

## IDENTIFICATION OF STAKEHOLDERS AND THEIR ROLES IN ECOTOURISM HAZARD MANAGEMENT IN MOUNT RINJANI NATIONAL PARK

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### ABSTRACT

*Mount Rinjani is a volcano with hot water, savanna, and other beauty of nature as one of the leading destinations in Lombok. Behind its beauty, Mount Rinjani National Park (TNGR) is in a natural hazard area, making it a disaster-prone area. The objective of this study is to identify the parties and roles of each party involved in the Ecotourism hazard management in TNGR based on their level of interest and influence. Determination of sampling used purposive sampling, as well as semi-structured key informant interviews with snowball sampling using interview guides. The study object of this study were the parties (stakeholders) and the relationship between the parties involved in the hazard management of TNGR ecotourism. The roles of stakeholders in managing the dangers of TNGR Ecotourism were divided into four: support, actors, decision-makers, and infrastructure providers. The key players were TNGR Center and West Nusa Tenggara (NTB) Provincial Tourism Office. The subjects were North Lombok Regency Tourism Office, Central Lombok Regency Tourism Office, East Lombok Culture and Tourism Office, EMHC (Edelweiss Medical Help Center), NTB Provincial Office of Environment and Forestry, Mataram Rescue and Search Office, BPMVG Sembalun, Rinjani Porter Guide Forum, Lombok APGI, Head of Sembalun Subdistrict, Head of Bayan Subdistrict, Sangkreang Nature Lovers Organization, and Tourism Activist Group (Pokdarwis) Rinjani Perkasa. The context setter was Regional Disaster Management Agency (BPBD) of NTB Province. The crowd was NTB Regional Police (Polda), Korem (Subregional Military Command) 162 Wira Bhakti Mataram, Regional Development Planning Agency (Bappeda) of NTB Province, Ministry of Energy and Mineral Resources of NTB Province, NTB Provincial Public Works and Spatial Planning Office, Rinjani Tourism Image Forum, North Lombok TO Association, Central Lombok TO Association, East Lombok TO Association, Daily Executor Board (DPH) Geopark UGG Rinjani Lombok and Grahaphala Unram.*

Key words: hazard, management, Mount Rinjani, stakeholder

### INTRODUCTION

Mount Rinjani is the second highest mountain with caldera, crater, lake, hot spring, savanna, and other beauty of nature as one of the leading destinations in Lombok for the domestic and foreign tourists. Behind its beauty, Mount Rinjani is located at a natural hazard area both hydrometeorological and geological hazards, making it as a disaster-prone area. A research by Muntasib et al. (2019) have found that many natural hazards at Mount Rinjani area are in the form of ravines, steep and slippery trails, low temperature, fog, wildlife and plants as well as disasters such as landslides, fires, volcanic activities, and earthquakes. These hazards should get serious attention from the tourists and tourism actors so they would not pose a risk. The parties involved in ecotourism hazard management come from government agencies, private institutions, tourism entrepreneurs, community groups, and the community. They have different roles and activities. The roles and activities of a party reflect the interests. The interests of each party will influence the relationship mechanism in managing ecotourism hazards in Mount Rinjani National Park (Taman Nasional Gunung Rinjani/TNGR). The decisions made need to be realized through collective action from all stakeholders, including the local community (Hazenbergh, 2015) that is considered as the

reason for an effective tourism destination governance (Çakar, 2018).

Therefore, this research is needed to identify the parties in managing ecotourism hazards in TNGR. This study aims at identifying the parties and their roles who are involved in managing ecotourism hazards in TNGR based on the level of interest and influence.

### RESEARCH METHOD

This study was carried out in Mount Rinjani National Park and its surroundings, Lombok Province. It was conducted in 2019.

The tools used in this study were: interview guide, voice recorder, digital camera, and writing instruments. The targets in this research were: the parties who manage ecotourism hazards in TNGR and the needs of the parties involved in managing ecotourism hazards in TNGR.

