

The 7<sup>th</sup> Smart Collaboration for Business in Technology and Information Industries 2016



# ANALYSIS OF STAKEHOLDERS IN CASE OF FIRE IN THE PROVINCE PRONE FOREST IN SUMATRA AND KALIMANTAN, INDONESIA

Husni Amani<sup>1</sup>, Annisa Nurbaiti,<sup>2</sup> Hani Gita Ayuningtias<sup>3</sup> FakultasRekayasaIndustri, Universitas Telkom<sup>1</sup> FakultasEkonomidanBisnis, Universitas Telkom<sup>23</sup> husni.amani@gmail.com<sup>1</sup>, annisa.nurbaiti@yahoo.com<sup>2</sup>, hanigita@gmail.com<sup>3</sup>

### Abstract

The case of land and forest fires in the province is prone to forest fires in Sumatra and Kalimantan each year tend to increase. Based on data from the National Agency for Disaster Management (BNPB) on the fires in 2015, the number of hotspots in Sumatra and Kalimantan reached 944 points and 222 points. Catastrophic losses smoke damage to the environment and the quality of public health. Smoke disasters cause loss of life and suffering from acute respiratory infections (ARI).

This study aims to identify, map and formulate the role of stakeholders in case the problem of forest fires. Data collected through interviews and then analyzed by qualitative descriptive. These results indicate there are thirteen (13) actor role of stakeholders in case of forest fires in Indonesia starting from the claimants of land, farmers, local governments to the central government, employers, up to an advocacy group. In addition to the role of actor stakeholder analysis, obtained also description of the role and organization of disaster response fire from the national level to the village level or business unit.

Keywords: Stakeholders, Forest Fire.

### 1.1. Introduction

Land and forest fires is one of the serious problems that until now still not be addressed. Every year, forest fires and land issues tend to increase and difficult to control by the Government and the people in the fire zone. In the event of a fire in 2015 after the Government can not address land and forest fires were very large and long finally in early November 2015, the Government has requested assistance from other countries. In Compass October 8, 2015, Prof. Emil Salim stated "Disaster in Sumatra and Kalimantan is not only damaging to the environment, but it is a humanitarian disaster". Fire incident was caused by the increased activity of illegal logging, conversion of land for settlement, cultivation, large-scale plantations, plantation establishment is more prone to burning, as well as the climatic conditions favor the occurrence of forest fires and land, especially in the season of low rainfall that long due to changes global climate.

Based on data from http://sipongi.menlhk.go.id page of the Ministry of Environment and Forests, which is accessible on Wednesday (08/10), the burnt area in 2015 spread across 12

provinces. Land burned largest area in the province of Riau, reaching 2025.42 hectares (ha). The province with a land area burned is significantly more West Kalimantan (900.20 ha), Central Kalimantan (655.78 ha), Central Java (247.73 ha), West Java (231.85 ha), South Kalimantan (185.70 ha), North Sumatra (146 ha), South Sumatra (101.57) and Jambi (92.50 ha). Head of Data Information and Public Relations of National Disaster Management Agency (BNPB) Sutopo Purwo Nugroho report, the number of hotspots in Sumatra reached 944 points and 222 points in Kalimantan. Land and forest fires are estimated still ongoing (www.sains.kompas.com). Currently, as many as three provinces, namely Riau, Jambi, Central Kalimantan have imposed emergency response status after weeks of indicators of air pollution in the region beyond the dangerous stage.

This study was conducted to analyze the stakeholders involved in the case of forest fires in the province prone to forest fires in Sumatra and Kalimantan. It will be a problem is when the parties - the interested parties have not been performing its role actively in tackling cases of forest fires related to the interests held by each - each party. By conducting a stakeholder analysis, is expected to identify the stakeholders involved and steps - steps that must be undertaken by each party in tackling cases of forest fires that occurred today and the future.

In this study conducted a few steps down to make it easier to build good communication with the stakeholders, the stakeholder mapping, stakeholder analysis, and stakeholder communications. This research is expected to contribute in helping the response to cases of forest fires that occurred in provinces prone to forest fires in Sumatra and Kalimantan, particularly relating to the identification of stakeholders and their respective roles.

### 1.2 Forest Fires

Wildfires are a local and global issues. In global warming, Indonesia is projected to have higher temperatures and changes in rainfall patterns. Climate variability inter - annual associated with phenomena such as the El Niño Southern Oscillation can lead to a decrease in the intensity of the rain. (1) Indonesia has enacted a number of laws and established institutions to address forest fires, but this proved ineffective. (2) Under the scenario of climate change in the future and the current fire management practices, tropical rainforests in Indonesia could be more susceptible to fire.(3) The effectiveness can be improved by addressing the cause of the fire, which involve a variety of stakeholders in formulating and improving law enforcement (Herath et al., 2011).

