side, and formidable socio-cultural pressure on the other. The last section, "Concluding Notes and Future Directions," highlinghts the conclusion and discusses several possibilities that can be explored further to advance this paper in the future.

STUDYING FOREST FIRES IN DAYAK COMMUNITIES

Approaching the forest fires

This paper is based on my preliminary fieldwork of five months, September-October 2015 and August-October 2016. In Mantangai sub-district, the study was focused in several villages within the former Mega Rice Project (MRP) area⁶—the space devoted to the project, one of the most degraded peat swamp forests in Indonesia. The site location is 155 km from Palangkaraya, the capital city of Central Kalimantan and 98 km from Kuala Kapuas, the capital of Kapuas Regency.

⁶ MRP is an effort to turn an idle and non-productive peatland landscape into agriculture stations in Central Kalimantan. The project was started in 1995 by Presidential Decree No. 82: Development of One Million Hectares of Peatland for Food Crop Production in the Province of Central Kalimantan, Peat Reclamation. After the Soeharto regime collapsed in 1998, the new Indonesian Government terminated the MRP through Presidential Decree No. 80/1999 (Boehm and Siegert 2001, Page et al. 2009; Medrilzam et al. 2013).



Source: Author, 2018

I conducted participant-observation in the dry season when forest fires mostly occur. The study was deliberately conducted during the dry season because according to Vayda (2009), the leader of the Human Action Team, it is essential to acquire first-hand observations—to improve accuracy and relevancy—of human actions at the time when people are most actively engaged with the fire environment. I interviewed more than 75 people including farmers, fishers, charcoal makers, illegal loggers, local officials, local figures, NGO workers, and others who might be knowledgeable about the issues. Furthermore, and more importantly, I observed various activities, multiple fire sites and relevant terrains, and numerous interactions during the fire season.

Dayak and Their Slash and Burn Agriculture

The research area is populated by Dayak who call themselves *Ngaju* people. They are an indigenous community that greatly depends on forest extraction for their livelihood, with activities such as logging, hunting, fishing, and collecting various forest products (Suyanto, Sardi, Buana, & van Noordwijk 2009; Ansori 2016; Lubis 2014, 2017; Hadiwijoyo, Saharjo, & Putra 2017).⁷ During their activities, people commonly use fire for various needs—cooking, providing heat, attracting deer, improving visibility, and enhancing pathways—in both farming land and forest areas (Applegate et al. 2014; Ansori 2016). The wide-ranging use of fire in this community is the reason the government suspects these kinds of activities to be the source of forest fires. Specifically, among all the Dayak livelihood alternatives, the state puts its effort intensely on slash and burn agriculture practices.

People in Mantangai traditionally start to prepare for *malan* (local term for farming) roughly two months before the end of the dry season. People know the time to *manghimba* (clearing the forest; necessary only to open new land), *mandirik* (clearing the bush), *manosol* (burning the dried trees and bush), and *manugal* (planting the seeds) based on their local knowledge in predicting the dry season (Akbar 2011). Some scientists emphasize that Dayak have local knowledge for managing the fires (Hadiwijoyo et al. 2017; Yanarita et al. 2014). The Dayak community used to employ what they call the *handel* system (small waterway, perhaps a river or canal). In the slash and burn institution, the *handel* system is essential for regulating collective work. The chief of *handel*—who is elected democratically—is responsible for setting up a meeting to decide the time for clearing the land, burning, and planting the paddy rice seeds.

⁷ The differentiation is important because there are hundreds of other communities of Dayak in Kalimantan island (see Yanarita, Naiem, Budiadi, & Sukarna 2014). According to Suyanto et al. (2009), up until 2010, the Dayak population in those villages is more than 95% and the rest are *Banjarnese*, migrant from Banjarmasin (the neighbor city in South Kalimantan), and *Javanese* that came to the area for various reasons.

This *handel* system obliges each member to help prepare the land, guard the fire, and plant the crops, going from one's own land to the next land in a rotational mode of labor.

However, from my fieldwork, I identified different practices of slash and burn agriculture. I heard repeated stories that the present-day Dayak tend to neglect the *handel* system, undermine the idea of collective work, and disregard the so-called local wisdom. They think it's "costly," "time-consuming," and "tiring." Some Dayak individuals now prefer to work alone or pay some laborers to reduce the time, money, and energy needed to prepare their farming land.

HISTORY OF FOREST FIRES AND STATE INTERVENTIONS

The forest fires chronicle

In his report, Dennis (1999) mentions how W.J.M. Michielsen—a former member of the Council of the Dutch East Indies—witnessed a forest fire during the drought period in 1880 in Central Kalimantan. From the land where he was standing, he expressed "it is hard to identify how the fire has spread through the forest." Michielsen's observation "Report of a Journey Through the Upper Districts of the Sampit and Katingan Rivers in March and April 1880," published in a magazine,⁸ was probably the first written record of a fire episode in Central Kalimantan.

One hundred thirty-five years later, it was my turn—standing in the same region—to watch the forest in massive flames. The 2015 episode is considered one of the biggest forest fires events in Indonesian history. Nationally, the damage from this year, in both burned area and economic losses, was comparable to that from massive fire episodes in 1997/1998 (Cattau et al. 2016).⁹ Even though many scholars particularly mark the fire events in 1997/1998 for their

⁸ The actual report written in Dutch "Verslag eener reis door de boven districten der Sampit en Katingan rivieren in maart en april 1880" was published in Tijdschrift voor Indische Taal, Land-en Volkenkunde in XXVIII edition, 1882.

⁹ In 1997-1998, Indonesia was not the only country that suffered from forest fires. The abnormal drought caused by El Nino impacted Australia, Brazil, Brunei, Malaysia, Philippines, Mexico, and the state of Florida in the United States. In total, 25 million ha of forest burned t that year. For more details please visit Tacconi (2003).

massive impact both economically and environmentally (Tacconi 2003; Cattau et al. 2016; Boehm and Siegert 2001, 2004; Chokkalingam et al. 2005; Someshwar et al. 2011; Hoscilo, Page, Tansey, & Rieley 2011), the story of forest fires in Indonesia can be traced back to 1982 when the first remarkable episode occurred, as shown in Table 1.

Fire Events	Estimated Loss	Most Impacted Area(s)
1982-1983	3.2 million hectares burned to varying degrees	East Kalimantan
1991 (fires	Ministry of Forestry stated that at least 66,000	South Sumatra, Jambi, Lampung, Riau,
reoccurred	hectares of forest area burned	Central Kalimantan, East Kalimantan, West
in 1992)		Java, Central Java, East Java, South
		Sulawesi, Bali, Nusa Tenggara, Timor.
1994	Estimation from Ministry of Forestry: 4.8 million	Central Kalimantan, Sumatra
	hectares of forests, brush, and grasslands burned	
1997-1998	Preliminary estimation: an area (land and forest)	Central Kalimantan, West Kalimantan, South
	in excess of 2-5 million hectares may have	Kalimantan, East Kalimantan, Riau, Jambi,
	burned (European Union Fire Response Group)	Lampung, South Sumatra, Bengkulu,
	Official estimation: 263,992 ha of designated	Sulawesi, Irian Jaya, Central Java
	forest land burned in 1997 and 550,000 in 1998	
	(Ministry of Forestry)	

Table 1. Forest Fires Events in Indonesia 1982-1998

Source: Modified from Dennis (1999)¹⁰

It is important to narrate the episodes of forest fire before and after 1998 differently due to the nature of their occurrence. Before 1998, forest fires occurred occasionally and mostly in the year when an El Nino¹¹ struck Indonesia. According to Null (2017), the intensity of El Nino in 1982-1983 and 1997-1998 was considered very strong, while episodes in 1991-1992 were

¹⁰ Some reports mention that forest fires in Indonesia were also happening back in 1961 and 1972/1973 (Harrison, Page, & Limin 2009; Hoscilo et al. 2011; Azman 2015, September. However, there is inadequate supporting information about 1961 fire events. Meanwhile, for the 1973 fire episodes Hoscilo et al. (2011) explain that fires *probably* ignited by natural causes; they assume that the fires "had either been preceded by a severe period of drought or if lightning struck a fire-prone surface" and did not spread to a wider area.

