

Strengthening Multi-Party Synergy in Handling Efforts Forest and Land Fires in Sumatra and Kalimantan

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Abstract

This study aims to see the extent to strengthen multi-stakeholder synergy, namely the government, the TNI and the National Police in efforts to handle forest and land fires on the islands of Sumatra and Kalimantan in relation to the Presidential Instruction (INPRES) of the Republic of Indonesia Number 3 of 2020 concerning Forest and Land Fire Management. The research method uses the Q-DAS (Qualitative Data Analysis Software) approach with the Nvivo 12 Plus software analysis tool. The research data is a predetermined national mass media activity and the website of the Ministry of Environment and Forestry, namely SIPONGI (Web-Based Forest and Land Fire Control Early Detection Information System) based on a specific period. The results of the study show that there is coordination and synergy carried out by interest actors, namely collaboration between the central government, local governments, the TNI and the National Police. This is evidenced by the various efforts made by the government in handling forest and land fires in Sumatra and Kalimantan. It is strengthened by a drastic decrease in the number of forest and land fire cases that occurred in Sumatra and Kalimantan. In 2020, there was a decrease of 34,749 Ha for the Sumatra region and 26,286 Ha for the Kalimantan region.

Keywords: synergy, handling, forest and land fires, Sumatra, Kalimantan.

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Introduction

The purpose of this study is to see the extent to which the synergy of multi-parties in this case the government, the TNI and the National Police in efforts to handle forest and land fires on the islands of Sumatra and Kalimantan in relation to the Presidential Instruction (INPRES) of the Republic of Indonesia Number 3 of 2020 concerning Forest and Land Fire Management (Putra et al., 2019). Forest and land fires are not a new thing that occurs in a number of regions in Indonesia, the Central and Regional Governments also have databases that should be used as a reference to be used as a pattern in analyzing prevention efforts carried out in the future (Azahari Darmawan, 2020). The database is used as an analysis pattern as well as a record of the capabilities or capabilities that have been implemented by the Government at the central and regional levels in carrying out their duties which is supported by a clearer and better division of tasks (Riyanto et al., 2020).

Sumatra and Kalimantan always experience forest and land fires every year (Tan et al., 2020). Both islands have extensive forests and plenty of flammable peatlands. Based on BNPB data (2019), over the past ten years, Indonesia has experienced 1,226 forest and land fires (Gunawan et al., 2019). The highest occurrence of forest and land fires occurred in 2018 and 2016 with 527 and 178 incidents, respectively. (Sabani et al., 2019) Forest and land fires in 2019 spread to a number of regions such as Riau, South Sumatra, Jambi, South Kalimantan, Central Kalimantan, Sumatra and Kalimantan Islands, and East Kalimantan. (H. Purnomo et al., 2019) Indonesia has the second largest peatland in the world with an area of 22.5 million hectares (ha), while the first place is occupied by Brazil with a peatland area of 31.1 million ha. The peatland has various benefits, including as a carbon store (30%), preventing drought and preventing saltwater mixing in agricultural irrigation (Asteriniah & Sutina, 2017).

In connection with this, peatlands need to be preserved so that land conversion (forest and land fires) in Sumatra, especially in Riau, Jambi and South Sumatra which always recur every year (Aminah et al., 2020). In the dry season, it is necessary to be aware of the appearance of fire points to be dealt with immediately before a massive hotspot occurs. (Basyuni et al., 2018). The emergence of forest and land fires in Sumatra, especially Riau, occurs during two periods of the dry season a year, namely between February-April and June-October (Pribadi & Kurata, 2017). Meanwhile, in 2017, 150 hotspots were detected on the islands of Sumatra and Kalimantan, of which 109 hotspots were in the category and 41 hotspots were in the high category (Sze et al., 2019). On the islands of Sumatra and Kalimantan, there are 5 districts that have set an emergency alert status for forest and land fires, namely Kubu Raya, Ketapang, Sekadau, Melawi, and Bengkayang Regencies (Afriyanti et al., 2019).

The direct impact of forest fires on the islands of Sumatra and Kalimantan includes the first, the onset of acute respiratory infections for the community (Purwanto et al., 2021). Second, reduced work efficiency because when there are large-scale forest fires, schools and offices are closed. Third, because forest fires cause animals to lose habitat. Fourth, the emergence of the international problem of smoke from forest fires on the islands of Sumatra and Kalimantan causes material and immaterial losses in neighboring countries, such as Malaysia and Singapore (Mora et al., 2019).