Stakeholders are actors (individuals and organization) who have interest in policy improvement (Schmerr, 2009). All actors/groups who affect and/or are affected by the policies, decisions, and action of a project are also known as stakeholders (Groenendijk, 2003). Stakeholders are usually associated with interest and influence.

Interests are closely related to individual or organizational needs (Groenendijk, 2003). The level of

individual or organizational interests is assessed through participation, benefits, percentage of work programs related to natural tourism, level of dependence, and roles of individuals/organizations. Influence is the process of changing the thoughts, behaviors, and feelings of others and its strength depends on power (Nelson and Quick, 1994; Reed et al., 2009). Assessment analysis of power was developed by Reed et al. (2009) through instruments of power and sources of power. Instruments of power include condign power (finance, sanction), compensatory power (gift, salary/wage, activity aid, appreciation), and conditioning power (education, propaganda, opinion). Sources of power include personality power (intelligence, charisma, physical strength) and organizational power (network, function, mass, suitability of function).

The informants were determined using purposive sampling. Informants are considered as actors (agencies/institutions/groups) who participate in the management of ecotourism hazards in TNGR. The informants may come from government agencies, private institutions, community groups, tourism entrepreneurs and the community. The data collection methods used in identifying and classifying the stakeholders were:

**Interviews with Informant** were performed to all parties who were related to hazard management in TNGR. The interview was semi-structured using interview guides with key informants from each stakeholder. Interview with key informant is to obtain specific information on a topic (Mikkelsen, 2003). The study discussed in this research was the parties (stakeholders) and the relationship between the parties involved in the ecotourism hazard management in TNGR. The first key informant from each stakeholder was the head of department, the head of TO (Trekking Organizer), and the head of organization or staff appointed by the head of stakeholder to represent the corresponding stakeholders in providing information about the ecotourism hazard management in TNGR. The

method to determine key informants is usually called as snowball sampling (Wildemuth, 2009).

Each stakeholder was asked about their interests, influence, policies and cooperation with other parties and measured by a score from 1-5. Field observation is a direct observation and careful recording of the environment conditions (physical, social and economic) of the parties under study.

The obtained data were analyzed using stakeholder analysis. Stakeholder analysis is used to analyze data about stakeholders. The stakeholder analysis model used was the model introduced by Reed et al. (2009). The stages in stakeholder analysis were as follows: identification of stakeholders and their roles; differentiate and categorize stakeholders based on their interests and influence.

The stakeholders were mapped into a stakeholder analysis matrix based on their interests and influence. The level of interest was assessed based on stakeholder participation in ecotourism hazard management, stakeholder dependence on ecotourism hazard management, work programs of each stakeholder related to ecotourism hazard management, benefits obtained by the stakeholder from natural tourism, and the roles of the stakeholder in managing ecotourism hazards. Meanwhile, the level of influence was assessed based on the instrument and the sources of power of each stakeholder (Reed et al., 2009). The instruments of power include conditioning power, condign power, and compensatory power. The sources of power include personality power and organization power. The level of stakeholder interests was assessed using an interest guideline, and the level of influence was assessed using an influence guideline. The maximum score that can be obtained by each stakeholder is 25 points for the level of interest and 25 points for the level of influence. After the level of interest and influence was obtained, each stakeholder was then mapped into an interest-influence matrix using Minitab 15 software (Figure 1).

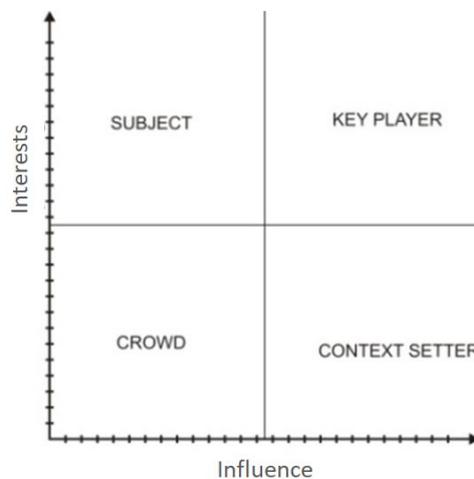


Figure 1. Interest-Influence Matrix (Reed et al. 2009).