¹¹ Dennis (1999) describes El Nino or The El Niño-Southern Oscillation (ENSO) as "the result of a cyclic warming and cooling of the surface of the eastern Pacific. ENSOs affect trade wind patterns, which in turn influence sea surface temperatures over vast areas of the Pacific. These changes can produce extreme weather throughout the tropics and have been linked to severe droughts in Indonesia and Australia, and heavy rainfall in South America. At other times, the injection of cold water becomes more intense than usual, causing the surface of the eastern Pacific to cool; this is called a La Niña event. This results in heavy rainfall in Australia and Indonesia, and droughts in South America. An El Niño event is usually followed by a La Niña event."

strong, and 1994 was moderate.¹² However, the case was totally different after 1998, since forest fires happened annually—with or without the presence of El Nino.

In Central Kalimantan, the fires in 1997/1998 were not impacted solely by El Nino but also affected heavily by the execution of the MRP. As a result of this project, a million hectares of peat swamp forest had been drained into agricultural and palm oil sites as a development initiative of the Indonesian government. On the connection between a drained environment and drought from a weather anomaly, Someshwar et al. (2011) explain "...drained peatlands are at greater risk of fire, and impacts are especially severe when rainfall is below normal, as in some El Nino years" (see also Dennis 1999; Boehm and Siegert 2001; Tansey, Beston, Hoscilo, Page, & Paredes Hernández 2008; Cattau et al. 2016; Ansori 2016). That year marked the beginning of routine fires events in Central Kalimantan, as shown in Figure 2.

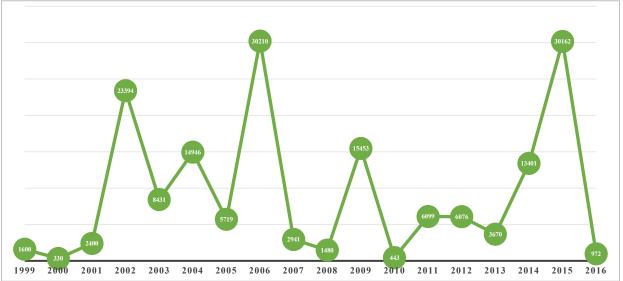


Figure 2. Number of Hotspot Alerts in Central Kalimantan 1999-2016

Source: Modified from Ceccato et al. (2010) and Chamorro, Minnemeyer, and Sargent (2017)

Consequently, fires—along with illegal logging and oil palm expansion—have become the main source of deforestation in Central Kalimantan (Cattau et al. 2016). Hansen et al. (2016)

¹² This dataset matches with Dennis (1999) description of the atmospheric condition in Indonesia during forest fires from 1982-1998.

estimate that more than three million hectares (about the size of Belgium) of tree cover were lost in this province between 2001-2016.¹³ Besides the environmental loss, forest fire events also lead to economic loss. For instance, the World Bank estimated that in 2015 forest fires cost Central Kalimantan around USD 2.4 million due to their major impact on agriculture, trade, transportation, and other activities. In addition, those forest fires also impacted public health, ranging from mild breathing problems to acute respiratory infection and even death (see Glauber and Gunawan 2016).

However, even though the forest fire episodes have been heavily linked with natural phenomena, such catastrophes have also been associated with human activities. Eventually, confronting forest fires in Indonesia means also dealing with the people. That necessity has contributed to another long and complicated relation between the Indonesian government and the local community.

State responses to forest fires

The history of outstanding episodes of forest fires is important for grasping why and how the Indonesian government reacts to this environmental disaster. There are two reasons that the state has been attempting to stop the forest fires from occurring. First, the state perceives the forest as a national asset that should be maintained for economic benefit from timber and non-timber production chains and other natural resource-based businesses. Some scholars believe this particular style of "managing" forest resources was adopted by the Indonesian government from the Dutch colonials (Dennis 1999; Lubis 2017. Thus, disasters upsetting such resources means severe economic deficit for the state. Glauber and Gunawan (2016) project that the economic

¹³ The total tree cover loss in Indonesian from 2001-2016 was 20.921 million hectares (slightly larger than Uganda). The three largest contributor provinces from that total number were Riau 16.6%, Central Kalimantan 14.5%, and West Kalimantan 14.2% (adapted from Hansen et al. 2016)

loss due to forest fires in 2015 as USD 16.1 billion (IDR 221 trillion). Moreover, protecting forest resources from fires—regarding smoke haze problems—is also crucial for securing economic and public service activities such as school, transportation, tourism, and in other significant sectors.

Second, the impacts of forest fires have concerned neighboring countries and the broader world as well as domestic citizens—hence, the political pressure grows (see Thung 2018). *The Straits Times*, a newspaper based in Singapore, has been questioning the smoke haze from Indonesia since October 19, 1961 (Azman 2015, September). Malaysia and Singapore, the two most impacted countries, have been actively demanding the Indonesian government to manage the forest fires—particularly after the fire events in 1997/1998. In 2002, the United Nations International Strategy for Disaster Reduction stated that direct impacts from forest fires are considered detrimental to the goal of sustainable development in the world. In that same year, Indonesia signed the Agreement on Transboundary Haze Pollution initiated by the Association of South East Asian Nations (Tacconi 2003).¹⁴ Recently, in November 2015—just a month after the massive forest fires were extinguished—Indonesia ratified the Paris Agreement, a world forum of climate change that was based on bottom-up initiatives from signatory countries (Alisjahbana and Busch 2017).

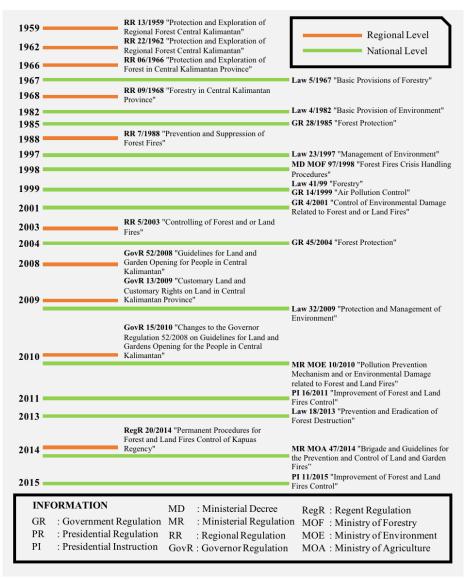
Despite the fact that massive forest fires have occurred several times, Indonesia's regulations directly addressing forest fires began only in 2001. The state issued Government Regulation 4/2001 about Control of Environmental Damage Related to Forest Fires, followed by Government Regulation 45/2004 about Forest Protection (created as a follow-up to Law 41/1999 about Forestry), and confirmed by Law 32/2009 about Protection and Management of

¹⁴ Even though the agreement was signed in 2002, according to Lubis (2017), Indonesia formally ratified the Transboundary Haze Pollution in 2014 by issuing Law 26/2014 "Ratification of ASEAN Agreement."

Environment (see Figure 3). According to Lubis (2017), the previous regulations at the national level, did not mention fires as part of forest management problems.

Different from national law, the Central Kalimantan regional level had already addressed fires as potential tools for land clearing as well as the risk to resources, beginning in 1959. Regional Regulation 7/1988 was specifically designed to prevent and suppress forest fires from slash and burn agriculture in Central Kalimantan. In 2008, the governor of Central Kalimantan, in Governor Regulation 52/2008 (later revised in 2010), even issued a Guideline for Land and Gardens Opening. It contained specific points about slash and burn agriculture because a vast majority of people depend on slash and burn method to sustain their livelihood (Someshwar et al. 2011).

Figure 3. Timeline of Regulations Related to Forest and Forest Fires



Source: Modified from Lubis (2017)

Despite numerous regulations at both regional and national levels, the forest fires keep happening. Aware of the risks of forest fires, the Indonesian government has been trying to improve the situation—besides issuing regulations—by acting with help from international institutions. After the 1982 fires episode, Indonesia received emergency assistance, technical aid, and training to solve the problems from several countries and international NGOs—such as, the European Commission, the Food and Agriculture Organization, the Japan International Cooperation Agency, the United Nations, the International Timber Trade Organization, Deutschen Gesellschaft für Technische Zusammenarbeit, the United States, and Australia

(Dennis 1999). Amid the benefits, an important issue is the conclusion from these projects: the source of the fires was mostly the agricultural practices of the local people. This conclusion justified assigning responsibility to those practices, as can be seen in Table 2.