The main frame of mind used in this study is to use coordination theory. Coordination is at the core of an organization's operations, which allows the organization's goals to be achieved. This belief is especially evident when referring to the definition of organization stated by Robbins (2003) that "an organization is a consciously coordinated social unit, with relatively identifiable boundaries, functioning in a continuous attachment, to achieve a common goal" (Nugroho, A and Agung, 2014). Social unity refers to a unit consisting of people or groups of people who interact with each other (Asteriniah & Sutina, 2017). Conscious coordination reflects the management of interaction patterns to ensure that critical tasks can be completed. Continuous attachment means that an organization and its members have attachments that are expected to be sustainable (Widayati et al., 2021). People in an organization participate regularly to achieve a common goal, referring to the existence of "something" that is to be achieved with the existence of the organization. The goals to be achieved are usually unattainable, or less efficient, when done individually (Diamond & Schreck, 2020).

Coordination is identified as the action of groups as actors who carry out interdependent activities to achieve goals (Nugroho, A and Agung, 2014). This is in line with the idea of coordination in an organization which is interpreted as interaction between individuals or parts to ensure that critical tasks are completed (Lestari et al., 2020). Specifically, coordination is defined as an activity, namely managing dependencies between activities. Then, coordination also describes that dependency occurs when actions taken by one system affect the actions or outcomes of other systems (Nugroho, A and Agung, 2014).

However, actors in carrying out interdependent activities can face conflicts of interest and the process of politicization in managing these dependencies (Nugroho, A and Agung, 2014). It is said that the concepts of cooperation, collaboration, and competition can be involved in the management of dependencies between activities. How actors manage dependencies related to emotional, incentive, and motivational aspects (Viollet et al., 2020). Agreed values on cooperation, learning together, mutual trust, information sharing, and systemic thinking, for example, are components of values that contribute to coordination efforts. Culture, therefore, is an important aspect for the flow of coordination. Culture is a set of shared values and norms that govern the interactions of members of an organization with each other, and with people outside the organization. Mediators are important for organizations to adapt to the environment, culture is a tool to strengthen internal integration and coordination. Strong organizational culture, improving behavioral consistency. Like structure, a strong culture guarantees order, consistency, and predictability. This is in line with the view of the natural/informal system in organizational studies, that informal structures provide informative and accurate directions to understand organizational behavior (Nugroho, A and Agung, 2014). The level of analysis of this study examines the coordination of forest and land fire control on the islands of Sumatra and Kalimantan. Especially coordination between government institutions involved in forest and land fire control with the TNI and the National Police.

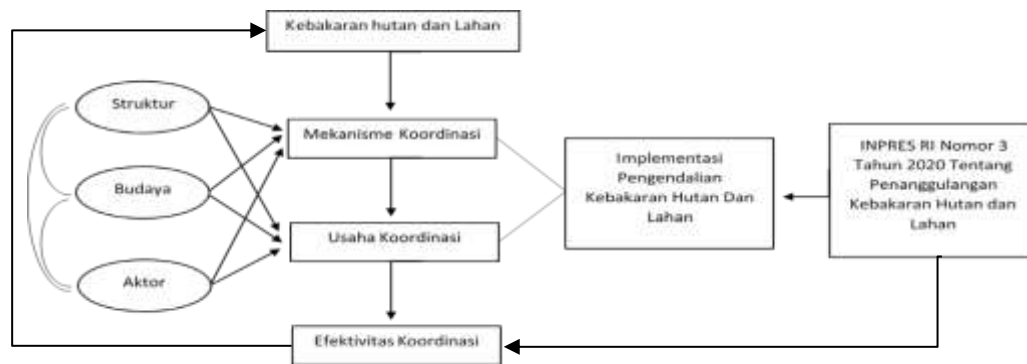


Figure 1. Theoretical Framework

(Source : Author)

Through the Presidential Instruction (INPRES) of the Republic of Indonesia Number 3 of 2020 concerning Forest and Land Fire Management, it is hoped that it can be a strategic step in terms of strengthening multi-stakeholder synergy in efforts to handle forest and land fires on the islands of Sumatra and Kalimantan. This study looks at the role of social media and mass media in producing public narratives in the policy process. Then the results of the narrative analysis are carried out by constructing the narrative conveyed so that it aims to develop the ideological assumptions contained behind the words in the text or speech in various forms of power (Sloan et al., 2017). Then, the result can describe a text (social reality) related to the interests of a person or dominant group that has a specific goal to get what it wants (Adrianto et al., 2020). Thus, this research can answer strategic steps in terms of strengthening multi-stakeholder synergy in efforts to handle forest and land fires on the islands of Sumatra and Kalimantan through Presidential Instruction (INPRES) of the Republic of Indonesia Number 3 of 2020 concerning Forest and Land Fire Management.

