

# Synergy of Local Government Institutions in Dealing with Forest and Land Fires as A Non-Military Threat at Border Regions in Indonesia

Ully Ngesti Pratiwi<sup>1)</sup>, Adi Nugroho<sup>2)</sup>

<sup>1</sup> Defense Management, The Republic of Indonesia Defense University, Indonesia

<sup>2</sup> Defense Management, The Republic of Indonesia Defense University, Indonesia

**Abstract:** Forest and land fires that regularly occur in West Kalimantan, which is located in the border regions, are a non-military threat that can cause losses for Indonesia and neighboring countries. This study aims to analyze the synergies between the local government, West Kalimantan BPBD, and other relevant agencies in dealing with forest and land fires in West Kalimantan as a non-military threat. In this research, the writer used a qualitative research method with a descriptive analytical approach. The results of this study are synergy is carried out in designing collaborative programs or activities in an effort to overcome forest and land fires in West Kalimantan. Optimizing coordination and communication between the local government, West Kalimantan BPBD and other relevant agencies is carried out intensively starting from planning, organizing, implementing, and evaluating by unifying the vision and mission as well as work programs in dealing with forest and land fires.

**Keywords:** border regions, forest and land fires, local government institutions, non-military threat, synergy.

## I. INTRODUCTION

Indonesia has international land bordered with three countries, namely Malaysia, Papua New Guinea, and Timor Leste (Sunarya, 2016). The land border area between Indonesia and Malaysia is 2,019.5 km long. The border between Indonesia and Malaysia in Southeast Asia delimits the border that separates the two countries on the island of Borneo (Ullah and Kumpoh, 2018). West Kalimantan is one of the areas in Indonesia that is dominated by peatlands, making it prone to forest and land fires. On July 28, 2021, the Meteorology, Climatology, and Geophysics Agency (BMKG) has identified the highest number of hot spots in West Kalimantan, as many as 72 points. Based on data released by the Directorate of Land and Fire Control, the largest forest and land fire area on the island of Kalimantan in 2021 will occur in West Kalimantan with an area of 15,309 ha.

Table 1. Recapitulation of Forest and Land Fire Areas per Province in Indonesia.

Province	2020 (ha)	2021 (ha)
West Kalimantan	7.646	15.309
South Kalimantan	4.017	2.047
Central Kalimantan	7.681	1.197
East Kalimantan	5.221	414
North Kalimantan	1.721	294

Source: Directorate of Forest and Land Fire Control, 2021.

The most prominent impact of forest and land fires in West Kalimantan is the occurrence of smog which is detrimental to public health and disruption of land, sea, and air transportation systems, as well as affecting other aspects of the economy (Sarmiasih and Pratama, 2019). In addition, West Kalimantan is geographically located in the border area between Indonesia and Malaysia. The impact of forest and land fires in West Kalimantan has caused smoke

pollution and caused losses not only to the community, but also to several neighboring countries, especially Malaysia and Singapore, giving rise to cross-border environmental security issues (Muadi, 2021).

The current form of threat has been influenced by the dynamics of the development of the strategic environment originating from within the country and other countries. Sources of threats can be carried out by state actors and non-state actors that are national, regional, and international. Present and future threats can be classified into several types, namely military threats, non-military threats, and hybrid threats. The forms of threats are not only physical but also include non-military threats with ideological, political, economic, socio-cultural, defense and security dimensions (Indonesian Defense White Paper, 2015).

One form of action from non-military threats with socio-cultural dimensions is disasters caused by humans (Indrawan, 2016), such as forest and land fires in West Kalimantan. Forest and land fires in West Kalimantan have become problems that routinely occur every year and have a negative impact on society and the country (Kumalawati et al., 2019). According to data from the National Disaster Management Agency (BNPB) (2019), most of the causes of forest and land fires are caused by humans (99%) and natural (1%), namely when carrying out land preparation activities for cultivation, agriculture, and plantations by burning forest and land. This is related to economic factors and the general public perception that this method is easier, cheaper, and faster (Rasyid, 2014). Thus, forest and land fires in West Kalimantan can be categorized as a non-military threat which has become a national issue and needs serious attention.