Fire Events	Cause(s)	State Action(s)
1982-1983	Fires were caused by small agricultural fires that escaped their bounds into nearby forest area.	 Ministry of Forestry released a "prevention is best" plan. A special fire mitigation task force was established.
1991 (fires reoccurred in 1992)	 Ministry of Forestry blamed shifting cultivators for causing the fires Environmentalists blamed the state for its poor forest management 	N/A
1994	 Government blamed "nomadic tribes" practicing slash-and-burn agriculture; NGOs blamed forest concessionaires and plantation companies; Concessionaires blamed the weather. 	 By December 1996, Minister of Forestry had announced guidelines for the prevention of forest fires. Government had issued a reminder that land clearing should be done without fire or legal action would be taken against the perpetrators.
1997-1998	 Large-scale plantation and timber estates were immediately blamed. Ministry of Forestry: "We can tolerate local people clearing land in a traditional way by burning the forest, but plantation companies can afford other ways of clearing." 	 Government gave ultimatum to 133 plantation companies, 27 timber estates, and 15 transmigration programs to stop burning. Government took legal action against 15 concession companies for starting fires. Fire disaster handling was placed after programs for poverty alleviation,
	It was reported that these fires were started by farmers clearing land. Source: Modified from 1	employment generation, public health care, and stabilization of the rupiah.

Table 2. Actions taken by the state following forest fire events

Source: Modified from Dennis (1999)

As I infer from Dennis (1999), even though the fire project from 1982-1994 did not put too much attention on the source of the fires, the investigation often blamed the society as the primary cause of the disaster. That is why, since 1982, state preventive and corrective actions have focused on the behavior of people. In the era of modern governance, this was the first time the indigenous people were formally accused of being the main source of forest fires. Since 1994, most projects have been designed to investigate the source of fires. Yet again, anthropogenic fires in agricultural practices are stressed as the most likely causes of the fires. Arryman Fellowship Paper June, 2018

Following the fire events in 1982/1983, it became common for police and military leaders to use tendentious terms that framed the people practicing slash and burn agriculture as criminal —such as "arsonist," "secured," "punished," "law enforcement."¹⁵ Further, the authorities strove to put them in prison. In 1991, for instance, three people were reportedly put on trial in East Kalimantan after the local authorities suspected them as arsonists who had caused forest fires in the area (Ibra 1991, December 10). Such treatments were also performed in other areas in Indonesia even before the massive fire in 1982/1983. However, these actions were event-bound, unsystematic, and not formally designed by the government.¹⁶

The approach to the forest fires developed by the armed forces seemed desirable to the state. As can be inferred from Table 2, the first state reaction was to establish a special task force generally consisting of people from various state institutions. This approach was then reproduced in the years of fires. In practice, Lubis (2017) explains, at least from 1995, the task force usually formed in a coordination unit or commando post, tiered from national to village level, to "control forest fires." Further, he argues that commonly this organizational style is highly bureaucratic and consequently less flexible to execute missions. The task is not solely to put down fires, but also to prevent accidents and punish the perpetrators. That is why the leader of the force is usually supported by the police and the military of the same territory in organizing a patrol and investigating the "arsonist." The involvement of the armed forces brings a repressive dimension to the intervention.

State officials' interventions at village and sub-district levels

¹⁵ Such terminologies were commonly articulated in public hearings, interviews, or newspapers. For instance, see Ibra (1984, July 7)

¹⁶ In 1980, *Kompas*, a national newspaper, reported that one villager in West Java province was caught by the authorities, as the police suspected him as an arsonist because a fire started from his land extended to a reforestation area (Hers 1980, July 15).

In Central Kalimantan, as a consequence of annual forest fires after 1997, tension has arisen each dry season between state apparatuses and the people who are suspected as the source of fires. Numerous shifting cultivators have been captured by the authorities, in different numbers each year. Recently, 95 people in 2014¹⁷ and 71 people in 2015¹⁸ were caught by the local authorities, including people from Mantangai. After President Jokowi issued his Presidential Instruction 11/2015 as a response to the 2015 massive fires, the situation only became tenser. The state's frustration with the disobedient society is shown in its current willingness to punish the "criminal" to restore the order. In August 2017, a military official ordered that anyone who deliberately set fire to forest areas be shot.¹⁹ This development is a new chapter of state and society relations, especially at the village level.

The intervention was executed by state officials, especially to villages that, based on official satellite reports,²⁰ suffered the most during the latest fire events. By August 2016, the time of my second fieldwork trip, there had been a significant shift in terms of state intervention. The state officials were intensely patrolling throughout Mantangai River and Kapuas River, two main water accesses for transportation in the area, to prevent slash and burn agriculture practices. Furthermore, state officials had installed big banners (see figure 4) containing warnings and threats around residential areas, public spaces, and main transportation access points, and people were indeed terrified of these intimidations. The situation invoked a dilemma for the people

^{17 &}quot;Polda Kalteng Tetapkan 95 Tersangka Pembakar Lahan," Manurung (2014, October 6).

^{18 &}quot;Pemilik Lahan Ditetapkan Jadi Tersangka," DKA and IDO (2015, November 16).

^{19 &}quot;Indonesian Official: Set a Forest Fire, Get Shot" 2017, August 5).

²⁰ The reports of satellite images were provided by Indonesian Agency of for Meteorology, Climatology, and Geophysics (BMKG). They utilized MODIS sensors from Terra and Aqua satellites—both are multi-national NASA research satellites. This agency spot fire hotspots by detecting thermal anomaly per one kilometer square in particular terrains. For an illustration of how scientists use the MODIS sensors in detecting hotspots in Central Kalimantan, please visit Tansey et al. (2008) or Masal, Manjin, Juni, Fatkhurohman, and Graham (2014).

because the season for slash and burn agriculture was coming and they needed to prepare their land accordingly.²¹



Figure 4. A warning related to fire use displayed at the military base in Mantangai sub-district

Source: Author, 2018

People were discussing their concerns with the state officials in their village and subdistrict. They were asking for the government's solution in their agricultural practices—how to produce rice, the staple food, for their family without using fires in land preparation. Alternatively, people requested rice supplies—or money to buy staple foods—from the government as a compensation. A few weeks later, after they had received no solution from state officials regarding their needs, some people deliberately burned their land, disobeying the

²¹ The similar cases also happen in other areas where the inhabitant practicing slash and burn agriculture—for instance, West Kalimantan (see Thung 2018).

warnings and threats. Even though the warnings and threats were very serious—15 years in prison or a fine up to IDR 10 billion (USD 750,000)—only one or two "arsonists" were punished. In fact, they received only minimum sentences, for example, a fine between USD 15-200, about two months in jail, or both. Often, even if a state bureaucrat knew the "arsonist," he or she would pretend to know nothing about the situation.

Realizing the urgency at the village and sub-district levels, the lower rank officials in Mantangai did not play their role as the state's representatives. They turned their allegiance to the people by "letting" the Dayak prepare their land—to set fires for farming that potentially cause forest fires. They overlooked such actions as long as the people did not ignite the fire before their eyes. Some of these officials even secretly told the people the tactic to outmaneuver the satellite surveillance: how to set fires without creating hotspots. Thus, there was a gap of governing between expectations of the high rank and executions of the lower rank within the state. The lower rank officials' practices, which were influenced by their everyday realities, "enabled" the local people to cause forest fires.

FOREST FIRES, INTERVENTIONS, AND STATE-SOCIETY DYNAMICS

Political ecology and socio-cultural based explanation for forest fires

For two decades, social scientists have been trying to understand the phenomenon of forest fires in Indonesia. Although their arguments about the causes of forest fires vary, their stances can be divided into two large categories. The first is from a political ecology point of view that sees the forest fire in the Indonesian tropical forest as a result of the failure of state policies in managing forest resources. Political ecologists argue that the regime of Soeharto, Indonesia's president from 1966 to 1998, implemented extraction-based policies which managed forest resources unsustainably and unequally (see McCarthy 2000; Herawati and Santoso 2011; Medrilzam et al. 2013; Lubis 2017). The second category is a socio-cultural perspective that suggests forest extraction-based human activities, especially slash and burn agriculture, are the main cause of fire events (see Boehm and Siegert 2001, 2004; Chokkalingam et al. 2005; Chokkalingam et al. 2007; Someshwar et al. 2011). With respect to predominant conditions of the environment,²² their analyses firmly conclude that most cases in the Indonesia tropical forest are caused by anthropogenic fires—fires set by people (Vayda 2006, 2011).