Research Methods

The focus of this research is to see how to strengthen multi-stakeholder synergy, in this case the government, the TNI and the National Police in efforts to handle forest and land fires on the islands of Sumatra and Kalimantan in relation to the Presidential Instruction (INPRES) of the Republic of Indonesia Number 3 of 2020 concerning Forest and Land Fire Management. The researcher used news data to analyze the synergy of multi-parties, in this case the government, the TNI and the National Police in efforts to handle forest and land fires on the islands of Sumatra and Kalimantan through online media, newspaper archives, and newspapers. We used the main search terms "Forest and Land Fires in Sumatra", "Forest and Land Fires in Kalimantan" and "synergy between the TNI and POLRI governments in handling forest and land fires". This research uses three national news media sources, CNN Indonesia, Detik.com and Kompas. Media selection is considered one of the sources that has high credibility, besides that the media is also active in providing information about forest and land fires. Then, in this study, only three news media sources were considered by the researchers.

Table 1. Media Source Classification (Forest and Land Fires)

No.	Media	Total
1.	CNN Indonesia	14
2.	Detik.com	11
3.	Compass	33

Source: Researched By Researchers (2025)

The news was reviewed and confirmed that the article contained an important section about forest and land fire news in Sumatra and Kalimantan. (Sarmiento & Mambor, 2020) Articles that are not news (e.g. editorial, commentary) are deleted and replaced with other randomly selected articles The analysis software for this study uses Nvivo 12 plus. Nvivo 12 plus as a qualitative analysis tool displays data in quantitative form called qualitative to quantitative analysis (Rosanti et al., 2021). The use of Nvivo as an analysis tool has five stages: (1) capturing data, (2) importing data, (3) encoding data, (4) data classification, and (5) displaying data. The data that has been displayed is submitted to the data using a qualitative data analysis method (Effendi & Personal, 2021).

Results and Discussion

Forest and Land Fires in Sumatra

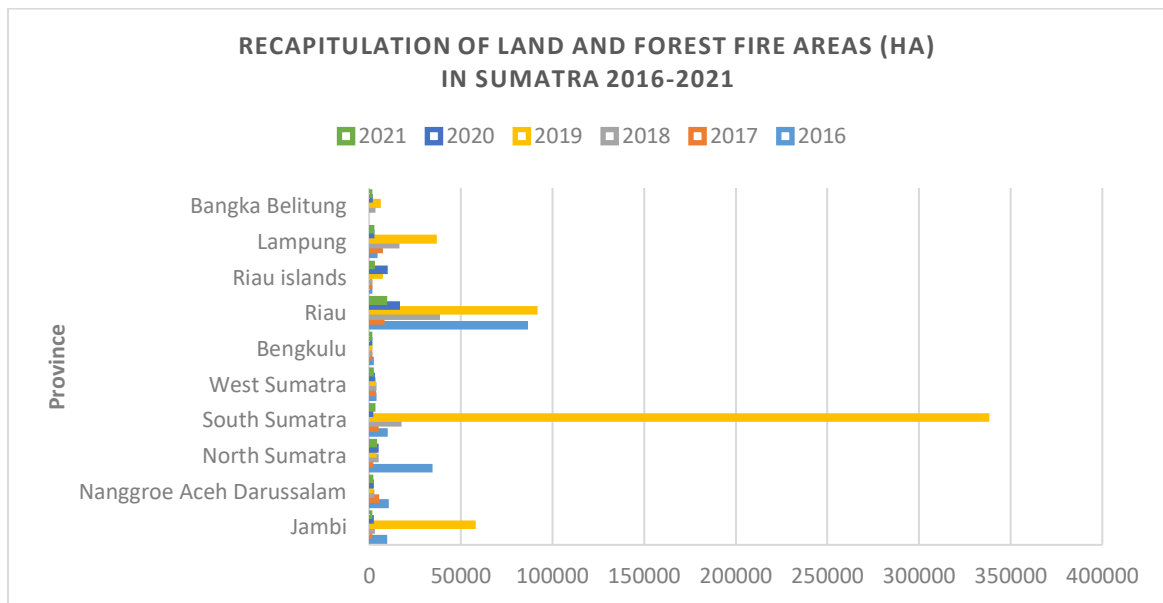


Figure 2. Recapitulation of Forest and Land Fires in Sumatra
(Source: Ministry of Environment and Forestry of the Republic of Indonesia)

Forest and/or land fires in Indonesia occur every year even though the frequency, intensity and area are different (Yusuf et al., 2019). The island of Sumatra is one of the big islands

in Indonesia that is prone to fires, in addition to climatic/weather conditions, land characteristics such as peat are also supporting factors for fires (Tata et al., 2017). It is recorded that forest and land fires for the past 5 years have occurred continuously with the largest fires occurring in 2019. Forest fires on the island of Sumatra in 2019 were the largest fires compared to previous years with a total of more than five hundred thousand hectares (535,787 Ha). This figure increased compared to previous years, namely the fires that occurred in 2016 with the total number of fires in Sumatra was 150 thousand hectares (151,371.6 Ha), then the fires that occurred in 2017 were twenty-three thousand hectares (23,789.93 Ha).