### 1.3 Stakeholders

Freeman (1984) defines stakeholders as "any group or individual who can Affect or be affected by the achievement of an organization's objectives." That the stakeholder is any group or individual who can affect or be affected by the process of achieving goals of an organization. A stakeholder is a person, organization or group with an interest in a particular natural resource (Brown et al., 2001). Stakeholders include all parties involved in the management of resources. In the context of the company, Clarkson (1994) provides a definition of stakeholders, more specifically as a group or individuals who bear a kind of risk either because they have invested (material or human) in the company ('Stakeholders voluntary'), or because they face risks due to the activities of the company ('Stakeholders non-voluntary'). Stakeholders can also be defined as a person, group or institution with an interest and / or can influence the outcome of an activity (Salam and Noguchi, 2006; Kusumedi and Bisjoe, 2010).

In Business Dictionary, defined stakeholder groups or organizations that have a direct or indirect interest in an organization because it can affect or be affected by the organization's actions, objectives, and policies.

Based on the above definition can be concluded that the stakeholders are all parties concerned with the issues and problems that the focus of the study or attention.

### 1.4 Stakeholder Analysis

A stakeholder analysis is the analysis of the influence of functions, roles and contributions of stakeholders to the phenomena or problems that occur. A stakeholder mapping and analysis tools (tools) that are vital for gaining an understanding of who the stakeholders involved in the communication. With that understanding will know their role and potential contribution. The role and contribution that is the basis of the success of public participation in communication. Stakeholder analysis becomes an important tool in identifying the perpetrators of communication. The perpetrators of this communication include people and organizations involved or affected by a plan. A clear understanding of the role and potential contribution of the various stakeholders is a major prerequisite for the participatory planning process.

Based on PMBOK 5th Edition, the steps in conducting a stakeholder analysis are as follows:



Figure 1. Steps Stakeholder Analysis (Source: PMBOK 5th Edition)

# 1. Stakeholder Identification

Identify all stakeholders and associated information such as roles, departments, interests, knowledge, hope, and the degree of influence. Identification of stakeholders includes two main steps that should be done, namely: (1) An understanding of the issues facing the company; (2) an understanding of the type, the type and characteristics of the stakeholders. Based on its relevance to a decision or an activity, Townsley (1998) distinguishes stakeholders into two primary stakeholders and secondary stakeholders. Primary stakeholders are those who have a direct interest in a resource, these stakeholders by Yang, et al., (2010) are called the key stakeholders (key stakeholders). Secondary Stakeholders are the parties who have an interest / indirect interests, or those who depend largely on the property or business generated by resources.

2. Analysis of the impact or potential support to each stakeholder that can be developed and classified for strategy development.

In a large stakeholder community, need to prioritize stakeholders to ensure an efficient effort to communicate and manage their expectations. In prioritizing stakeholder there are three attributes, namely power, legitimacy, and urgency (Mitchell et al., 1997). Urgency be used as consideration in this classification shows that stakeholders can move dynamically. This shows that new stakeholders can be taken into account at a time, but at other times they are not involved (Elias and Cavana, 2000). The three attributes of each can be combined and ultimately the combination will produce seven types of stakeholders.

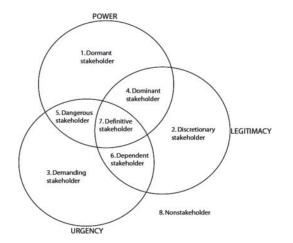


Figure 2. Atribut Stakeholder (Source: Mitchell, 1997)

Based on the image, stakeholders can be categorized as follows:

- a. Stakeholder latent. The stakeholders have only one of the three attributes. They have a low position. Latent Stakeholders are divided into three groups, namely stakeholder dormant (if only to have the attributes of power), stakeholder discretionary (if only to have the attributes of legitimacy), and stakeholders demanding (if only discount urgency attribute).
- b. Stakeholders expectant. Stakeholders are included in this category have a moderate position. Stakeholders of this type are divided into three groups, namely the dominant stakeholder (have the attributes of power and legitimacy), stakeholder dependent (have the attributes of legitimacy and urgency), and stakeholder dangerous (have the attributes of power and urgency).
- c. Stakeholders definitive. Stakeholders of this type have a top notch because it has three attributes, namely power, legitimacy, and urgency.