Neither argument is adequate. In the political ecology analysis, there are still gaps between the national and provincial level policies and the actual political interplay at the village level where the phenomena occur. The dynamics within government tools, particularly how state officials enforce policies on the indigenous people in everyday settings, should be better elaborated. Meanwhile, although the socio-cultural perspective provides deep understanding about various types of anthropogenic fires, it pays scant attention to the relation between the changing institution of slash and burn agriculture and burning practices. Fire use is part of the slash and burn agriculture that encompasses collective-government practices within the community.²³ However, based on my initial findings, this institution has been changing gradually for some time and is practiced in different ways by the indigenous people.

²² Biophysical scientists state that a fire happens and spreads because of various environmental conditions such as El Nino anomaly (see Dennis 1999; Siegert, Ruecker, Hinrichs, & Hoffmann 2001), lack of moisture in the forest (Rieley 1997), or previously burned area (Cochrane 2001).

²³ The term "collective" here should not be associated with communal. Slash and burn agriculture—often used interchangeably with other terms such as swidden agriculture or shifting cultivation—is better portrayed as *reciprocal* labor rather than communal labor. There are no communal lands, communal acts, or communal consumption since individuals basically work for themselves—to fulfill self-interest (Dove 1983). However, in practice, they have an institution to govern the reciprocal collaboration.

Based on these reflections, it is important to comprehend how fire regulation enforcement is linked to the changing slash and burn agriculture practices. Why, even in the presence of coercive state apparatuses, do people still set their fires? Why are the indigenous people blamed for the uncontrollable fires when other factors are also clearly known? How do state officials operate in enforcing the fire ban for the indigenous people? These questions resemble how development initiatives—in this case, intervention—are delivered by the state to the society.

State-sponsored development initiatives and forest fires

When it comes to development or intervention, Scott (1998) argues that the state usually perceives the society as a target for the exercise of power. Thus, in a sense of greater legibility, the state often neglects existing social arrangements within an area. The reason behind this strategy of governing is that contextual complexities are seen by the state as a nightmare for ideal bureaucracy (Scott 1998; see also Morgan and Orloff 2017). This desire to measure and to unify explains why the state's initiatives to facilitate improvement for people becomes tragic (Scott 1998). With similar reasoning, Gupta (2012) articulates that even with a noble intention, a state's intervention in society contains a certain measure of structural violence through procedures of bureaucracy which systematically repress the powerless beneficiaries or targeted population. In so doing, the state exercises its "expert" knowledge which it thinks is best to ameliorate improve people's life (Scott 1998; Li 2007b; Gupta 2012).

Indonesia's policies to criminalize fire use for slash and burn agriculture reflect the way the state perceives what is best to improve the situation based on *its* calculation. This bias is exactly what Li (2007b) interprets as the practice of "rendering technical" in governing development initiatives. Inspired by Ferguson (1994), Li (2007b) argues that state desire to

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ameliorate people' life often simplifies the whole governing acts to merely technical instructions, visible actions, and measurable targets, hence manifesting the anti-political machine conception. Further, Li (2007a) elaborates that in a development initiative—community forest management, for instance—officials often overlook the social and political consequences of their interventions —such as land tenure issues, overlapped interests of villagers and local elites—because they are not well equipped to deal with such complexities. This is partly the reason that state initiatives generally fail to address the actual problems and often create new ones.

Nevertheless, in handling matters related to forest fires, I am deliberately neglecting conclusive terms such as "failure," "flop," or "blunder" for the state's efforts. I agree with Van Klinken and Barker (2009) that not only may these terms direct us to a misleading deduction but also they may not help much to understand why things work the way they do. Reducing development to nothing more than anti-politics machinery is also insufficient for understanding why social interventions cannot produce their intended goals—why state interventions have not been effective to stop the forest fires. I argue that these scholars tend to perceive the state as a unitary entity in promoting development to the society. What appears in local newspapers and other reports about state interventions to prevent forest fires may suggest that the state's actions are unified under presidential commands. However, such a myopic image is most likely intended to create a notion of the state's noble redemption for its previously poor policies about natural resources and, more importantly, a message to society to stay away from the forest fires.

In contrast, many scholars argue that the state should be seen as having multiple interests, levelled layers, and many forms and faces that do not necessarily work congruently (Mitchell 1991; Gupta 2006, 2012; Van Klinken and Barker 2009; Morgan and Orloff 2017). This frame is

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significantly useful to see how "many hands of the state"²⁴ operate in daily events related to forest fires, since state policies are executed by lower rank officials. I suggest that focusing attention on everyday practices of these lower rank officials (local agent of the state) would be fruitful for understanding how the state's policies in governing people have been ineffective. The fact that these state officials have helped the people to override the state's intervention should be counted as signifiers that the boundary between the state and society is blurred rather than fixed (Gupta 2006; Van Klinken and Barker 2009; Morgan and Orloff 2017).²⁵

State officials' shifting allegiance and its contribution to the spread of forest fires

The notion of state as a multi-actor and multi-interest institution is not particularly new. Lipsky (2010) uses the term "street-level bureaucrats" to underline the significant role of lower rank state officials in delivering services to communities. The lower rank government officials are the hands-on tool of the state machine and, at the same time, are often also part of the local community. Barker and Van Klinken (2009) argue that state organizations are filled by elites who are also part of society, including elites at the local level—which is essentially true in the case of Mantangai. Whether or not the local officials have blood ties with people in their jurisdiction, they are still an integral part of the community structure. In other words, the officials at the lowest level of the state are a grey area—contested arena—in the dichotomy of state and society.

With blurred boundaries between state and society, state officials may shift their allegiance to society. Van Klinken and Barker (2009) give some hints about such a shift, using

²⁴ This is the metaphor used by Morgan and Orloff (2017) to describe the various forms of the state as multiple institutions and interests.

²⁵ Mitchell (1991) argues that even though there is a line between state and society, that line is a constructed feature of modern power that has an effect on governing. This boundary is partly shaped and affected by the everyday interactions between state apparatuses and society.

cases in Indonesia. One of their instances, cited from Fougeres (2009), concerns a village head in South Sulawesi who was not happy about implementing the government's regulation on sustainable fishery because not all of his constituents were well served by the rules against cyanide fishing. Van Klinken and Barker (2009) see local officials, individuals who also are part of the state, as able to neglect the top-driven policies and shift their allegiance to the society. In the same fashion, Greenhalgh (1994) notes that during the period of strict birth control policy in China, cadres, as local officials, often helped villagers by their unwillingness to promote the birth-planning campaign—a policy they did not like. Benefiting from their position within the blurred boundaries, the lower rank officials can alter their orientation and side with the people they care about in overcoming state policies. What is worth bringing to light is not only their motivation but also the context in which they decide to enact such behavior and what situations enables them to do so.

I argue that the shift of local officials from state to society depends hugely on a juncture in which the local officials' decision is influenced by their capacity to analyze state limitations, their skepticism regarding bureaucratic procedures, and pressure from the society at a particular time. This kind of perspective is important, especially because bureaucrats may not convey accurately the order from the top level, or they may do so but not share the basic assumption of the policy directives, thereby disrupting the smooth functioning of the state system (Sharma and Gupta 2006). That is why examining the lower rank of the state in everyday bureaucratic practices is significant, not only for better comprehension of forest fires and other impediments to the proper implementation of development programs but also for explaining the production and reproduction of the shifting effect of the state (Sharma and Gupta 2006).