The impact of forest and land fires on the island of Sumatra on its burned area includes the loss of wood or non-timber products, as well as as animal habitat (Rudiyanto, Dzakyy Ridha M., Dea Shalehalistya L., 2019). Thousands of hectares of orangutan habitat and other endangered animals have also been destroyed. On a global level, forest and peatland fires are the main sources of greenhouse gas emissions. From October 2015 to 2016, emissions per day of wildfires in Indonesia exceeded those of the United States economy, or more than 15.95 (fifteen point ninety-five) million tons of carbon dioxide emissions per day (Cahyono et al., 2015). If Indonesia can stop the fires, it can achieve a 29% (twenty-nine percent) reduction in greenhouse gas emissions by 2030 (Asteriniah & Sutina, 2017). However, the most dominant cause of fires is due to human actions clearing land still by burning spurred by the El Nino natural phenomenon which causes long droughts and spurs the drying of peatlands, most of which are indeed in a damaged condition and quickly mongering due to massive canalization by plantation business activities and industrial plantation forests, so that these locations are very vulnerable and fires occur in the same location Over and over again (Cahyono et al., 2015). Another factor is the source of fire from the community, cases of forest and land fires are difficult to solve through law enforcement, land and/or forest fires are also the result of encroachment, controlling forest areas. So that the impact and occurrence of forest and/or land fires that result in haze occur every year and have caused losses, both ecological, economic, social and cultural losses that are difficult to calculate (Tata et al., 2017).

The highest forest and land fires that occurred in all provinces on the island of Sumatra were in South Sumatra Province with the number from 2016 to 2021 reaching three hundred thousand hectares of burned land (368,388.2 Ha). There are various factors that can affect the level of fire vulnerability. Regression analysis shows that there are several factors related to hotspot points and fire incidence in Sumatra, especially South Sumatra with the highest cases of forest and land fires in Sumatra (Yusuf et al., 2019). In each region, the factors that affect the rate of fires vary. Soil type factors based on regression analysis showed that soil type was related to hotspots logarithmicly (Tata et al., 2017). The number of hotspots in peatland types is more than in mineral soils (Cahyono et al., 2015). In fact, the area of peatland in South Sumatra province is 1.2 million hectares of the total area of South Sumatra Province, which is 9 million hectares. Under natural conditions, peat ecosystems, which are piles of organic matter that have not been weathered, are water-saturated ecosystems. Peat can absorb water 1 to 13 times its weight. However, peat that has been cut down from vegetation and built drainage or canals so that peat water is drained, causing the peat condition to turn dry and the peat surface layer becomes more dense, this can cause the peat to be drained so that it becomes prone to fire (Johanna Griselda Joy

Saputro, I Gusti Ayu Ketut Rachmi Handayani, 2021).

Another factor is the relationship between the number of hotspots and rainfall. Low rainfall in September (2015 and 2016) correlated with the high number of hotspots that year and the incidence of forest fires (Yusuf et al., 2019). Because peat is an organic material that in the dry season and dry conditions is a combustible fuel, this condition is exacerbated by the habit of people opening gardens and fields by burning grass vegetation, shrubs or bushes (Asteriniah & Sutina, 2017). Even though fire protection is carried out and fire barriers are carried out, on dry peatland fire will easily spread to the bottom of the peat, which causes smoldering fires and jumping fires due to wind blowing (Tata et al., 2017).

In addition to South Sumatra Province with the highest number of forest and land fires, Riau Province also occupies the second position with the most burned land area on the island of Sumatra with a total of two hundred and forty thousand hectares of land (243,616.9 Ha) from 2016 to 2021. Followed by Jambi Province with a total area of forest and land fires from 2016 to 2021 of more than sixty hectares (67737.17 Ha). Factors that affect fire rates vary. The first factor is that Riau Province is a province with a land structure of more than 50 percent of the peatland area of the island of Sumatra (Yusuf et al., 2019). The classification of peatlands is categorized into three groups of peatland conditions, namely peatland that is not permanently flooded in its original condition, peatland that is not permanently flooded and utilized, and non-peat land (mineral soil) (Tata et al., 2017).

Then other factors that also affect forest and land fires are land cover, rainfall, altitude, land slope, river network and road accessibility. Riau Province is dominated by permanent unflooded peatlands, which are used for Industrial Plantation Forests (HTI), plantations, agricultural land and others (Yusuf et al., 2019). In order to be cost-efficient, the community and business people often carry out land clearing activities in a very environmentally unfriendly way, namely in the form of burning activities which eventually lead to land and forest fires around plantation areas (Cahyono et al., 2015). Meanwhile, the level of fire vulnerability in Jambi Province was identified as being influenced by soil type (peat/non-peat), land cover, height of the place, slopes, distance from villages, distance from rivers, distance from roads and distance from Manggala Agni Operating Area (Daops) (Yusuf et al., 2019).

