

Prevention, Control and Law Enforcement Forest and Land Burning in Riau Province

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Abstract—Forest and land fires (Karhutla) in Indonesia seem to have become commonplace. In fact, the forest and land fires have an impact on public health, the paralysis of the economy and transportation, the destruction of flora and fauna, the impact on climate change, and transboundary haze pollution. Based on data from the Indonesian Ministry of Environment and Forestry (KLHK), the recapitulation of the total area of forest fires in Indonesia on September 30, 2020, reached 274,375.00 ha. Similarly, what happened in Riau Province based on the recapitulation of forest and land fires area (Ha) per Province in Indonesia in 2016- 2021, the total area of forest and land fires that occurred in Riau Province reached 6,510 ha. Forest and land fires in Riau Province continues to occur every year. In 2021, the Riau Provincial Government has officially established an emergency alert status for forest and land fires. The fire and forest fire alert status is effective until October 31, 2021. This refers to the Riau Governor's Regulation Number 09 of 2020 concerning Standard Procedures for Determining the Status of Disasters and the Command of the Task Force for Controlling the Fire and Forestry Disaster in Riau Province and the current situation. In 2019 in Riau Province, there were 78 suspects consisting of 73 individuals and 5 corporations. Meanwhile, in 2020, there have been 19 cases of forest and land fires in Riau Province which are under investigation. If business actors and/or activities do not take steps to control or prevent forest and land fires, strict action will be taken in the form of criminal sanctions. Law enforcement efforts, especially criminal ones are actually the last repressive measure taken to provide a deterrent effect to forest and land fire perpetrators in Riau Province. Meanwhile, currently what needs to be done is prevention and control efforts that should be used as the basic key movement in controlling forest and land fires in Riau Province.

Keywords—preventing, controling, law enforcement, land burning

I. INTRODUCTION

Forests are gifts and gifts from God Almighty for all mankind. Therefore, forests should be guarded and preserved in order to provide welfare for all creatures in the world, not only for now but also for the future.

Forest damage, such as forest and land fire, has an impact on environmental [1], social and public health damage. Not only the destruction of ecosystems but also the smog generated can disrupt public health.

Forest and land fires that are currently occurring in Indonesia, including Riau Province, have an impact on the community in the form of smog and environmental damage, so to ensure the status, function, condition of forests and forest areas, forest protection efforts are carried out, namely preventing and limiting forest damage caused by illegal activities. humans in the form of forest and land fires.

Forest and land fires occur every year, but law enforcement against forest and land fires is still considered very weak and has not run optimally. The existing legal instruments for combating forest, land and smoke pollution have not been able to overcome the problem of forest and land burning.1 Although in 2019, the handling and enforcement of the law on forest and land fires had begun, as well as in Riau Province, where the Riau Police released the results of handling forest and land fire cases (karhutla) throughout 2019 in Riau Province through the Head of Public Relations of the Riau Police, Kombes Pol. Sunarto said that the number of cases of forest and land fires handled by the Riau Police and the ranks of the Resort Police in Riau were 74 cases spread across districts and cities. A total of 74 cases consist of 72 individual cases and 2 corporations (companies). While the number of perpetrators who were named as suspects was 81 people. The suspects consisted of 77 individuals and 4 people from the company. Then the cases that have been in stage II are 65 cases, stage I are 5 cases, investigations are 3 cases. In addition, there is one case that was SP 3 because the suspect died [2]. However, forest and land fires continue to occur.

Riau Province as one of the provinces in Indonesia with very complex environmental problems, especially the problem of damage to forests and peat ecosystems whose impact is one of the largest contributors to forest and land fire disasters that occurred in Indonesia. Based on Presidential Instruction Number 3 of 2020 concerning Forest and Land Fire Management, he instructs: (1) to undertake efforts to control forest and land fires throughout the territory of the Republic of



Indonesia, which includes the following activities: (a) prevention of forest and land fires; (b) fighting forest and land fires; and (c) post-forest and land fire management. (2) streamlining law enforcement efforts against criminal acts forest and land fires as well as compensation payments in accordance with the level of damage or consequences required for rehabilitation costs, restoration of forest and land conditions, or other necessary actions as well as the imposition of administrative sanctions in accordance with the provisions of laws and regulations.