**Descriptive analysis of needs** is to describe the needs of each stakeholder for the ecotourism hazard management in TNGR. The needs of each stakeholder were classified according to their similarity. Descriptive analysis of needs was performed using a list of stakeholder needs.

## RESULT AND DISCUSSION

### 1. Identification of Stakeholders and Their Roles

There are 28 stakeholders involved in the management ecotourism hazards in TNGR as presented in Table 1. The stakeholders come from provincial and city government agencies, private institutions, community groups, individual entrepreneurs, and the community. The twenty-eight stakeholders included in government agencies are TNGR Center, West Nusa Tenggara (NTB) Provincial Tourism Office, North Lombok Regency Tourism Office, Central Lombok Regency Tourism Office, East Lombok Culture and Tourism Office, BMKG (Indonesian Agency for Meteorology, Climatology, and Geophysics), NTB

Regional Police, Korem (Subregional Military Command) 162 Wira Bhakti Mataram, Regional Development Planning Agency (BAPPEDA) of NTB Province, NTB Provincial Office of Energy and Mineral Resources, NTB Provincial Office of Environment and Forestry, Regional Disaster Management Agency (BPBD) of NTB Province, NTB Provincial Public Works and Spatial Planning Office, Mataram Search and Rescue Office, Center for Volcanology and Geological Hazard Mitigation (PVMBG) of Sembalun, Head of Sembalun Subdistrict, Head of Bayan Subdistrict; Community groups are EMHC (Edelweiss Medical Help Center), Rinjani Tourism Image Forum, Rinjani Porter Guide Forum, North Lombok TO Association, Central Lombok TO Association and East Lombok TO Association, IMGA Lombok, Orplas, Tourism Activist Group (Pokdarwis) Rinjani Perkasa, DPH Geopark UGG Rinjani Lombok, Grahapala Unram. The roles of stakeholders in managing ecotourism hazards in TNGR are divided into four: the supporting roles, actors, decision makers, and facility and infrastructure providers.

Table 1. Stakeholders involved in ecotourism hazard management in TNGR

No	Stakeholders related to ecotourism hazard management in Mount Rinjani National Park
1	Mount Rinjani National Park Center
2	West Nusa Tenggara (NTB) Provincial Tourism Office
3	Head of NTB Regional Police
4	Danrem 162 Wira Bhakti Mataram
5	Head of (Regional Development Planning Agency) BAPPEDA of NTB Province
6	Head of Energy and Mineral Resources Office (ESDM) of NTB Province
7	Head of Environment and Forestry Office of NTB Province
8	Head of Public Works and Spatial Planning Office of NTB Province
9	Head of Regional Development Planning Agency of NTB Province
10	Head of Mataram Search and Rescue Office
11	Head of Mount Sembalun Observer (PVMBG)
12	Head of North Lombok Regency Tourism Office
13	Head of Central Lombok Regency Tourism Office
14	Head of East Lombok Culture and Tourism Office
15	Head of Indonesian Agency for Meteorology, Climatology, and Geophysics (BMKG)
16	Head of EMHC (Edelweis Medical Help Center)
17	Head of Rinjani Tourism Image Forum
18	Head of Rinjani Porter Guide Forum
19	Head of North Lombok TO Association
20	Head of Central Lombok TO Association
21	Head of East Lombok TO Association
22	Head of IMGA Lombok
23	Head of Sembalun Subdistrict
24	Head of Bayan Subdistrict
25	Head of Sangkareang Green Peace Organization (Orplas/Organisasi Pencinta Alam Sangkareang)
26	Head of Pokdarwis Rinjani Perkasa
27	DPH Geopark UGG Rinjani-Lombok
28	Head of Grahapala Universitas Mataram