Forest and Land Fires in Kalimantan

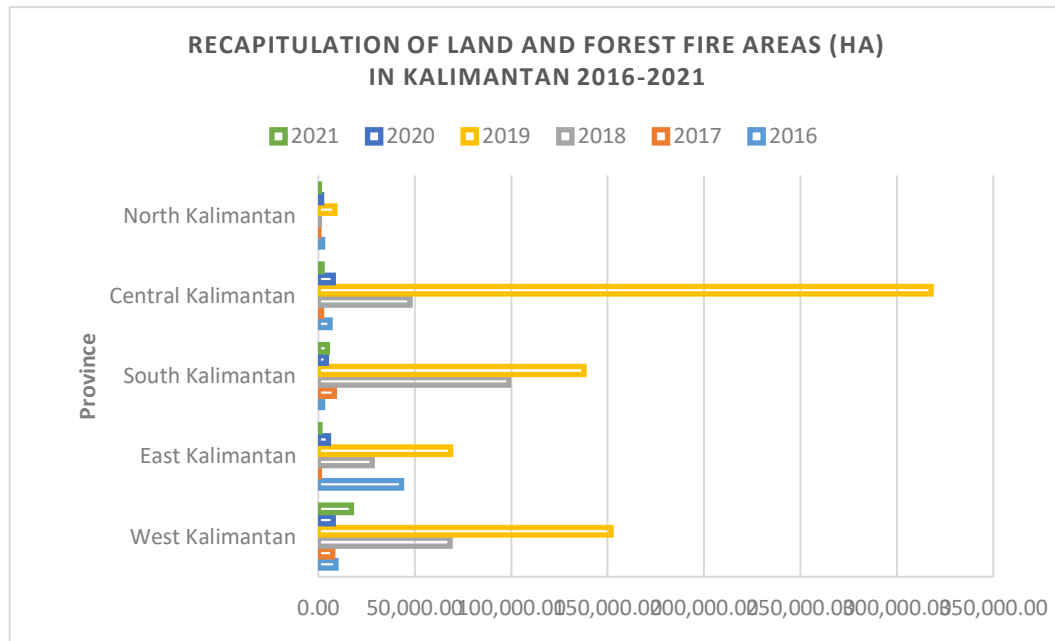


Figure 3. Recapitulation of Forest and Land Fires in Kalimantan
(Source: Ministry of Environment and Forestry of the Republic of Indonesia)

Forest and land fires are a frequent occurrence in Indonesia, especially on the island of Kalimantan. Forest fires are one of the causes of the decline in the quality of natural ecosystems, such as the destruction of forest land and vegetation, changes in the composition of forest ecosystems, plant physiology, and public health disturbances around the fire site, so forest fires in Kalimantan are a potential threat to sustainable development (Aflahah et al., 2018). Disasters that occur in the dry season cause damage to ecosystems and losses in economic, social and cultural aspects (Pasaribu & Friyatno, 2008). It is recorded that land and forest fires are a recurring occurrence in Indonesia, especially in Kalimantan.

Forest and land fires that occur on the island of Kalimantan have increased and decreased every year. Just like the forest and land fires that occurred on the island of Sumatra, the highest fires that occurred on the island of Kalimantan occurred in 2019 with the total area of fires in all areas on the island of Kalimantan being six hundred and eighty thousand hectares (684,599.00 hectares). The total area of fires on the island of Kalimantan in 2019 increased drastically compared to the previous year, namely sixty-two thousand hectares (62,898.56 Ha) in 2016, eighteen thousand hectares (18,260.09 Ha) in 2017, and two hundred and forty thousand hectares (243,013.50 Ha) in 2018. The large-scale fires that occurred in 2019 on the island of Kalimantan dominated, namely around 42% of the forest and land fires that occurred on the island of Kalimantan of the total fires that occurred in Indonesia.