Mapping of stakeholders will help managers how to involve the stakeholders in achieving the goals (Reed et al., 2009). Based on the influence (power) and interest (interest) held by any stakeholders, the stakeholders can be categorized into four types: (Reed *et al.*, 2009; Thompson, 2011; Gardner *et al.*, 1986) :

- 1. Stakeholders with interest rate (interest) is high but have an influence (power) is low are classified as subjects (Subjects). These stakeholders have low capacity to reach our objectives, but can be influenced by forming alliances with other stakeholders. These stakeholders can often be very helpful so that the relationship with stakeholdersini must be maintained properly.
- 2. Stakeholders with interest rate (interest) and influence (power) is low are classified as Other Followers (Crowd). Required little consideration to involve stakeholdersini further because the interests and influence are usually changes over time. Stakeholdersini must remain monitored and is woven with good communication.
- 3. Stakeholders with interest rate (interest) is low but has influence (power) higher classified as Support (Contest setters). Stakeholdersini can bring the risk that its presence should be monitored and managed properly. Stakeholdersini may turn out to be key players for an event. Good relations with these stakeholders continue to be fostered. For that all information required should be given so that they can continue to play an active role in achieving the goals.

# **1.5 Research Model**

The research method is a flow chart diagram in the form of research Ishikawa (Fishbone diagram). As part of the Fishbone diagram is input in the form of interviews and secondary data (articles and news) involved in the case of forest fires in the province prone to forest fires in Sumatra and Kalimantan. Output of stakeholder mapping. The object of research is the case of forest fires. Result indicators are the identification of stakeholders.

# 1.6 Finding and Discussion

# **1.6.1 Actors in land and forest fires**

According to Purnomo (2015) in the blended (2015) 28 on the field findings showed that the land and forest fires, both of which want to prevent, cope with or who want to earn profits and economic rents involve many actors in the scene in a state forest, concession companies and on community land. Some actors and roles related to land and forest fires can be found atTabel 1

No	Actor	Description	Role
1	Land Claimant	unscrupulous village heads, youth leaders, customary, and unscrupulous illegal loggers	alone or jointly identify state lands (open access) ex-concession or concessions are yet operational; not delineated the land claimed; care of block letters as a sign of ownership
2	Farmer Group Board	land claimants, members of political parties and public figures	collecting and organizing farmers and ordinary people to be registered as members of the group; administering land in cooperation with village officials and districts; and divide tasks
3	Farner Group Member	farmers, local communities, caretaker relatives of farmer groups	jointly maintain the land claimed from a counter- claim of the other party; involved in land clearing activities; get free land / cost
4	Marketer Team Land	members of farmers in charge of land market	identifying and disseminating information to potential buyers of land potential land; negotiating land selling
5	Village Government	village head, village secretary, the head of affairs, RW / RT	facilitate administrative procedures related letter of the land (certificate of land or SKT certificate, certificate of indemnity or SKGR)

No	Actor	Description	Role
6	District Government (Kecamatan)	head of sub-district, sub-district secretary, the head of affairs etc.	facilitate administrative procedures related letter of the land (SKT, SKGR)
7	District Government (Kabupaten)	regent and ranks related	manage land use districts
8	Land Broker	community leaders, youth leaders, political party members, village officials	as a source of information for searchers and sellers of land; connects buyers and sellers of land; buy land at a low price and sell at high prices
9	Small Scale Land Buyer (<25ha)	the company's staff, relatives of members / management group of farmers, local traders, officials of political parties, government officials	buying land for the cultivation of plantation crops, assets or inheritance for children / grandchildren
10	Big Scale Land Buyer (>25ha)	Great entrepreneurs, individual district / provincial officials, merchants intercity / region, company managers	buying land for the cultivation of plantation crops, property assets or inheritance for children / grandchildren
11	Small scale owner palm oil	the company's staff, relatives of members / management group of farmers, local traders, officials of political parties, government officials	cultivate oil palm cultivation on land (claims) with an area of less than 25 ha
12	Big scale owner palm oil	Great entrepreneurs, individual district /provincial officials, merchants intercity / region, company managers	cultivate oil palm cultivation on land (claims) with an area of over than 25 ha
13	Advocacy organizations	Local NGOs, national, university, media	provide information and awareness to the community about issues related to social, environmental, etc.; encourage the parties to seek a solution of the issues raised