Talking about law enforcement as discussed in previous research3 that the implementation of criminal law enforcement against forest and land burning perpetrators in Riau Province has experienced many obstacles, both from the aspect of the legal code/regulation itself which regulates the handling of forest and land burning, from the aspect of law enforcement officers/enforcement officers, facilities or infrastructure, society and culture. which causes law enforcement to be ineffective. Even though criminal law enforcement is actually the last repressive measure taken to provide a deterrent effect to forest and land burning perpetrators in Riau Province, what needs to be done now is prevention and control efforts that should be used as the basic key movement in controlling forest and land fires in Riau Province. Based on this, the author is interested in writing about "Prevention and Control and Enforcement of Forest and Land Burning Laws in Riau Province".

II. DISCUSSION

Forest fire is defined as an event where fire consumes vegetated fuel that occurs in a forest area that spreads freely and uncontrollably. Meanwhile, land fires occur in non-forest areas [3]. Forest burning, where the fire spreads freely and consumes natural fuels from the forest such as litter, grass, dead tree branches/branches that remain standing, logs, tree stumps, weeds, shrubs, foliage and trees [4].

According to Article 1 number 38 of the Regulation of the Minister of Environment and Forestry Number P.32/MENLHK/SETJEN/KUM.1/3/2016 Concerning Forest and Land Fire Control that Forest and Land Fire, hereinafter referred to as Karhutla, is an event of forest and/or land burning, either naturally or by human action, resulting in environmental damage that causes ecological, economic, sociocultural and political. Meanwhile, based on Article 1 number 20 of the Regional Regulation of Riau Province Number 1 of 2019 concerning Technical Guidelines for Handling Forest and/or Land Fires, Forest and/or land fires are a condition where forest and/or land areas are hit by fire caused by human activities or other factors. nature so as to cause damage to forests and/or land causing economic, ecological, social, cultural, educational and health.

More than 99% of the causes of forest and peatland fires are the result of human activities, either intentionally burning or due to negligence in using fire. This is supported by certain conditions that make fire prone to occur, such as the El Nino phenomenon, the physical condition of degraded peat and the low socio-economic conditions of the community. The causes of fires by humans include: (a) Burning of vegetation Fires caused by fire originating from the intentional but not controlled burning of vegetation during activities, HTI and plantations as well as preparation of agricultural land by the community; (b) Activities in the use of natural resources Fires caused by fire originating from human activities during the use of natural resources, for example the burning of bushes that block their access to natural resources and the making of fires for cooking by illegal loggers and fish seekers in the forest. Their negligence in extinguishing fires can lead to fires; and (c) Fire tenure is often used by local communities to regain their land rights [5].

Therefore, it is necessary to enforce the law against the act of burning forest and land. Talking about law enforcement, is a process that sees many things. In general, as stated by Soerjono Soekanto [6] there are five factors that influence law enforcement, namely: (1) the rule of law/regulation itself; (2) Officers/law enforcement officers; (3) Facilities; (4) Society and (5) Culture. The law enforcement process also extends to the stage of making laws/laws. The formulation of the mind of the legislators as outlined in the legislation will also determine how the law enforcement will be carried out. Therefore, the success of law enforcement will be influenced by these things.

Talking about law enforcement of forest and land fires in Riau Province so far is still far from expectations. Of the 74 cases of forest and land fires above, 72 cases (97%) of perpetrators of forest and land burning were carried out by individuals with 81 people as suspects and only 2 cases (3%) corporate actors (companies: PT SSS and PT TI) with 4 people suspect. Meanwhile, from Jikalahari's observation, land forest fires also occurred in other corporate areas as shown in Figure 1.



Fig. 1. Data on forest and land fires in 2019.