Forest fires on the island of Kalimantan cause various losses to the Indonesian people, ranging from health, social, ecological, economic and reputational problems (Johanna Griselda Joy Saputro, I Gusti Ayu Ketut Rachmi Handayani, 2021). Health losses are the most obvious,

forest fires are a routine event that occurs during the dry season in Indonesia. Indonesia's tropical climate has a great influence on natural conditions, especially forests and has the potential to harm economic growth if it is not stopped immediately (Cahyono et al., 2015). The economic condition of the Indonesian state is also considered to be a loss because with the occurrence of these forest fires, the country's foreign exchange sources from timber and non-timber forest products, as well as ecotourism are also reduced (Aflahah et al., 2018). Then, in the eyes of the International, Indonesia also suffered a loss of reputation because it reaped protests from neighboring countries that were affected by the smoke of forest fires. Losses in the health sector are the most obvious that can be observed. Smoke from forest fire events causes various diseases, especially acute respiratory infections (ARI) (Pasaribu & Friyatno, 2008). In addition, the existence of poor air quality is also a tough challenge and continues to be burdensome for Indonesia. The loss in terms of social and cultural aspects is that forest fires in Indonesia should have been declared an emergency, considering that the impact of this disaster has caused losses to the people and the Indonesian nation from various aspects. As a result of forest fires, the surrounding communities also experience the impact of social losses in the form of the loss of forests as the identity of indigenous peoples (Johanna Griselda Joy Saputro, I Gusti Ayu Ketut Rachmi Handayani, 2021).

In addition to the loss in the health, social and cultural sectors, the economy, forest and land fires have been confirmed to have an impact on environmental damage. With environmental damage, this will have an impact because later it can kill all kinds of things in the forest environment, such as animals, biota that are needed as a balance for our lives, medicinal plants, resin, wood, fruits and so on (Aflahah et al., 2018). The biggest factor that plays a major role or key in forest destruction in Indonesia is the very weak political, legal and economic system in Indonesia, so that many still consider forest resources to be a source of income that can be exploited for political interests and personal gain (Johanna Griselda Joy Saputro, I Gusti Ayu Ketut Rachmi Handayani, 2021). Supposedly, armed with the reason that Indonesia is one of the largest remaining owners of tropical rainforests on earth, Indonesia should be challenged diplomatically to be able to prevent illegal logging and forest burning (Pasaribu & Friyatno, 2008).

The participation of the government to always supervise and provide legal protection efforts for forests is very necessary to deal with individuals who act arbitrarily and unenvironmentally friendly such as the act of burning in the forest land clearing method (Yusuf et al., 2019). This is considered very detrimental because impacts such as smoke puffs and various other impacts make the people of Kalimantan often complain because their environmental forest land continues to decrease and the granting of Forest Control Rights (HPH) given by the authorities to companies is sometimes misused so that this is actually the core of the problem (Johanna Griselda Joy Saputro, I Gusti Ayu Ketut Rachmi Handayani, 2021). The natural imbalance in Kalimantan has occurred and resulted in disasters that are difficult to recover from in a short period of time (Asteriniah & Sutina, 2017).

Central Kalimantan Province is the area on the island of Kalimantan with the highest number of forest and land fires, which is around 36% of the total forest and land fires that occur in all provinces on the island of Kalimantan. The level of fire vulnerability in Central Kalimantan Province is influenced by land cover, soil type, land system, and regional function (Cahyono et al.,

2015). External factors such as dry climates also contribute to causing forest fires. However, individual behavior and industrial elements of a company are also determined as other major driving factors in wildfires (E. P. Purnomo et al., 2021). Another factor is that when rainfall is low, visibility is low and temperatures are high, the number of hotspots increases so that the potential for forest and land fires is greater. If the potential for forest fires is getting bigger, it will have an impact on increasing the amount of haze that rises into the atmosphere, so that it can have an impact on all sectors, both from the health, transportation, economic, and social sectors (Aflahah et al., 2018).

Strengthening Multi-Party Synergy in Forest and Land Fire Handling Efforts in Sumatra and Kalimantan

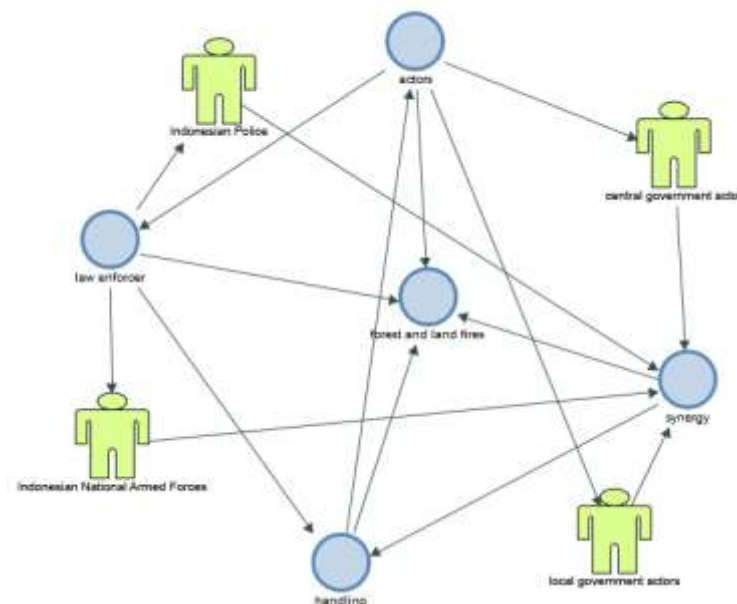


Figure 4. Visualization of Actor Relationships
(Source: processed by the author)