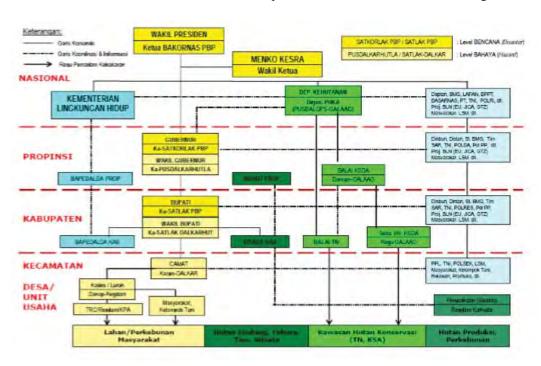
Source : (Purnomo, dkk., 2015)

Tabel 1. Actor Role Interests Related Fires

Other findings of the burning of forests and land by the company, according to Anton (Executive Director of WALHI West Kalimantan), not only land clearing land preparation but also an insurance claim. In some companies, there is a link with the land fire insurance purposes. Land and forest fires so there are deliberate. When the garden was opened in a matter of economics, unproductive, then burned in order to get insurance, money opening new gardens in other regions.

### 1.6.2 Fire Chain and Interest of Actor

The cause of the fires because of several factors, among others, the investor who wants to open a palm oil plantation in the forest area and because the economic conditions are still many Indonesian people are at a low level, especially those living in areas of forest edge and interior. The chain is starting forest fires from land claims, slash and cleaning, combustion, and planting palm or acacia. Land claims covering a variety of processes as follows: people scramble to claim the land and sell it; cooperation, land clearing for plantations by the cooperative; new settlements; overlapping claimsby indigenous peoples and land mafia. The actor claims mover among other elements village heads, youth leaders, former concession workers and unscrupulous public figures. Once claimed, the land is generally sold to raise cash. Land sold to support supporting documents of ownership issued by the village government to convince prospective buyers about the validity of land. The village government in this phase of the land claim issues a letter block and SKT and SKGR on land selling phase.



#### 1.6.3 Organizations in the Land and Forest Fire Management

On a national scale handling of land and forest fires within the responsibility of the Ministry of Welfare, which is tasked to coordinate the cooperation between the various relevant agencies.

Figure 3. Organizational Chart of Forest and Land Fire Fighting

Nevertheless, it needs to be stressed here, that basically the responsibility for the use of fire and (the event) forest fires and / or land caused is the responsibility of every land manager. In the handling of forest fires and land the role of community organizations becomes very important because people as actors who were at the site level (location). Through an existing community organizations can develop early warning systems as part of the fire control and prevention of land on the stage. Terminology commonly known in disaster management, said that the early warning system is a series of the capacity required to produce and disseminate warning information that is

meaningful in time to enable individuals, communities and organizations threatened danger to prepare and take the appropriate action, and in sufficient time to reduce the possibility of damage or loss (UNISDR, 2009).

The early warning system consists of a series of things: understanding and mapping the hazard; monitor and predict the events that will soon take place; process and disseminate warnings to the authorities and to the public; and take the appropriate actions and timely to the warning. Community-based early warning systems (Community Early Warning System) is an operational structure that allows residents to take steps to minimize the impact of natural disasters.

### 1.6.4 Strategy Land and Forest Fire Prevention Sumatra and Kalimantan

The government has made various efforts to extinguish the fire. BNPB only four steps, namely:

- 1. Extinction of the air with artificial rain and water bombing.
- 2. Outages on the ground by a joint team BPBDs, Mangala Agni, military, police, MPA, and society.
- 3. Law enforcement operations by the police and investigators
- 4. Health care and socializing.

People who are always in the location should be able to prevent the burning of land and forests in order not to be a disaster. Community participation to prevent disasters and forest fires can be started from the village level.

### **1.7 Discussion**

Combustion in this sense is defined as an intentional act of burning is done by the community in managing land for agriculture / farming them. While the fire is defined as a process of combustion, which spreads freely, not depressed, which consume fuel such as litter, grass, humus, the branches of dead wood, poles, weeds, shrubs, foliage and trees fresh (Dharmawan, 2003).

In addition, the industrial timber estates and plantations that utilize community clandestinely clearing land by burning, so that the cost of land clearing can be suppressed, also has sparked fires and gardens. On the abovebasically farming communities / cultivators, businessman industrial timber plantations and large farms increase the risk of forest fire and the resulting adverse effects including smoke disaster.