The enforcement of criminal law against perpetrators of forest and land burning (karhutla) in Riau Province as

described above is still dominated by individuals. In fact, there are other actors who are indicated to have also burned forests and land, such as cukong, groups of people, business actors or corporations and the community. For reasons of cost savings (low costs), speeding up land clearing work, preventing pests and improving soil quality.

The enforcement of criminal law against individuals has been carried out in accordance with statutory regulations, both the Criminal Code (KUHP), Law Number 41 of 1999 concerning Forestry, Law Number 32 of 2009 concerning Environmental Protection and Management and Law No. 39 of 2014 concerning Plantations. Meanwhile, the enforcement of criminal law against corporations that are indicated to be burning forests and land is still minimal and not maximal.

As previously mentioned, there are five factors that influence law enforcement, namely: (1) the rule of law/regulation itself; (2) Officers/law enforcement officers; (3) Facilities; (4) Society and (5) Culture. Similarly, the implementation of criminal enforcement against perpetrators of forest and land fires in Riau province experienced several obstacles, among which [7]: (1) The rule of law/regulation itself relates to the regulation on infrastructure that must be owned by corporations for fire prevention. That at this time to declare a corporation intentionally or negligently burning forests and land is still difficult to find regulations. Need clarity settings in laws and regulations to provide legal certainty and carry out law enforcement against companies that are likely to carry or fail to prevent forest fires and land: (2) Law enforcement officers/enforcers, limited number and human resources in increasing law enforcement professionalism. In carrying out law enforcement against the perpetrators of forest and land burning, the ability and understanding of investigators will determine the sustainability of the handling of cases of forest and land burning; (3) Facilities and Geographical Conditions of Forests at Fire Locations Inadequate facilities and locations and geographical conditions of forest and land fires that are difficult to reach. The location of the fire is far from the village, sometimes in the forest. To get to this location, you have to travel for hours even with a rather difficult terrain because the surrounding conditions have also occurred forest and land fires. With such difficult conditions and locations, sometimes it becomes an obstacle for the police to carry out investigations and investigations against arsonists; (4) Society, the pattern of law enforcement is influenced by the level of community development, where the law is enforced or frozen. In a simple society, the pattern of law enforcement is carried out through simple procedures and mechanisms, but in a modern society that is rational and has a high level of specialization and differentiation, the organization of law enforcement is complex and highly bureaucratic. The more modern a society, the more bureaucratic the law enforcement process will be. As a result, those who play an important role in the law enforcement process are not only humans who become law enforcement officers, but also the organization that regulates and manages the operationalization of the law enforcement process. The condition of law enforcement on forest and land burning in the community is not only

determined by a single factor, but is influenced by various factors that contribute jointly to these conditions, but which factor has the most dominant influence depending on the social context and challenges faced. The community concerned. In general, the factors that affect law enforcement in forest and land burning can be distinguished in two ways, namely the factors contained in the legal system and factors outside the legal system. The factors in the legal system include legal factors (laws), law enforcement factors, and facilities and infrastructure factors, while factors outside the legal system that have an influence are community legal awareness factors, community development, culture, and other factors. Political or state authorities. Things that encourage people to burn forests due to economic factors and low costs, speed up land clearing work, prevent pests and improve soil quality; and (5) The culture, the culture of conserving forests and keeping forests sustainable sometimes have not been embedded in the hearts of some people, so they easily burn forests and land just for reasons of low cost or for economic reasons because they are told to burn forests. There has not been a growing awareness in some people that prevention is better than cure, preventing forest fires is better than extinguishing forest fires that already have an impact and cause huge losses to the community not only in Riau Province but also outside Riau Province.

Law enforcement efforts, especially criminal ones, are actually the last repressive measure taken to provide a deterrent effect to forest and land fire perpetrators in Riau Province. Meanwhile, currently what needs to be done is prevention and control efforts that should be used as the basic key movement in controlling forest and land fires in Riau Province. It is necessary to have facilities and infrastructure to prevent forest and land fires in the concession area in order to control and even prevent forest and land fires in Riau Province. In addition, it is necessary to maximize the role of local governments, the police and the community as well as the private sector to prevent and control so that forest and land fires no longer occur in Riau Province.