The synergy of the government, namely the central government and local governments, as well as law enforcement officials, namely the National Police and the TNI, is indispensable in assisting every movement that has been carried out as a form of efforts to control forest and land fires, so that the main goal in the form of controlling fires that occur until it is complete can be realized. Economic growth factors from the rapidly growing agricultural and plantation sectors in Indonesia, especially in Sumatra and Kalimantan. The government also knows this well, with data on forest and land fire cases that have been identified. Good synergy in facing challenges and changes that occur to prevent forest and land fires in the future, with forest and land fires that occur, especially for local governments with the enactment of a regional autonomy system that expands the freedom to manage their own households, but still requires control of support from

the central government in the process of having a supportive reciprocal relationship with the same policy direction.

Through INPRES (Presidential Instruction) Number 3 of 2020 concerning Forest and Land Fire Management, namely in the context of strengthening the prevention and enforcement of law as an effort to combat forest and land fires throughout the territory of the Republic of Indonesia, the President of the Republic of Indonesia instructed all levels of government ranging from ministries, institutions, law enforcement officials, and also local governments to be able to coordinate and synergize in the context of forest fire management and land. Based on that, the data obtained through the media taken by the researcher shows that the government is synergizing in efforts to accelerate land and forest fire management.

Based on the coordination theory that states that the core of the organization's operations allows the organization's goals to be achieved. This is in line with the idea of coordination in an organization which is interpreted as interaction between individuals or parts to ensure that critical tasks are completed (Nugroho, A and Agung, 2014). Prevention efforts are carried out in synergy between the central government, local governments, the TNI, the National Police, and the community. The National Disaster Management Agency (BNPB) seeks to accelerate the handling of forest and land fires in various ways, one of which is by deploying 6 forest and land fire handling helicopters in the Sumatra region. The helicopter is used for air patrols and water bombing, as has been done for fire extinguishing at several points in the South Sumatra region. Then, strict law enforcement will change the behavior of forest and land burning perpetrators. Law enforcement officials are preparing law enforcement for forest and multidoor land fires, which is not only applying layered articles but will also implement layered laws together with the police and prosecutor's office, so that the punishment for the perpetrators will be more severe.

All stakeholders must synergize with each other and be sustainable in overcoming the problem of forest and land fires in Indonesia, especially in Sumatra and Kalimantan. This synergy is carried out by the Coordinating Ministry for Political, Legal and Security Affairs (Kemenkopolhukam), the Ministry of Environment and Forestry (KLHK), the TNI, the National Police, other ministries/institutions and local governments who are actively holding a Special Coordination Meeting (Rakorsus) at the ministerial level which discusses forest and land fire control, which occurs in Indonesia, especially fire-prone areas such as Sumatra and Kalimantan. The form of seriousness carried out by the government, especially the National Police in terms of handling forest and land fires, can be seen from the launch of the National Digital Prevention Analysis System or ASAP application which functions as a tool for controlling and preventing forest and land fires from the district/city, provincial to central levels. The National Digital ASAP Application is a merger and improvement of similar applications in ministries or institutions that are integrated into one monitoring system in order to prevent and control forest and land fires more quickly. With this application, the apparatus can see and find out in real time whether there are hotspots and firespots so that it can make it easier for members of the TNI and POLRI to come and carry out security quickly.

Along with that, the President of the Republic of Indonesia also emphasized that the problem of forest and land fires is a serious concern for local governments and all law

enforcement officials. This is strengthened by the imposition of sanctions for law enforcement actors who will be removed from the ranks of the TNI and Polri in the regions, namely the regional commander, police chief, danrem, dandim, to the police chief in the event of forest and land fires (karhutla) in their work areas. Therefore, the central and regional governments continue to coordinate in handling forest and land fires which also receive assistance from the TNI and the National Police who have concentrated on preventing and handling forest and land fires.