WHEN NOTHING GOES RIGHT, GO LEFT:

THE SHIFTING LOYALTIES OF STATE OFFICIALS

Adi²⁶ was desperately trying to call Budi when I started the informal interview on his office's veranda. His office is located in clear sight of Budi's office building across the street. While calling, he occasionally glanced over—probably hoping to see Budi there. He seemed uncomfortable to talk about forest fire intervention without his colleague. "He should be here, so we can talk together, right?" he grumbled. I did not recognize the doubt and insecurity in Adi until later when I learned about the heavy pressure and frustration he and his lower rank colleagues endured as a state entity dealing with forest fires.

This section focuses mainly on the everyday practices of lower rank state officials at village and sub-district levels. Various experiences had driven their actions into forms that apparently were different from the desired outcomes. These experiences include the bureaucratic processes they had faced, the lack of resources they had encountered, the exhaustion they had sustained, and the sympathy they felt for Mantangai people. The story of these officials as the government's distant bodies in dealing with forest fires is problematic in terms of the state's intervention agenda. These lower rank officials' actions resonate with the notion that the many layers, forms, and faces of the state do not necessarily work congruently (Mitchell 1991; Gupta 2006, 2012; Van Klinken and Barker 2009; Morgan and Orloff 2017). Further, such a gap in smooth governing typically disrupts the functioning of the system (Sharma and Gupta 2006) and in turn, in this case, perpetuates the ineffectiveness of state intervention in preventing forest fires from occurring.

²⁶ All the subjects here are lower rank officials. To protect the anonymity of my interlocutors, I do not specify the exact names or positions. I also do not distinguish among police, military, and elected and non-elected officials.

Mission (almost) impossible: The turbulence in executing fire prevention commands

In May 2016, as an implication of Presidential Decree 11/2015 "Improvement of Forest and Land Fires Control," a task force was created in Mantangai. Reportedly, everything seemed fine on paper, but problems continuously emerged day by day as these local state officials were provided with neither money nor facilities to perform the prevention and control of forest fires not to mention the complicated command chain within the structure from national to village levels. This highly bureaucratic and resource deficient task force only replicated previous unsuccessful state intervention for controlling forest fires (Lubis 2017). Most prior interventions had created a circumstance in which the executors could not perform the designed strategies to achieve the targets. Such an unfavorable situation faced by officials who implement the daily services within a society is quite typical, in terms of lack of support from the higher ranks, limited provision of resources, and insufficient authority (Lipsky 2010; Migdal 2001; Sharma and Gupta 2006). I argue that the difficulties experienced by the local state's officials did not result simply from "rendering technical" initiatives; these difficulties occurred mostly because the state executives failed in addressing the inherent complexity within the bureaucracy. They lacked the capacity to design a proper flow of operational funds, incompetently assessed the need for equipment and other necessary supplies, and, more importantly, overlooked the layers of state apparatuses.

One of the mandated chores of this task force was to conduct a routine patrol in the jurisdiction area. When Cahyadi first mentioned the patrol, I thought he meant a watch with a motorized canoe inside the former MRP areas—like what I did for my observation. As the interview progressed, I realized that most of the patrols he had been conducting were land patrols using motorbikes—covering less than half of the Mantangai area. Due to a lack of organizational

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resources, he and his colleagues were not able to perform their watch via waterways, which is the most sensible approach to observe people's activities in the peat forest. To patrol using a motorized canoe, they would have to have rented it from local people for USD 10-15 and spent a minimum of USD 15 for gasoline—as well as an expenditure for food, equipment, and other travel supplies. Cahyadi said that he often spent his own money for patrolling. He testified that Adi and Budi did the same. That amount of money was expensive for lower rank officials like them.

Budi confirmed Cahyadi's information about the struggle in performing patrols, and Budi knew well that their difficulties were part of the bureaucratic face of fire operations. When I visited his office, he specified two problems regarding this issue: unreliability of funds and limitation of equipment for dealing with forest fires. He explained, "We can use the funds, but the bureaucratic process will stall our effort significantly. If we were applying for those funds now [dry season], they [higher rank institution] probably would grant that money next rainy season." For immediate needs, he could not afford to wait for bureaucratic procedures; thus he used another operational fund of the sub-district and money from his own pocket for visiting hotspots. Meanwhile, regarding the equipment, he complained, "Like a month ago when fires occurred for weeks. We could not do much. In the sub-district office, we only have three pumps, each with a 25-meter hose; 75 meters in sum. It's useless!" Further, he explained that the task is even harder because Mantangai sub-district comprised more than 40% of the total area of Kapuas Regency, and most of the space can be accessed only through rivers and canals.

After conducting separate interviews with Adi, Budi, and Cahyadi, I knew the patrols they mentioned were not a regular watch within the area, but merely response visits to reports of detected hotspots they had received from both their superiors and other state institutions. These

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patrols were intended to prevent the spread of fires, as occurred in 2015. Dodi told me that the data concerning hotspot distribution were gathered from the Indonesian Agency for Meteorology, Climatology, and Geophysics. One particular unit in Kapuas Regency processed and simplified the data before disseminating it to the related state officials.

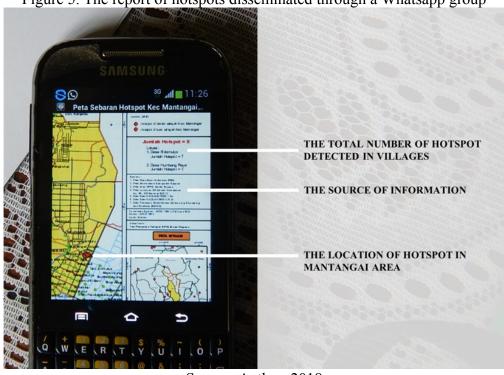


Figure 5. The report of hotspots disseminated through a Whatsapp group

Source: Author, 2018

Apparently, even though the task force was formalized in May 2016, these lower rank officials had worked in fire prevention and control much earlier than that. Without sufficient resources, their primary mission was to visit hotspots and not to patrol. Dodi whispered that the term "patrol" did not mean doing a water-based trip throughout their area. Rather, it meant merely talking with village heads, regardless of whether or not fires had occurred. The village heads were central figures in terms of getting bottom-up updates about people's activities related to forest fires. Ironically, most village heads did not know the precise conditions of fire occurrence in their village. They never checked conditions themselves; rather, they just relied on

people's information. For Adi, Budi, and Cahyadi, visiting hotspots was not only tiring but also depressing. With limited resources and under heavy pressure from their own distant superiors, they had to cover a 714 square kilometer area (nearly the size of Singapore), including vast protected forest landscapes.

Following my question about his experience in performing state intervention, with a gloomy expression Adi told me his story about his miserable period of duty in Mantangai, "Who wants to be positioned here? Why did I get this position at the time when Jokowi's regulation [of fire ban] is being executed? Nothing like this [intense pressure] ever happened before. In the past, we were relaxed even though smoke haze and fires were occurring." He learned through his friend that the duty of handling forest fires is inevitably a gamble: if he succeeded, he would stay; if he failed, the supervisor would demote him. Regarding Adi's determination, Dodi had told me a week earlier, "When no institution wants to take initiative, it is only Adi who consistently puts effort into every hotspot report. He often uses his own money to buy gasoline [for patrolling] and to give an incentive to personnel who help him. He has no option but to come to the hotspots, as the command came from higher rank officers in Palangka [capital of province], even Jakarta. He has to be there [the hotspot] by any means: use a motorized canoe, motorbike, or if necessary, walk barefoot for miles!"

Adi explained that a visit to the coordinates of a hotspot was about two related tasks. The main objective was extinguishing fires at the reported coordinates. Another task was reporting the process—sending pictures of the "before" and the "after" conditions to his supervisors. For that demanding tasks he and his colleagues would have go to the hotspot location as indicated by the satellite report. Dodi narrated that, about one or two months before, Adi was ordered to put out a fire (he did not specify the location) by his supervisors, and he asked Dodi to join him.

They were very tired after walking five kilometers, because the hotspots were located in the deep protected forest. Adi had to post pictures to his Whatsapp group to prove they were truly working on the task. This online chat platform was used as communication channel for all bureaucrats related to intervention regarding forest fires. Considering his duty and the vast area he was supposed to cover with limited money and personnel, he shook his head, and then lamented, "*Aduh…ampun, ampun…*" (local expression of surrender). "I have been doing this [visiting hotspots, putting down fires] since February, and now it is already October," he added, expressing his exhaustion.