Related to efforts to prevent and control forest and land fires in Riau Province. In 2019, the Riau Provincial Government enacted Riau Province Regional Regulation Number 1 of 2019 concerning Technical Guidelines for Forest and/or Land Fire Management and in 2020 the Governor of Riau issued Riau Governor Regulation Number 09 of 2020 concerning Standard Procedures for Determining the Status of Disaster Emergency and the Task Force Command for Forest and Land Fire Disaster Management in Riau Province.

Prevention and control of forest and land fires in Riau Province through Riau Province Regional Regulation Number 1 of 2019 namely Implementation of prevention efforts including: (a) in situations where forest and/or land fires do not occur; and (b) in situations where there is a potential for forest and/or land fires.

Prevention of forest fires in the absence of forest and/or land fires includes: (a) forest and/or land fire control planning; (b) reducing the risk of forest and/or land fires; and (c) prevention. Prevention of forest and land fires in a situation where forest and/or land fires do not occur can be carried out by research and development in the field of disaster.

Planning for forest and/or land fire control includes: (a) identification and assessment of disaster threats; (b) understanding of community vulnerability; (c) analysis of the possibility of disaster impact; (d) choice of disaster risk reduction measures; (e) determination of disaster preparedness and impact management mechanisms; and (f). allocation of tasks, authority, and available resources.

Efforts to prevent forest and/or land fires are carried out through: (a) application of the precautionary principle; (b) implementation of early warning and prevention systems; (c) the application of land clearing without burning, taking into account local wisdom; (d) socialization, counseling, increasing human resources and increasing community participation in controlling forest and/or land fires; (e) development of technology and procedures for controlling forest and/or land fires; and (f) awarding the community, legal entities that are instrumental in controlling forest and/or land fires.

Forest and land fires in Riau Province continue to occur every year. 2015 and 2019 were the worst fires at that time. In 2021, the Riau Provincial Government has officially established an emergency alert status for forest and land fires. The fire and forest fire alert status is effective until October 31, 2021. This refers to the Riau Governor's Regulation Number 09 of 2020 concerning Standard Procedures for Determining the Status of Disasters and the Command of the Task Force for Controlling the Fire and Forestry Disaster in Riau Province and the current situation.

The previous regulation of the Governor of Riau Province was only made at the moment of the haze in 2015. This means that the emergence of the regulation is only reactive. As a result, the content contained in the Governor's Regulation is no longer a reference in determining the Riau Province APBD in 2018 and 2019 where many budgets for forest and land fire prevention and control programs are crossed out in APBD discussions. This indicates that the regulation is not effective as a guide in budgeting forest and land fires in Riau Province because it was made prematurely. This can be seen from the absence of additional regulations after the forest and land fires that hit Riau Province in 2015 [8]. It was only later in 2020 with the Governor of Riau Regulation Number 09 of 2020 concerning the Permanent Procedures for Determining the Status of Disasters and the Command of the Karhutla Disaster Management Task Force in Riau Province. In this case, tactical powerlessness refers to how much participation policy makers have in relevant agencies in fighting for the forest and land fires program in the Riau Province APBD. If you read the Riau Province Regional Budget for the period 2015 to 2019, there are three Regional Government Organizations (OPD) that have programs related to the issue of forest and land fires. The three OPDs are the Environment and Forestry Service, the Horticulture and Plantation Food Crops Service, and the Regional Disaster Management Agency. Based on the 2017

and 2018 APBD realization reports, several forest and land fire prevention and control programs from the three OPDs can be seen in table 1 below:

TABLE I.	LIST OF PROGRAMS RELATED TO FOREST AND LAND FIRES AT			
THE ENVIRONMENT AND FORESTRY SERVICE, HORTICULTURAL AND				
PLANTATION FOOD CROPS SERVICE, AND REGIONAL DISASTER				
MANAGEMENT AGENCY				