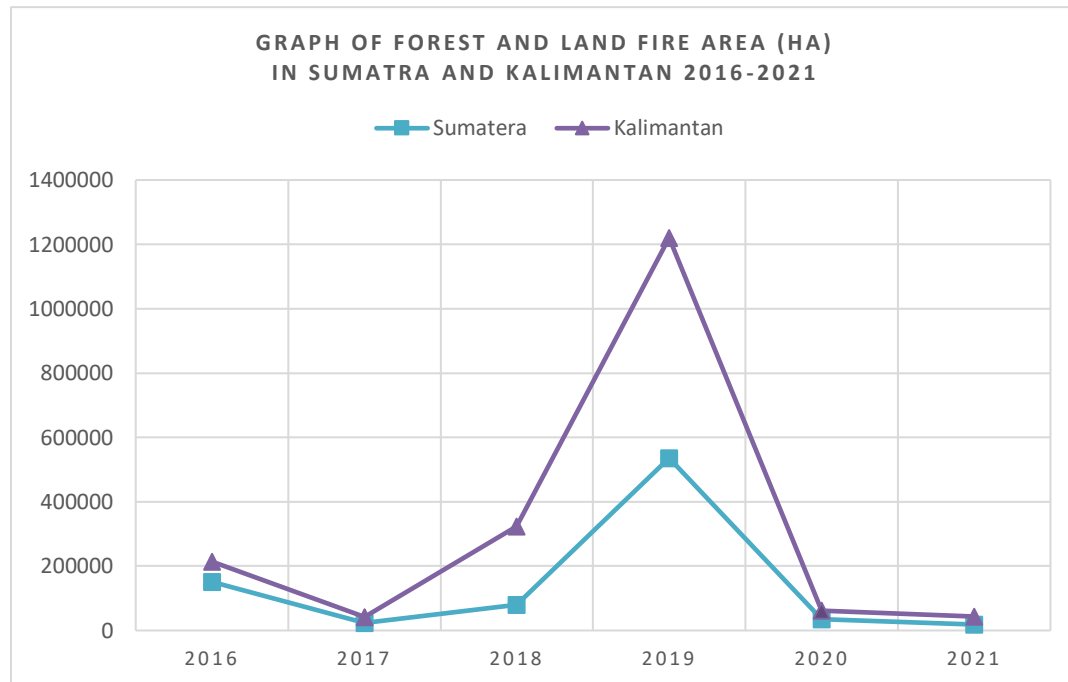


Figure 5. Forest and Land Fire Area Graph (Ha) in Sumatra and Kalimantan 2016-2021

Judging from the graph (figure 5), fires that occurred on the islands of Kalimantan and Sumatra have increased significantly from year to year. In 2016, fires that occurred in Sumatra amounted to 151,372 Ha and 62,898.56 Ha for the Kalimantan region. In 2017, these two regions experienced a slight decrease compared to the previous year with the total area of fires that occurred in Sumatra was 23,789.9 Ha and Kalimantan was 18,260.09 Ha. Cases of forest and land fires then increased in 2018 with a figure of 79,967.68 for the Sumatra region and 243,013.5 Ha for the Kalimantan region. Forest and land fires that occurred over the past five years were highest in 2019. In the Sumatra region, there is a spread area of 535,787 hectares and in the Kalimantan region an area of 684,599 hectares.

The handling of forest and land fires in the Kalimantan and Sumatra islands in 2020 is considered successful. This success cannot be separated from the support of all actors, namely stakeholders, both the TNI, the National Police and the community. The handling of forest and land fires is considered successful in accordance with existing procedures, as well as thanks to the synergy and solid cooperation of all parties, so that in the end the various efforts carried out

run well and smoothly. This is certainly in line with the purpose of its enactment through INPRES (Presidential Instruction) Number 3 of 2020 concerning Forest and Land Fire Management, namely in the context of strengthening prevention and law enforcement as an effort to combat forest and land fires. Public awareness is also considered to have started to be good, especially with various breakthroughs and efforts to prevent forest and land fires from an early age through massive socialization and education. Although hot spots are still found in some areas, but compared to the previous year or 2015, of course the conditions are much better now (Aflahah et al., 2018).

This is evidenced by a drastic decrease in the number of forest and land fire cases that occurred in Sumatra and Kalimantan. In 2020, it is shown (in figure 5) that there was a decrease of 34,749 Ha for the Sumatra region and 26,286 Ha for the Kalimantan region. This certainly happens not instantaneously, but requires a very long process so that the government can handle the problem of forest and land fires that are subscribed to every year. For this reason, the government must still conduct important evaluations to obtain information, suggestions and innovations for improving forest and land fire management in the future.

Conclusion

The forest and land fires that have occurred in Sumatra and Kalimantan over the past five years have had a very bad impact on Indonesia. The largest forest and land fires occurred in 2019. The problem of forest and land fires that occurred in Sumatra and Kalimantan could not be overcome instantly, therefore a regulation was issued in the form of Presidential Instruction (INPRES) of the Republic of Indonesia Number 3 of 2020 concerning Forest and Land Fire Management. The results of the study show that there is coordination and synergy carried out by interest actors, namely collaboration between the central government, local governments, the TNI and the National Police. This is evidenced by the various efforts made by the government in handling forest and land fires in Sumatra and Kalimantan. This is strengthened by a drastic decrease in the number of forest and land fire cases that occurred in Sumatra and Kalimantan. In 2020, there was a decrease of 34,749 Ha for the Sumatra region and 26,286 Ha for the Kalimantan region.

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