In Law Number 3 of 2002 concerning National Defense, it is stated that the national defense system in dealing with non-military threats places Ministries/Institutions (K/L) outside the defense sector as the main element with the assistance of other elements of the nation's power. The Ministry of Defense of the Republic of Indonesia in the Indonesian Defense White Paper (2015) also states that in overcoming non-military threats, the implementation is carried out by increasing the capacity, synergism, and the role of Ministries/Agencies outside the defense sector, supported by other Ministries/Agencies according to their duties and functions as Other Elements of National Power.

Based on Law Number 24 of 2007 concerning Disaster Management Article 5, it is stated that the government and local governments are responsible for implementing disaster management. In this regard, the government established the National Disaster Management Agency (BNPB) which is the main element in dealing with non-military threats in the form of disaster management, including forest and land fires. Whereas in the regions, each regional government is also required to establish a Regional Disaster Management Agency (BPBD) led by an official at the level below the governor, who becomes an extension of the government's arm to deal with disasters in their respective regions (West Kalimantan BPBD Work Plan, 2021).

As a follow-up to Law Number 24 of 2007, the Ministry of Home Affairs of the Republic of Indonesia Regulation Number 46 of 2008 was issued concerning the Guidelines and Work Procedures of the Regional Disaster Management Agency. Regional Disaster Management of West Kalimantan Province (BPBD Kalimantan Barat) and updated with Regional Regulation Number 8 of 2016 concerning the Formation and Composition of Regional Apparatuses of West Kalimantan Province. Furthermore, to regulate the Position, Organizational Structure, Duties and Functions and Work Procedures of the Regional Disaster Management Agency of West Kalimantan Province, it is stipulated through West Kalimantan Governor Regulation Number 127 of 2016 (West Kalimantan BPBD Work Plan, 2021).

In dealing with forest and land fires in West Kalimantan, there are several agencies involved, including the Indonesian National Armed Forces (TNI), The Indonesian National Police (POLRI), Meteorological, Climatological and Geophysical Agency (BMKG), Civil Service Police Unit, Social Service, Health Service, Badan Search And Rescue Nasional (BASARNAS), as well as special institutions from community elements formed by BPBD to help dealing with the problem disasters, such as Disaster Resilient Villages (Desa Tangguh Bencana) or Disaster Volunteer Community Groups (Kelompok Masyarakat Relawan Bencana), and others. This synergy is a manifestation of cooperation with various agencies or institutions to dealing with forest and land fires in West Kalimantan. Therefore, in carrying out its main tasks and functions, synergy between the local government, West Kalimantan BPBD, and other relevant agencies is needed to dealing with forest and land fires to be more effective and efficient. Coordination and communication are also needed in order to form a good synergy and are expected to have deterrence in preventing the potential for forest and land fires as non-military threats. Without the establishment of synergy between the local government, West Kalimantan BPBD, and other relevant agencies, it is impossible to optimally control forest and land fires that often occur in West Kalimantan (Wicaksono, 2017). Based on the description that has been disclosed, the researcher is interested in analyzing more deeply related to the synergy between the local government, West Kalimantan BPBD, and other relevant agencies in dealing with forest and land fires in West Kalimantan as a non-military threat.

## **II. RESEARCH METHODOLOGY**

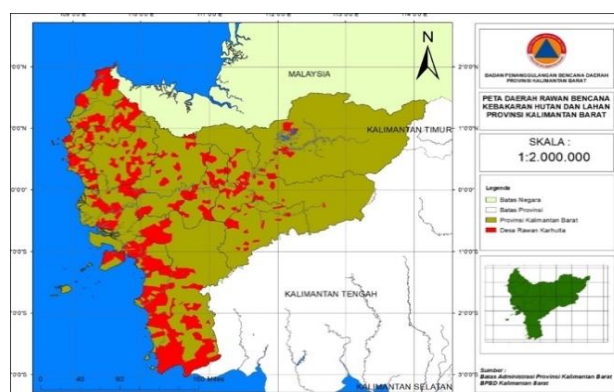
This research used a qualitative research method with a descriptive analytical approach. Qualitative methods can be used to describe, summarize various conditions, situations or reveal something and find out something behind the