Sided with community, not the state

Reflecting the way regulations were enforced without properly considering executor officials like him, Budi protested, "We must be critical. This new national policy [fire ban] is too centralized. They do not have an idea that we are bleeding [suffering] in delivering the execution." The repeated heart-breaking moments these lower rank state officials endured during that fire season in 2016 had apparently weakened their commitment to the state. The serious threat to their careers and the continuous burdensome missions, especially without proper support, made them question their position as state actors. Furthermore, their emotions were torn apart while witnessing the fear, anger, and frustration of Dayak people in dealing with the fire ban order—a repressive regulation without any solution. The state was failing both the state's officials and the community.

Over time, the local state actors had channeled their disappointment in the state by siding with people in overcoming the state's strategy in forest fire intervention. This shift was facilitated by the blurred boundaries of state and society, where the lower rank officials acted as the hand of

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the state in performing their role while still being members of the community (Greenhalgh 1994;Van Klinken and Barker 2009). However, their political maneuver to side with the people was not determined solely by their individual motives and did not necessarily occur in all situations. Rather, it emerged at a certain juncture: the interwoven condition of problematic enforcement and disempowering bureaucracy on the one hand, and insistent socio-cultural pressure on the other.

In early September, Erwandi told me that people were afraid of the fire ban and, at the same time, anxious about their future. About two weeks after discussing this new policy with Erwandi, I interviewed a farmer in the same village about the farmers' reactions. He explained his dilemma and shared his plan and collective spirit of the farmers. "We now have 82 signatures [of farmers]. We are ready. If the government [regency] cannot give us permission to burn our land, then *Bupati* [head of regency] should provide a rice supply that can fulfill our needs up to next year. If he refuses to meet our needs, it means we are being forced to burn our land. We do not care if one of us is captured and imprisoned, the rest of the group will follow [be imprisoned too]." Most people in Mantangai shared his feeling. In a sympathetic tone Adi testified, "In public hearing I witnessed a delegate from a village, in his trembling voice, speak to government representatives: 'I know this ban is instructed by the president, but where is the solution for us? We are the poor, what should we eat?'." Lower rank officials in Mantangai routinely encountered this kind of pitiful expression.

Fandi confirmed that as a leader in the community, he was in an ambivalent position. "We are part of the [state] system, we only take order from the higher rank and apply it, no [other] option." Nevertheless, when farmers or representatives of a farmer group asked about what they could do to get permission for using fire, he played his dual part. "I understand your situation but

you already knew the [fire] ban. So, it is up to you. *But the police and military officers are not watching you every time*. I am not encouraging you to burn, *but you can think, right?*" (emphasis added). I heard other state officials in Mantangai gave similar hints when they were confronted by farmers—who in fact were their own colleagues, distant relatives, or even family.

At about the same time, some of the farmers came, individually or in a group, to ask permission of Adi. "Most of them are my neighbors, so I know them personally." He told those who came to his house that it was not his will, but that of the president and the higher rank, and he suggested to farmers that it was "fine" to burn their land as long as they can keep their activity out of his or others' sight. He told me, "No one would notice if they burn at midnight, anyway," as long as they did not ignite a fire when he was around.

At one point, he stopped the interview and checked his Whatsapp application. I observed his later anxiety in composing his afternoon report to his supervisor—a daily reporting task. While typing, he told me that the communication group had been established in order to get real time bottom-up information regarding fire intervention. He shook his head, looked disappointed, and then read out loud the last message from a high rank official in the chat group. This person had written, "After reviewing the report, I know some of you never catch the arsonist." His superior was expecting local officials to capture people who were still using fires, in both the forest and their own farming areas. Adi seemed to take the message personally, because he admitted to me that he had never caught any person thus far. In a reflective manner, he articulated the dilemma he felt from his superior's message. "How can we capture our own people, while we are obliged to merge with the community," articulating his confused role. The ideal task for state officials in this particular situation, he added, should be to take preventive actions not oppressive ones. That belief is why he did not like the idea of seizing people who were trying to survive. "I do not want to scare people; I want to do good for them." he added.

Budi shared the same dilemma. He explained that, since the Governor Regulation 15/2010 "Guideline for Land and Gardens Opening" had been formally annulled, he felt he had no capacity to defend someone who caused a fire. From his remark, I assumed he had protected Mantangai people in previous years. Now, in his desperation from juggling his role as state representative and society member, he suggested to anyone who consulted him, including his own family, "If you still want to burn your land, just do it. But I cannot guarantee you are going to be okay. The risk is yours." He emphasized further, "I personally wish to tell them 'just burn it,' but there are police we need to think about."

Cahyadi did not participate in "encouraging" Dayak community to burn their land sneakily as the rest of the state officials in Mantangai did. However, he indicated that arresting people would be the officer's last option: "Only if they [the farmers] did it before our eyes," he said. As officers familiar with community tradition, they were aware that burning land was an act of surviving, especially when they contrasted that fact with the state's inability to provide a practical solution for people's need. The mentality to contain oppressive acts was contradictory with the guideline of "controlling" fires in farming and forest area.

More advanced than other state officials, Erwandi developed a strategy to overcome the state's technology using the knowledge he had memorized from state-sponsored training. Along with other state apparatuses in Central Kalimantan, he had participated in training on fire prevention and mitigation held by the Ministry of Forestry, Ministry of Environment, and United Nations Development Program. Having learned the mechanisms of hotspot detection, he knew that under certain conditions a satellite would not be able to trace a fire. When confronted by

farmers, he would suggest, "You all can still do burning, with tricks: do not burn in daylight and please ensure the fire won't spread. Ignite the fire in the evening when the temperature is low so the satellite cannot detect your fire. Just do not go against the [fire] ban explicitly; rather, do it carefully and be quiet about it. Then, burn only a small area, maximum one hectare per action, to minimalize attention from others." He offered this "cheat sheet" because he cared about the people who could not fulfill their basic needs due to the fire ban.

Figure 6. People practicing "burn and run" agriculture. (left: smoke appearing in a farming area; right: the inspected site where fires were ignited from the canal)



Source: Author, 2018

Considering the shift in practice of local state officials, I am not surprised that people were still able to perform what I call "burn and run" agriculture, a phenomenon of people's igniting fires in their land and then running away from the location because they were afraid of being seen by other (see also Lubis 2017; Ansori 2018). They were frightened of being punished by the authority regarding the enforcement of fire ban. Nevertheless, they practiced such actions even though their fires might spread from farming to other terrains. I found a site where a farmer had ignited fires on his land (see Figure 5) sometime before the end of August 2016. When I left Mantangai in late in September of that year, I had not heard of any actions taken against that farmer.

CONCLUDING NOTES AND FURTHER DIRECTIONS

In this paper, I have attempted to answer why state interventions have been ineffective in stopping forest fires from occurring. My preliminary findings show that the occurrence and spread of forest fires are not simply caused by poor state policies or people's behavior, but are also determined by political interplay at lower levels of governance between the state's enforcement officers and the local community. As the state's agent, the lower rank officials have experienced disempowering bureaucratic processes and implacable socio-cultural pressure, and have both delivered and endured problematic enforcement. At the same time they have witnessed the state's incapability of providing solutions for the indigenous community. These officials, in turn, have shifted their allegiance from state to society and "allow" people to set fires—actions that are instrumental to forest fires.

By explicating the dynamics of state functionaries at village and sub-district levels, I do not expect to frame the subjects responsible for the forest fires. My purpose is to illuminate that the phenomenon of forest fires is related to the incongruence of work within layered levels and multiple interests of the state. By so doing, this ethnography of lower state officials in Mantangai offers another piece to the puzzle of current forest fires in Indonesia.

Moreover, since fire-related catastrophes are not exclusive to Indonesia, this analysis may have relevance for the issue more broadly in the global South. India, for instance, has been struggling with massive burning of crops (Kumar, Kumar, & Joshi 2015) while Australia has been trying to prevent further loss from fires in savanna areas (Whitehead, Purdon, Russell-Smith, Cooke, & Sutton 2008). Some African countries also have been promoting a country-level effort to control and mitigate problems from fires (Eriksen 2007). The common feature of anthropogenic fires in these regions is the tension between indigenous practices of fire use and state enforcement that results in environmental and economic losses. By exploring the dynamics of lower rank officials in delivering fire controlling initiatives, this paper opens a different window for understanding fire-related problems in the region and beyond.