Stakeholders from government agencies, private institutions, community groups and the community may have all four roles or partially as shown in Table 2 and 3. The roles of government agencies in ecotourism hazard management in TNGR include these four roles. The role of government agencies in supporting activities during a danger is as an actor, for they will be actively involved in hazard management, as well as serving as a decision maker and infrastructure provider. The stakeholders who become the supporting actors are BMKG and PVMBG. They have the role to provide information about seismic conditions or climate hazards and also the conditions of Mount Barujari. The stakeholders who become the decision makers are Mount Rinjani National Park as well as supporter of all stakeholders who participate in the

National Park if there is a danger and also as the infrastructure providers according to its ability. BNBD of NTB Province is also an actor, decision maker and infrastructure provider for the Provincial and District Tourism Offices as well as the decision makers and supporting actor for the ecotourism hazard management in TNGR. Regional Police, Bappeda, ESDM Office, Environment and Forestry Office, Public Works and Spatial Planning Office are the supporting actors as well and in urgent situation, they also provide facilities and infrastructure. Mataram Search and Rescue Office acts as an actor and supporting actor. DPH Geopark UGG Rinjani Lombok, Grahapala Unram serve as supporting actors in decision making on Ecotourism Hazard management in TNGR.

**Table 2 Role distribution in tourism management in Mount Rinjani National Park**

Role in tourism hazard management in TNGR	Related stakeholder
Actor	Government Agencies, BNPBD, of NTB Province, Mataram Search and Rescue Office
Supporting Actor	Government Agencies, BMKG, PVMBG, BTNGR, Regional Police of NTB Province, BAPPEDA, ESDM Office, Environment and Forestry Office, Public Works and Spatial Planning Office of NTB Province, Mataram Search and Rescue Office, DPH Geopark UGG Rinjani-Lombok
Decision maker	Government Agencies, BTNGR, NTB Provincial BNPBD, West Nusa Tenggara Province (NTB) Tourism Office, North Lombok Regency Tourism Office, Central Lombok Regency Tourism Office, East Lombok Regency Culture and Tourism Office
Facilities and Infrastructure Provider	Government Agencies, BTNGR, BNPBD of NTB Province, West Nusa Tenggara Province (NTB) Tourism Office, North Lombok Regency Tourism Office, Central Lombok Regency Tourism Office, East Lombok Regency Culture and Tourism Office, Regional Police of NTB Province, BAPPEDA, ESDM Office, Environmental and Forestry Office, Public Works and Spatial Planning Office of NTB Province

**Table 3 Role distribution of private sector in tourism management in Mount Rinjani National Park**

Role in tourism hazards management in TNGR	Related stakeholder
Actor	Head of Pokdarwis Rinjani Perkasa, EMHC (Edelweis Medical Help Center)
Supporting Actor	Head of Pokdarwis Rinjani Perkasa, Rinjani Tourism Image Forum, North Lombok TO Association, Central Lombok TO Association, East Lombok TO Association, IMGA Lombok, Head of Sembalun Subdistrict, Head of Bayan Subdistrict, Orplaspas, Head of Grahapala Universitas ram.
Decision Maker	
Facility and Infrastructure Provider	

The stakeholders from the private sector act as the supporting actors, some are the actors. Sembalun, Rinjani Tourism Image Forum, Rinjani Porter Guide Forum, North Lombok TO Association, Central Lombok TO Association and East Lombok TO Association, IMGA Lombok, Head of Sembalun Subdistrict, Head of Bayan Subdistrict, Orplas, Pokdarwis Rinjani Perkasa serve as the actors and supporting actors. EMHC is an actor in ecotourism hazard management in TNGR.