phenomenon that has not. According to Sugiono (2016), the analytical descriptive approach is a method that works to describe or provide an overview of the object under study through data or samples that have been collected as they are then analyze and draw conclusions that apply to the public. This study used interview and documentation data collection techniques. The indepth interview method is carried out with the intention of collecting primary data or information directly from the informants. The documentation method is carried out to obtain data by utilizing secondary data that is already available or processed. This secondary data is obtained from sources relevant to the problem, through literature studies in the form of official documents of government organizations and other institutional documents, transcripts, books, newspapers, magazines, agendas, archives, and other libraries. Based on the description that has been done, the researcher uses a qualitative research method with a descriptive analytical approach to analyze more deeply the synergy between the local government, West Kalimantan BPBD, and other relevant agencies in dealing with forest and land fires in West Kalimantan as a non-military threat.

### III. RESULT AND DISCUSSION

#### 3.1 Forest and Land Fires in West Kalimantan as a Non-military Threat

Forest and land fires in West Kalimantan have occurred repeatedly and become a cross-border environmental security issue that causes aspects, such as health and economic aspects 2019 data, the West 322 villages prone to Kalimantan.



major problems in various aspects, socio-cultural aspects, (Arifudin, et al., 2013).Based on Kalimantan BPBD has mapped forest and land fires in West

Picture 1. Map of villages prone to forest and land fires in West Kalimantan.

Sumber: West KalimantanBPBD, 2021.

Some of the challenges that cause forest and land fires that are prone to occur in West Kalimantan, namely: a) Extensive peatlands. West Kalimantan has very large peatlands, reaching  $\pm 1,759,700$  ha or about 11.98% of the total land area (14,680,700 ha) in West Kalimantan; b) Peat depth. The depth of peat in West Kalimantan ranges from 1–12 m and can even reach 30 m; c) Characteristics of fires on peatlands. If forest and land fires occur on peatlands, they will last longer and produce more smoke. The smoke plays a major role in contributing to pollution in the form of harmful smog, besides that it is more difficult to extinguish and produces more greenhouse gases into the atmosphere. In 2015, the amount of peatland burned was 93,515.80 ha and decreased in 2020 to 7,646.00 ha (Sipongi, 2020). However, in 2021, the condition of forest and land fires in West Kalimantan increased again and it was recorded that until March 31, 2021, there were 2,508 hotspots (West Kalimantan Space Agency, 2021). West Kalimantan BPBD noted that until July 2021, the area of forest and land fires in West Kalimantan reached 15,309 ha.

Table 2. Forest and Land Fire Areas in West Kalimantan in 2015-2020.

TAHUN	2015 (ha)	2016 (ha)	2017 (ha)	2018 (ha)	2019 (ha)	2020 (ha)
Burned AreaTotal in Indonesia	2.611.411,44	438.363,19	165.483,92	628.288,84	1.649.258,00	296,942.00
West Kalimantan Burned Area	93.515,80	9.174,19	7.467,33	68.422,03	151.919,00	7.646,00
Percentage of Burned	3,58%	2.09%	4.51%	10.89%	9.21%	2.57%

Land in West Kalimantan to National						
-------------------------------------	--	--	--	--	--	--

Source: Sipongi, 2021.

Forest and land fires in West Kalimantan, based on the Indonesian Defense White Paper published by the The Ministry of Defense of the Republic of Indonesia in 2015, can be considered a non-military threat because they are natural disasters that regularly occur every year and have a very detrimental impact on society, the country and neighboring countries, to develop into a cross-border national security issue. By sector, the impact of forest and land fires includes the transportation, health, economic, ecological and social sectors, including the nation's image in the eyes of neighboring countries and the world.

In addition, it can be considered a non-military threat because forest and land fires in West Kalimantan show the highest percentage (99%) caused by community activities. Based on research conducted by Sawerah, et al. (2016), the motive for the occurrence of forest and land fires in West Kalimantan is based on considerations of the economic aspect, that clearing or preparing land by burning is a method that is often used by communities and companies because it is considered easier, cheaper, and effective. According to Pasaribu and Friyatno (2020), both the community and the company clearing the land want to immediately prepare the land at the lowest possible cost and at the same time expect an increase in the level of soil acidity (pH) (from around 3-4 to 5-6) so that plants can grow well.