I anticipate my future work will highlight that contemporary Mantangai people are not burning in the same ways as their predecessors. In recent decades, many societal, environmental, and political changes have influenced their practices in both slash and burn agriculture and other forms of livelihood. The transformation of these practices seems to have had an effect on the occurrence and spread of forest fires in this particular area. For that reason, these alterations need to be explored further since the existing scholarship discusses the indigenous practices in a taken-for-granted manner. Thus, in the future, I intend to analyze changing practices, not only in slash and burn agriculture but also in other kinds of livelihood with regard to the new sociopolitical contexts at the village level.

Concerning these new contexts, I have not yet closely explored the issue of local people's interaction with non-state actors. Since the late 1990s, people in Mantangai have been involved in socio-environmental interventions initiated by national and international organizations such as Borneo Orangutan Survival Foundation, World Wild Fund for Nature, Wetland International, CARE International, Center for International Forest Research, and Kalimantan Forest Climate Partnership (see also Lubis 2017). These recent arrangements should be added to the equation for better comprehending the dynamics of people's actions, lower state officials, non-state actors, and the environment.

Tracing the complexity of forest fires to other levels and forms of bureaucracy would be beneficial in defining the state-society interconnectedness. For instance, at the regency level there are several state agencies, other than local government, that share an interest in forest fires

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issues, such as the disaster management agency (Badan Penanggulangan Bencana Daerah) and the protected-forest management unit (Kesatuan Pengelolaan Hutan Lindung). Furthermore, in 2016 the Indonesian state created the national agency of peat restoration (Badan Restorasi Gambut) that is institutionally aimed at ameliorating, financially and culturally, the life of the people around the forest, and, environmentally, the condition of the peatlands. The emergence of this new bureau has complicated the governance of forest fires at both national and local levels, including Central Kalimantan, and thus provides an additional perspective for my research.

BIBLIOGRAPHY

- Akbar, A. (2011). Studi kearifan lokal penggunaan api persiapan lahan: studi kasus di hutan Mawas, Kalimantan Tengah. *Jurnal Penelitian Sosial dan Ekonomi Kehutanan, 8*(3).
- Alisjahbana, A. S., and Busch, J. M. (2017). Forestry, Forest Fires, and Climate Change in Indonesia. *Bulletin of Indonesian Economic Studies*, 53(2), 111-136.
- Ansori, S. (2016). *Beyond livelihood's fires: Lessons from 2015' peat fires in Kalimantan Tengah.* Paper presented at the 6th International Symposium of Journal Antropologi Indonesia, Universitas Indonesia, Indonesia.
- Ansori, S. (2018). *The everyday forms of anthropocene: An ethnography of peat fires in Central Kalimantan, Indonesia.* Paper presented at the The 2nd City Anthropology Conference, University of Illinois, Chicago.
- Applegate, G., Cochrane, M. A., Jessup, T. C., Lubis, Z., Masal, F., Ryan, K., and Vayda, A. P. (2014). Doing research on causes and dynamics of peat fires in Central Kalimantan's KFCP Area. Indonesia-Australia Forest Carbon Partnership.
- Azman, A. (2015, September). A history of the haze. *The New Paper*. Retrieved from http://www.tnp.sg/news/singapore-news/history-haze
- Barker, J., and Van Klinken, G. (2009). Reflections on the state in Indonesia. In G. Van Klinken & J. Barker (Eds.), *State of authority: The state in society in Indonesia*. New York: Cornell Southeast Asia Program Publications.
- Boehm, H.-D. V., and Siegert, F. (2001). *Ecological impact of the one million hectare rice project in Central Kalimantan, Indonesia, using remote sensing and GIS.* Paper presented at the 22nd Asian Conference on Remote Sensing.
- Boehm, H.-D. V., and Siegert, F. (2004). The impact of logging on land use change in Central Kalimantan, Indonesia. *International Peat Society, Number 12*(January 2004).
- Cattau, M. E., Harrison, M. E., Shinyo, I., Tungau, S., Uriarte, M., and DeFries, R. (2016). Sources of anthropogenic fire ignitions on the peat-swamp landscape in Kalimantan, Indonesia. *Global Environmental Change*, *39*, 205-219.
- Ceccato, P. N., Jaya, I. N. S., Qian, J., Tippett, M. K., Robertson, A. W., and Someshwar, S. (2010). *Early warning and response to fires in Kalimantan, Indonesia*. Retrieved from http://iri.columbia.edu/publications/id=1037

- Chamorro, A., Minnemeyer, S., and Sargent, S. (2017). Exploring Indonesia's long and complicated history of forest fires. Retrieved from Global Forest Watch website: <u>http://blog.globalforestwatch.org/fires/indonesias-fire-history-provides-insights-to-prevent-future-fires.html</u>
- Chokkalingam, U., Kurniawan, I., and Ruchiat, Y. (2005). Fire, livelihoods, and environmental change in the middle Mahakam peatlands, East Kalimantan. *Ecology and Society*, *10*(1).
- Chokkalingam, U., Permana, R. P., Kurniawan, I., Mannes, J., Darmawan, A., Khususyiah, N., and Susanto, R. H. (2007). Community fire use, resource change, and livelihood impacts: The downward spiral in the wetlands of southern Sumatra. *Mitigation and Adaptation Strategies for Global Change*, 12(1), 75-100.
- Cochrane, M. A. (2001). In the line of Fire Understanding the Impacts of Tropical Forest Fires. *Environment: Science and Policy for Sustainable Development, 43*(8), 28-38.
- Dennis, R. (1999). A review of fire projects in Indonesia, 1982-1998: CIFOR.
- DKA, and IDO. (2015, November 16). Pemilik lahan ditetapkan jadi tersangka. *Kompas*, p. 22. Retrieved from <u>http://home.kompas.co.id/litbang/tarkfast/download4.cfm?</u> <u>type=0&id=31913106&session=1514500766415</u>
- Dove, M. R. (1983). Theories of swidden agriculture, and the political economy of ignorance. *Agroforestry systems*, 1(2), 85-99.
- Eriksen, C. (2007). Why do they burn the 'bush'? Fire, rural livelihoods, and conservation in Zambia. *The Geographical Journal*, *173*(3), 242-256.
- Ferguson, J. (1994). *The anti-politics machine: 'development', depoliticization and bureaucratic power in Lesotho*. Minneapolis and London: University of Minnesota Press.
- Fougeres, D. (2009). Governing villages in Indonesia's coastal zone. In G. Van Klinken & J. Barker (Eds.), *State of authority: The state in society in Indonesia*. New York: Cornell Southeast Asia Program Publications.
- Glauber, A., and Gunawan, I. (2016). *The Cost of Fire: An Economic Analysis of Indonesia's* 2015 Fire Crisis. Retrieved from http://pubdocs.worldbank.org/en/643781465442350600/Indonesia-forest-fire-notes.pdf
- Graham, L. L. B., Masal, F., Manjin, S., Juni, E. T., Fatkhurohman, and Applegate, G. (2014). *Hotspot monitoring, fire investigation, and type and distribution of land assets in the KFCP area*. Indonesia-Australia Forest Carbon Partnership.
- Greenhalgh, S. (1994). Controlling Births and Bodies in Village China. *American Ethnologist*, 21(1), 3-30.
- Gupta, A. (2006). Blurred boundaries: The discourse of corruption, the culture of politics, and the imagined state. In A. Sharma & A. Gupta (Eds.), *the anthropology of the state: a reader* (Vol. 22, pp. 211). Malden: Blackwell Publishing.
- Gupta, A. (2012). *Red tape: Bureaucracy, structural violence, and poverty in India*: Duke University Press.
- Hadiwijoyo, E., Saharjo, B. H., and Putra, E. I. (2017). Kearifan lokal masyarakat Dayak Ngaju di Kalimantan Tengah dalam melakukan penyiapan lahan dengan pembakaran. *Jurnal Silvikultur Tropika*, 8(1), 1-8.
- Hansen, M. C., P. V. Potapov, R. Moore, M. Hancher, S. A. Turubanova, A. Tyukavina, ... J. R.
 G. Townshend. (2016). *Hansen/UMD/Google/USGS/NASA Tree Cover Loss and Gain Area*. Retrieved from <u>http://www.globalforestwatch.org/country/IDN/15</u>
- Harrison, M. E., Page, S. E., and Limin, S. H. (2009). The global impact of Indonesian forest fires. *Biologist*, *56*(3), 156-163.