**2. Stakeholder Mapping**

The stakeholders that have been identified have different levels of interest and influence on the management of ecotourism hazards in TNGR. The different levels of interest of each stakeholder is influenced by the form of stakeholder participation in the management of ecotourism hazards, the dependence of stakeholders on natural tourism, the work programs of each stakeholder related to natural tourism, the benefits

that stakeholders obtain from natural tourism, and the role played by stakeholders in management of ecotourism hazards in TNGR. The different levels of stakeholder dependence are influenced by condign power, the conditioning power of feasibility, compensation power, personality power, and organization power (Reed et al. 2009). The analysis results of stakeholder level of interest can be seen in Table 4 and the analysis results of the level of influence can be seen in Table 5.

The calculation results of the total score of interest and influence of each stakeholder are mapped in the interest-influence matrix in Figure 2. Figure 2 describes the distribution of stakeholders into four groups of key player, subject, context setter and crowd. Each group has a different number of stakeholders according to their level of interest and influence.

Table 4 Stakeholder level of interest

No.	Stakeholder	Score					Total
		I	II	III	IV	V	
1.	Gunung Rinjani National park	5	5	4	5	5	24
2.	NTB Provincial Tourism Office	3	5	2	5	2	17
3.	North Lombok Regency Tourism Office	3	5	2	5	3	18
4.	Central Lombok Regency Tourism Office	3	5	3	5	3	19
5.	East Lombok Regency Culture and Tourism Office	3	5	3	5	4	20
6.	Edelweis Medical Help Center	5	3	5	3	5	21
7.	BMKG	1	5	2	3	4	15
8.	NTB Regional Police	2	2	1	2	3	10
9.	Korem 162 Wira Bhakti Mataram	1	2	1	2	3	9
10.	NTB Province BAPPEDA	2	2	3	2	1	10
11.	NTB Provincial Office of Energy and Mineral Resources	1	1	1	1	2	6
12.	Environment and Forestry Office of NTB Province	2	3	4	2	2	13
13.	Regional Disaster Management Agency of NTB Province	2	3	2	3	2	12
14.	NTB Provincial Public Works and Spatial Planning Office	1	3	2	3	1	10
15.	Mataram Search and Rescue Office	4	3	5	3	4	19
16.	PVMBG Sembalun	3	3	3	3	1	13
17.	Rinjani Tourism Image Forum	2	2	4	2	1	11
18.	Porter Guide Rinjani Forum	4	2	2	4	2	14
19.	North Lombok TO Association	2	2	3	3	1	11
20.	Central Lombok TO Association	2	2	3	3	1	11
21.	East Lombok TO Association	2	2	3	3	1	11
22.	IMGA Lombok	2	3	3	2	3	13
23.	Head of Sembalun Subdistrict	3	3	2	3	2	13
24.	Head of Bayan Subdistrict	3	3	2	3	2	13
25.	Sangkreang Green Peace Organization	3	2	4	2	2	13
26.	Pokdarwis Rinjani Perkasa	3	3	2	3	2	13
27.	DPH Geopark UGG Rinjani Lombok	2	2	3	2	2	11
28.	Grahaphala UNRAM	2	1	3	2	2	10

Description: I: involvement; II: benefit; III: percentage of work programs; IV: dependency level; V: role

Table 5 Stakeholder level of influence

No.	Stakeholder	Score					Total
		I	II	III	IV	V	
1.	Mount Rinjani National Park	3	3	4	3	5	18
2.	NTB Provincial Tourism Office	3	3	2	2	4	14
3.	North Lombok Regency Tourism Office	1	2	2	2	3	10
4.	Central Lombok Regency Tourism Office	2	2	2	2	2	10