Forest and land fires in West Kalimantan that occurred were caused by these human activities, including disasters caused by human actions which were categorized as non-military threats with socio-cultural dimensions (Indrawan, 2016). Non-military threats have different characteristics from military threats because they are not only physical, but also have the Ipoleksosbudhankam dimension. So, synergy between government agencies is needed to handle, overcome, and anticipate it.

### **3.2 Synergy between the Local Government, West Kalimantan BPBD, and Related Agencies**

Synergy is a form of the ability to integrate or collaborate that must be owned by local governments with related agencies, such as the West Kalimantan BPBD with other agencies in dealing with non-military threats that continue to develop, such as forest and land fires that routinely occur in West Kalimantan. Synergy is very important to do, according to Deardorff and William (2006) in Rusfiana (2017) defining "synergy is not something we can hold in our hands but tribes are multiplied exponentially through joint, collaborative efforts". This means that synergy is not something that can be achieved and carried out individually, but requires collaboration and cooperation of various parties to unite forces in order to achieve common goals.

In West Kalimantan Governor Regulation No. 39 of 2019 concerning Forest and Land Fire Prevention and Control, forest and land fire prevention is defined as all efforts and actions or activities undertaken to prevent or reduce the possibility of forest and land fires. Based on the magnitude of the consequences of forest and land fires in West Kalimantan that occurred throughout the year, it is necessary to synergize between the local government, West Kalimantan BPBD, and other relevant agencies in response efforts. Synergy in efforts to combat forest and land fires has also been regulated in Presidential Instruction No. 3 of 2020 concerning Forest and Land Fire Management. There are 28 Ministries and Institutions in Indonesia that play a role in overcoming forest and land fires which have their respective main tasks and functions. Efforts to control forest and land fires throughout Indonesia include the following activities:

1. Prevention of forest and land fires
2. Fighting forest and land fires
3. Handling after forest and land fires

Furthermore, in the 2021 West Kalimantan BPBD Work Plan it is explained that the West Kalimantan BPBD was formed as an effort to carry out disaster management and management at the regional scope and is responsible for the regional government. West Kalimantan BPBD has several programs in the effort to overcome forest and land fires in West Kalimantan, including:

1. Establishment of Volunteers for Disaster Care in districts/cities.
2. Disaster counseling in high disaster prone areas.
3. Coordination meeting for disaster management and preparedness of smoke caused by forest and land fires.
4. Disaster response and preparedness post.
5. Coordination of disaster risk reduction.
6. Control and supervision of disaster management.

Synergy in overcoming forest and land fires in West Kalimantan can be achieved through optimizing coordination and communication between the local government, West Kalimantan BPBD and other relevant agencies. Coordination and communication are carried out intensively regarding the prevention of forest and land fires.

Coordination carried out by the West Kalimantan BPBD with local governments and other relevant agencies in designing collaborative programs or activities. The preparation of planning documents, both annual (Work Plans) and intermediate (Strategic Plans) involves all relevant stakeholders starting from planning, organizing, implementing, and evaluating through the following stages:

1. Preparation of the Work Plans/Strategic Plans Preliminary Draft Document
2. Implementation of the Provincial BPBD Regional Apparatus Forum. West Kalimantan with related Stakeholders
3. Preparation of the Work Plans/Strategic Plans Document
4. Implementation of the Village/District, Regency/City and Province
5. Preparation of the Final Work Plans/Strategic Plans Document
6. Evaluation of the Ministry of Home Affairs on the Final Draft Work Plans/Strategic Plans
7. Preparation of Work Plans/Strategic Plans Documents
8. Preparation of pure KUA/PPAS/changes
9. Preparation of West Kalimantan Provincial Government Budget Documents
10. Implementation of the Meeting Evaluation of the implementation of activities, whether it is policy evaluation, evaluation of results and evaluation of the implementation of local government programs and activities.

Synergies in designing collaborative programs or activities between BPBD West Kalimantan and local governments and other relevant agencies can be created by unifying the vision and mission as well as work programs in dealing with forest and land fires. Referring to the vision and mission of the head and deputy regional head which is adjusted into the goals, targets, strategies, policy directions, programs, activities and sub-activities by paying attention to and analyzing sectoral policies that support the prevention of forest and land fires in West Kalimantan.