- Herawati, H., and Santoso, H. (2011). Tropical forest susceptibility to and risk of fire under changing climate: A review of fire nature, policy and institutions in Indonesia. *Forest Policy and Economics*, 13(4), 227-233.
- Hers. (1980, July 15). Kebakaran hutan reboisasi terus diselidiki: Harus ditindak tiap tindakan yang merugikan orang lain. *Kompas*, p. 1. Retrieved from <u>http://home.kompas.co.id/litbang/tarkfast/detail4.cfm?</u> item=74&startrow=1&style=advanced&navigation=&session=1514497863290
- Hoscilo, A., Page, S. E., Tansey, K. J., and Rieley, J. O. (2011). Effect of repeated fires on landcover change on peatland in southern Central Kalimantan, Indonesia, from 1973 to 2005. *International Journal of Wildland Fire*, 20(4), 578-588.
- Ibra. (1984, July 7). Hutan perlu diamankan. *Kompas*, p. 9. Retrieved from <u>http://home.kompas.co.id/litbang/tarkfast/uploadpdfpreview.cfm?</u> <u>opr=preview&id=477513</u>
- Ibra. (1991, December 10). Daerah Sekilas: Samarinda- Tiga orang penduduk yang merambah hutan diadili. *Kompas*. Retrieved from <u>http://home.kompas.co.id/litbang/tarkfast/download4.cfm?</u> <u>type=0&id=30639184&session=1514498668602</u>
- Indonesian Official: Set a Forest Fire, Get Shot. (2017, August 5). VOA News. Retrieved from https://www.voanews.com/a/indonesia-forest-fires/3973522.html
- Kumar, P., Kumar, S., and Joshi, L. (2015). The extent and management of crop stubble Socioeconomic and Environmental Implications of Agricultural Residue Burning (pp. 13-34): Springer.
- Li, T. M. (2007a). Practices of assemblage and community forest management. *Economy and Society*, *36*(2), 263-293.
- Li, T. M. (2007b). *The will to improve: Governmentality, development, and the practice of politics*. Durham and London: Duke University Press.
- Lipsky, M. (2010). *Street-level bureaucracy: Dilemmas of the individual in public service*. New York: Russell Sage Foundation.
- Lubis, Z. (2014). Social Mapping of Access to Peat Swamp Forest and Peatland Resources. Indonesia-Australia Forest Carbon Partnership.
- Lubis, Z. (2017). Menggantang Asa di Kabut Asap: Fenomena 'Environmentaliti Friksional' Pada Kasus Pengendalian Kebakaran Lahan Gambut di Kabupaten Kapuas Kalimantan Tengah. (Doctoral Dissertation), Universitas Indonesia, Depok, Indonesia.
- Manurung, J. W. (2014, October 6). Polda Kalteng Tetapkan 95 Tersangka Pembakar Lahan. *Antara News*. Retrieved from <u>https://kalteng.antaranews.com/berita/234581/polda-kalteng-tetapkan-95-tersangka-pembakar-lahan</u>
- Masal, F., Manjin, S., Juni, E. T., Fatkhurohman, and Graham, L. L. B. (2014). *Monitoring hotspot dan investigasi kebakaran di wilayah kerja KFCP*. Indonesia-Australia Forest Carbon Partnership.
- McCarthy, J. (2000). The changing regime: forest property and reformasi in Indonesia. *Development and Change, 31*(1), 91-129.
- Medrilzam, M., Dargusch, P., Herbohn, J., and Smith, C. (2013). The socio-ecological drivers of forest degradation in part of the tropical peatlands of Central Kalimantan, Indonesia. *Forestry*, 87(2), 335-345.
- Migdal, J. S. (2001). *State in society: Studying how states and societies transform and constitute one another*. Cambridge: Cambridge University Press.

- Mitchell, T. (1991). The limits of the state: Beyond statist approaches and their critics. *American political science review*, 85(1), 77-96.
- Morgan, K. J., and Orloff, A. S. (2017). *The many hands of the state: theorizing political authority and social control*. New York: Cambridge University Press.
- Null, J. (2017). El Nino and La Nina years and intensities based on Oceanic Nino Index (ONI). Retrieved from Golden Gate Weather Services website: <u>http://ggweather.com/enso/oni.htm</u>
- Page, S., Hoscilo, A., Langner, A., Tansey, K., Siegert, F., Limin, S., and Rieley, J. (2009). Tropical peatland fires in Southeast Asia. *Tropical fire ecology*, 263-287.
- Rieley, J. (1997). The peatland resources of Indonesia and the Kalimantan peat swamp forest research project. *Biodiversity and Sustainability of Tropical Peatlands*, 37-44.
- Saharjo, B. H. (2016). *Fires in Sumatera and Kalimantan 2015*. Retrieved from Bogor, Indonesia.:
- Scott, J. C. (1998). Seeing like a state: How certain schemes to improve the human condition have failed. New Haven: Yale University Press.
- Sharma, A., and Gupta, A. (2006). Introduction: Rethinking theories of the state in an age of globalization. In A. Sharma & A. Gupta (Eds.), *the anthropology of the state: a reader*. Malden, MA: Blackwell Publishing.
- Siegert, F., Ruecker, G., Hinrichs, A., and Hoffmann, A. (2001). Increased damage from fires in logged forests during droughts caused by El Nino. *Nature*, *414*(6862), 437.
- Someshwar, S., Boer, R., and Conrad, S. (2011). Managing Peatland Fire Risk in Central Kalimantan. *Indonesia World Resources Report, Washington, DC*.
- Suyanto, S., Sardi, I., Buana, Y., and van Noordwijk, M. (2009). Analysis of local livelihoods from past to present in the Central Kalimantan ex-mega rice project area. *World Agroforestry Centre, Bogor*.
- Tacconi, L. (2003). *Fires in Indonesia: causes, costs and policy implications*. Retrieved from http://www.cifor.org/publications/pdf_files/OccPapers/OP-038.pdf
- Tansey, K., Beston, J., Hoscilo, A., Page, S. E., and Paredes Hernández, C. (2008). Relationship between MODIS fire hot spot count and burned area in a degraded tropical peat swamp forest in Central Kalimantan, Indonesia. *Journal of Geophysical Research: Atmospheres,* 113(D23112).
- Thung, P. H. (2018). A Case Study on the Persistence of Swidden Agriculture in the Context of Post-2015 Anti-Haze Regulation in West-Kalimantan. *Human Ecology*, 1-9.
- Van Klinken, G., and Barker, J. (2009). Introduction: state in society in Indonesia. In G. Van Klinken & J. Barker (Eds.), *State of authority: The state in society in Indonesia*. New York: Cornell Southeast Asia Program Publications.
- Vayda, A. P. (2006). Causal explanation of Indonesian forest fires: concepts, applications, and research priorities. *Human Ecology*, *34*(5), 615-635.
- Vayda, A. P. (2009). *Explaining human action and environmental changes*. Lanham: AltaMira Press.
- Vayda, A. P. (2011). Dos and don'ts in interdisciplinary research on causes of fires in tropical moist forests. In A. P. Vayda & B. B. Walters (Eds.), *Causal explanations for social* scientists. A reader (pp. 287-304). Lanham, MD: AltaMira Press.
- Whitehead, P. J., Purdon, P., Russell-Smith, J., Cooke, P. M., and Sutton, S. (2008). The management of climate change through prescribed savanna burning: emerging

contributions of indigenous people in northern Australia. *Public Administration and Development, 28*(5), 374-385.

Yanarita, Naiem, M., Budiadi, and Sukarna. (2014). Development of the Dayak Ngaju community forest in the forest and peatland area, Central Kalimantan, Indonesia. *IOSR Journal of Environmental Science, Toxicology and Food Technology (IOSR-JESTFT)*, 8(3), 40-47.