No.	Stakeholder	Score					Total
		I	II	III	IV	V	
5.	East Lombok Regency Culture and Tourism Office	2	2	3	2	3	11
6.	Edelweis Medical Help Center	2	2	2	2	4	12
7.	BMKG	2	2	3	2	2	11
8.	NTB Regional Police	2	2	2	2	3	11
9.	Korem 162 Wira Bhakti Mataram	2	2	2	2	2	10
10.	NTB Province BAPPEDA	2	3	3	2	2	12
11.	NTB Provincial Office of Energy and Mineral Resources	1	2	3	1	2	9
12.	Environment and Forestry Office of NTB Province	2	2	3	2	2	11
13.	Regional Disaster Management Agency of NTB Province	5	4	5	4	4	22
14.	NTB Provincial Public Works and Spatial Planning Office	2	2	2	2	2	10
15.	Mataram Search and Rescue Office	2	2	2	2	3	11
16.	PVMBG Sembalun	2	2	3	2	3	12
17.	Rinjani Tourism Image Forum	1	2	1	1	2	7
18.	Porter Guide Rinjani Forum	2	2	1	2	1	8
19.	North Lombok TO Association	2	1	2	1	2	8
20.	Central Lombok TO Association	1	2	2	1	2	7
21.	East Lombok TO Association	1	2	2	2	2	9
22.	IMGA Lombok	2	2	2	2	2	10
23.	Head of Sembalun Subdistrict	2	2	2	2	2	10
24.	Head of Bayan Subdistrict	1	2	2	2	2	9
25.	Sangkreang Green Peace Organization	2	1	2	1	2	8
26.	Pokdarwis Rinjani Perkasa	1	2	2	1	1	7
27.	DPH Geopark UGG Rinjani Lombok	2	2	2	2	2	10
28.	Grahapala UNRAM	2	2	2	2	2	10

Description: I: condign; II: conditioning; III: compensatory; IV: personality; V: organization

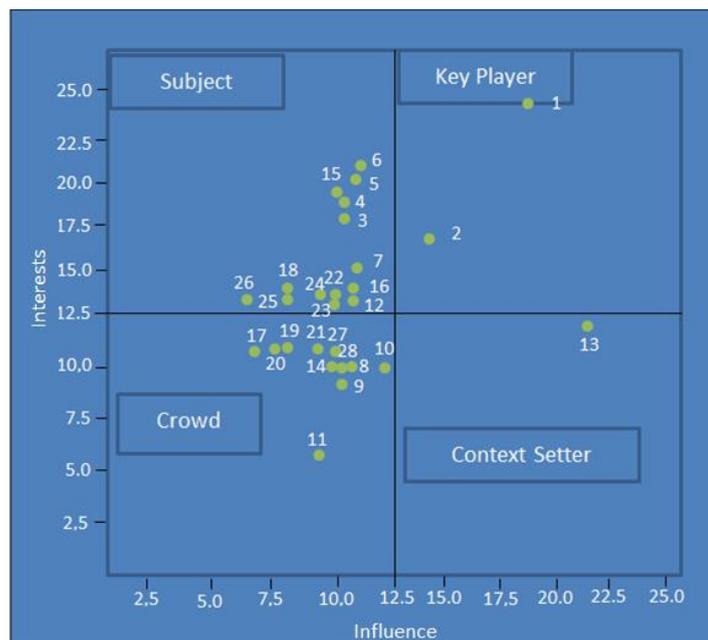


Figure 2 Matrix of interest and influence of natural tourism stakeholders

Description: 1. Mount Rinjani National Park, 2. NTB Provincial Tourism Office, 3. North Lombok Regency Tourism Office, 4. Central Lombok Regency Tourism Office, 5. East Lombok Regency Culture and Tourism Office, 6. Edelweis Medical Help Center, 7. BMKG, 8. NTB Regional Police, 9. Korem 162 Wira Bhakti Mataram, 10. NTB Province BAPPEDA, 11. NTB Provincial Office of Energy and Mineral Resources, 12. Environment and Forestry Office of NTB Province, 13. Regional Disaster Management Agency of NTB Province, 14. NTB Provincial Public Works and Spatial Planning Office, 15. Mataram Search and Rescue Office, 16. PVMBG Sembalun, 17. Rinjani Tourism Image Forum, 18. Rinjani Porter Guide Forum, 19. North Lombok TO Association, 20. Central Lombok TO Association, 21. East Lombok TO Association, 22. IMGA Lombok, 23. Head of Sembalun Subdistrict, 24. Head of Bayan Subdistrict, 25. Sangkreang Green Peace Organization, 26. Pokdarwis Rinjani Perkasa, 27. DPH Geopark UGG Rinjani Lombok, 28. GRAHAPALA UNRAM.