Data Meteorology, Climatology and Geophysics (BMKG) showed there were 39 hotspots in Sumatra. www.bbc.com (March 13, 2016 edition). Head of the Meteorology, Climatology and Geophysics (BMKG) Meteorological Station Syamsudin Noor Banjarmasin Ibn Sulistyono points out, the number of hotspots detected in South Kalimantan Satellite Terra / Aqua from January to March 10, 2016 as many as 74 points. www.kompas.com (edition of 11 March 2016).

As reported by the (www.sawitindonesia.com, Qayyum Amri) Joko Widodo said there were three steps taken to control the use of peat. First, the government made a policy one policy map that will run at the Coordinating Ministry for Economic Affairs and Bappenas. The policies of this map were put together following the government in March 2015.Dengan goal to integrate data distribution of land use permits that had been in the ministry until the government dare. Langkah second, there is no longer granting new licenses in the peat. Third, Jokowi will ask the Review permits long.

In addition to policies issued by Joko Widodo, the Government considered necessary to prepare mitigation of forest fire by setting up a sort of Team Rapid Response (TRC). "TRC is tasked to conduct inspections on a regular basis and make prevention the first such forest fires or land in a spot, "said analyst paradigm Environmental Research Institute Sunaryo HR Prasad in a written statement in Jakarta, Friday (09/10/2015). Therefore, the TRC should be given greater authority to utilize local government resources. Therefore, in TRC is necessary to have liaison

officers who have direct access to the Access to the regents or governors. (Lestarini, October 9, 2015).

There are impacts of peat fires, namely socioeconomic impact, environmental impact and health impact, that any such impact directly felt by the community.

### References

- Clarkson, M. 1994. A risk based model of stakeholder theory. Proceedings of the Second Toronto Conference on Stakeholder Theory. Toronto: Centre for Corporate Social Performance & Ethics, University of Toronto.
- Elias, A.A. and Cavana, R.Y. 2000. Stakeholder Analysis for Systems Thinking and Modelling. School of Business and Public Management Victoria University of Wellington, New Zealand.
- Freeman, R. E. 1984. Strategic management: A stakeholder approach. Boston: Pitman.
- Gardner, J. R., Rachlin, R. and Sweeny, H.W.A. 1986. Handbook of Strategic Planning. http://www.12manage.com/methods\_stakeholder\_mapping. html. AksesTgl. 23 Juli 2011.
- Kusumedi, P dan Bisjoe, A.R.H. 2010. Analisis Stakeholder danKebijakan Pembangunan KPH Model Maros di Propinsi Sulawesi Selatan. JurnalAnalisisKebijakanKehutanan, 7(3), 179-193.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. 1997. Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts. Academy of Management Review, 22(4), 853-886.
- Reed, M.S, Graves, A., Dandy, N., Posthumus, H., Hubacek, K., Morris, J., Prell, C., Quinn, C.H., and Stringer, L.C. 2009. Who's In And Why? A Typology Of Stakeholder Analysis Methods For Natural Resource Management. Journal of Environmental Management, 90, 1933–1949.
- Salam Md., Abdus and Noguchi, T. 2006. Evaluating Capacity Development for Participatory Forest Management in Bangladesh's Sal Forests Based on '4Rs' Stakeholder Analysis. Forest Policy and Economics, 8, 785–796.
- Sains Kompas. 2015. Kabut Asap Kebakaran Hutan, Setengah Abda Kita Abai. [Online] http://sains.kompas.com/read/2015/09/14/16272971/Kabut.Asap.Kebakaran.Hutan.Seten gah.Abad.Kita.Abai, diakses 08 Oktober 2015.
- Si Pongi. Kementrian Lingkungan Hidup dan Kehutanan. [Online] http://sipongi.menlhk.go.id/home/main, diakses 07 Oktober 2015.
- Thompson, R. 2011. *Stakeholder Analysis.Winning Support for Your Projects.*http://www.mindtools.com/pages/article/ne wPPM\_07.htm.Akses Tanggal 20 Pebruari 2011.
- Townsley, P. (1998)/ Social Issues in Fisheries. FAO Fisheries Technical Paper. No. 375. Rome, FAO. 1998, 39p. FAO CORPORATE DOCUMENT REPOSITORY.
- Yang, Z., Ju, M., Zhou, Y., Wang, Q., and Ma, N. 2010. An Analysis of Greenhouse Gas Emiision Trading System from the Perspective of Stakeholders. *Procedia Environmental Sciences*, 2, 82–91.
- www.kompas.com
- www.bbc.com
- www.sawitindonesia.com