No	Department/Agency	Polotod programs Karbutla	
		Related programs Karhutla	
1	Department of	Prevention and control of karhutla	
	Environment and	Prevention policy dissemination karhutla	
	Forestry	Updates hazard map karhutla	
		Coaching village smoke free	
		Control of community-based karhutla	
		Fostering Community Care Fire (MPA)	
		Fire brigade training karhutla	
2	Department of	Dem-fire control farm land and orchards	
	Horticulture and	Land and garden fire monitoring and	
	Food Crops	control	
	Plantation	Construction of water management in the	
		plantation area	
3	Regional Disaster	Procurement of equipment monitoring	
	Management Agency	system karhutla	
		Prevention equipment procurement	
		activities karhutla	
		Emergency alert response operations	
		karhutla	
		Inventory resource and disaster	
		management preparedness karhutla	
		Formation and development of	
		disasterresilient villages	
		Natural disaster impact rehabilitation	
		program	

Source: Lakip of the Environment and Forestry Service, Horticulture and Plantation Food Crops Service, and Regional Disaster Management Agency, 2019.

The funds from these activities, as illustrated in the Table 2.

OOVERNMENT						
No	Agency	Prevention	Control			
1	Department of	8.080.463.000	1.730.740.000			
	Environment and Forestry					
2	Department of Horticulture	586.100.000	95.000.000			
	and Food Crops Plantation					
3	Regional Disaster	1.283.300.000	1.146.400.000			
	Management Agency					
	Budget Amount	9.363.763.000	2.877.140.000			
	Percentage (%)	76,5%	23,5%			

TABLE II. PROPORTIONALITY OF THE 2019 PREVENTION AND CONTROL BUDGET IN THREE OFFICES/AGENCIES IN THE RIAU PROVINCIAL GOVERNMENT

Source: Riau Province APBD, 2019

From table 2 above, it can be seen that the budget for handling forest and land fires in Riau Province is still minimal, the total budget for preventing and controlling forest and land fires in the 2019 APBD is only Rp. 12.24 Billion. This amount is very small when compared to the total budget of the Riau Province APBD in 2019 which reached Rp. 9.17 Trillion. In other words, forest and land fire prevention and control Programs are only 0.13% of the total Riau Province APBD in

2019, namely prevention is only 9,363,763,000 and control is only allocated for 2,877,140,000.12

In the future, efforts to deal with forest and land fires in Riau Province include: (1) Weather modification technology (TMC) to trigger artificial rain; (2) Sprinkling water from (water bombing) with PNBP helicopters; and (3) Air patrol monitoring potential hotspots. Meanwhile, prevention efforts are carried out by means of, among others: (1) patrolling the joint unit of KLHK, TNI, Polri, PNBP and members of the Fire Care Community; (2) TMC to sow rain clouds in areas with the potential for forest and land fires; (3) Re-discussion of peatlands through drilled wells or canal blocking; and (4) Socialization of the prohibition of land burning to the community.

There are several ways to anticipate forest and land fires, including ensuring high-level canals work properly, ensuring boreholes are filled with water and conducting surveillance. Supervision is not only carried out by the government, but also by corporations to monitor their land to prevent fires by means of patrols, where corporations also have the front guard in conducting patrols, patrols in their territory as well as air patrols using drones in the local area, as well as reporting immediately. in case of fire. Likewise, supervision carried out by individuals or communities is very important in order to provide information to the government if they see a fire as well as prevent forest and land fires. So it is hoped that forest fires in Riau Province will not occur again with the active participation of all parties, both from the government, private sector and the community to keep forests sustainable and sustainable.

III. CONCLUSION

Forest and land fires in Riau Province continue to occur every year. 2015 and 2019 were the worst fires at that time. In 2021, the Riau Provincial Government has officially established an emergency alert status for forest and land fires. The fire and forest fire alert status is effective until October 31, 2021. This refers to the Riau Governor's Regulation Number 09 of 2020 concerning Standard Procedures for Determining the Status of Disasters and the Command of the Task Force for Controlling the Fire and Forestry Disaster in Riau Province and the current situation.

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