#### **IV. CONCLUSION**

Forest and land fires that occur in Indonesia's border areas, namely in West Kalimantan, have occurred every year so that they can be classified as non-military threats and become a cross-border environmental security issue. So it is necessary to optimize the synergy between the local government, West Kalimantan BPBD, and other relevant agencies in an effort to overcome forest and land fires in West Kalimantan as a non-military threat. Synergy is carried out in designing collaborative programs or activities in efforts to combat forest and land fires in West Kalimantan. The optimization of coordination and communication between the local government, West Kalimantan BPBD and other relevant agencies is carried out intensively starting from planning, organizing, implementing, and evaluating by unifying the vision and mission as well as work programs in dealing with forest and land fires.

#### **REFERENCES**

- [1] S. Abas, The strategic issues of economic development of border area of Indonesia-Malaysia (Study case of Entikong sub-district of West Kalimantan), *Journal Cyberpreneurship Innovative and Creative Exact and Social Science*, 2(2), 2016, 110-121.
- [2] U. AKM. Ahsan and K. A. A. Ahmad, Are borders the reflection of international relations? Southeast Asian borders in perspective, *Journal of Asian Security and International Affairs*, 5(3), 2018, 1-23.
- [3] S. Mia and P. P. Yudha, The problematics mitigation of forest and land fire district (kerhutla) in policy perspective (A case study : Kalimantan and Sumatra in period 2015-2019), *Journal of Governance and Public Policy*, 2019, 6(3), 270-192.
- [4] M. Sholih, Smoke Haze Trigger Factors in the Malaysia Indonesian Border, *Utopía Y Praxis Latinoamericana. Año*, 2021, 26(1), 381-393.
- [5] Ministry of Defense of the Republic of Indonesia, *Indonesian Defence White Paper* (Indonesia: Ministry of Defense of the Republic of Indonesia, 2015).
- [6] I. Jerry, Ancaman Non-Militer Terhadap Keamanan Nasional di Papua. 2016.
- [7] Kumalawati, Rosalina, Dianita A., and Elizabeth, Penyebab Kebakaran Hutand an Lahan Gambut di Kabupaten Barito Kuala Provinsi Kalimantan Selatan. Prosiding Seminar Nasional diselenggarakan Pendidikan Geografi FKIP UMP "Manajemen Bencana di Era Revolusi Industri 5.0". 2019.



- [8] R.Fachmi., PermasalahandanDampakKebakaranHutan. *JurnalLingkarWidyaiswara*, 2014, 1(4): 47-49.
- [9] RencanaKerjaBadanPenggulanganBencana Daerah Provinsi Kalimantan Barat tahun 2021.
- [10] W.Galih, SinergisitasPemerintah Daerah, PolridanTNI dalamMenanggulangiKebakaranHutandanLahan di KabupatenMempawahProvinsi Kalimantan Barat dalamKaitannyadenganPeraturan Daerah Provinsi Kalimantan Barat Nomor 6 Tahun 1998 tentangPencegahandanPenanggulanganKebakaranHutan. *Jurnal Nestor Magister Hukum*, 2017, 1(1): 1-13.
- [11] M. Judith and B. Suratmoko, *The Underlying Causes and Impacts of Fires in Souths-east Asia: Fire and Landscape in Sanggau, West Kalimantan, Indonesia* (Indonesia: Socio-Economic Report, 2000).
- [12] Sawerah, Siti, Pudji M., andPrabowo, T,Partisipasi Masyarakat dalamPencegahanKebakaranLahanGambut di KabupatenMempawah, Provinsi Kalimantan Barat. *JurnalPenyuluhan*, 2016, 12(1): 89-102.
- [13] Pasaribu, Sahat M. andFriyatno, S.,MemahamiPenyebabKebakaranHutandanLahansertaUpayaPenanggulangannya: Kasus di Provinsi Kalimantan Barat. BadanLitbangPertanian, 2020.
- [14] R. Yudi and U. Madjid, Synergy of Local Government and Indonesian National Army in Establishing State Border Area (NKRI-RDTL), *Mimbar*, 2017, 33(2), 301-309.