**a. Key player**

Key players are stakeholders who have great interests and influence and are most active in the management (Reed et al., 2009). Stakeholders who are categorized into key players in managing ecotourism hazards in TNGR are Mount Rinjani National Park Center and West Nusa Tenggara Province Tourism Office. It is because Mount Rinjani National Park Center is the Central Government Agency assigned to manage Mount Rinjani National Park. Meanwhile, NTB Tourism Office is a regional government agency which is mandated to run regional government affairs in the tourism sector in NTB. Therefore, all natural resources belonging to the local government that will be used as natural tourism objects must have approved by NTB Provincial Tourism Office. Furthermore, NTB Provincial Tourism Office is also responsible for supervising the development of NTB tourism.

**b. Subject**

Subjects are stakeholders who have great interests but little influence. This type of stakeholder is supportive, and has less capacity to change the situation (Reed et al., 2009). The stakeholders categorized in the Subject Group are North Lombok Regency Tourism Office, Central Lombok Regency Tourism Office, East Lombok Regency Culture and Tourism Office, Edelweiss Medical Help Center, NTB Environment and Forestry Office, Mataram Search and Rescue Office, BPMVG Sembalun, Porter Guide Rinjani Forum, IMGGA Lombok, Head of Sembalun Subdistrict, Head of Bayan Subdistrict, Sangkreang Green Peace Organization, and Pokdarwis Rinjani Perkasa. The subject group has a high interest since it manages ecotourism hazards in TNGR. Regional managers such as the Heads of Subdistrict or District Tourism Offices, as well as EMHC always directly handle any accidents, along with the Porter Guide, and green peace organization. The subject group has little influence because it is not the main decision maker, although it will always participate directly when there is a danger and disaster in TNGR.

**c. Context setter**

Context setters are stakeholders who have a great influence but little interest (Reed et al. 2009). The stakeholder categorized in the context setter group is the NTB Regional Disaster Management Agency. BPBD is an agency in charge of and responsible for hazard and disaster events that occur in TNGR. It will send warnings about a disaster in its area. So, it has a great influence on disaster management in NTB, but the interests related to the direct management of ecotourism hazards are small, except when a disaster occurs.

**d. Crowd**

Crowd is a stakeholder with a little interest and influence. This type of stakeholders will consider all the activities they do (Reed et al., 2009). The stakeholders categorized in the crowd group are NTB Regional Police,

Korem 162 Wira Bhakti Mataram, Bappeda of NTB Province, NTB Provincial Office of Energy and Mineral Resources, NTB Province Public Works and Spatial Planning Office, Rinjani Tourism Image Forum, North Lombok TO Association, Central Lombok TO Association, East Lombok TO Association, DPH Geopark UGG Rinjani Lombok and Grahaphala Unram. NTB Regional Police and Korem 162 Wira Bhakti Mataram have an influence because they are the national defense agencies and during a disaster they also help evacuating the visitors. Bappeda has a great influence in planning its region. The Energy and Mineral Resources and Spatial Planning Office have an influence on spatial planning in their area. Rinjani Tourism Image Forum, North Lombok TO Association, Central Lombok TO Association, East Lombok TO Association are very influential in bringing and managing visitors who will climb up and down the Mount Rinjani, while DPH Geopark Rinjani is more focused on managing Rinjani as a Geopark area. Moreover, Grahaphala UNRAM can influence government agencies, NGOs, and local communities. Influence on government agencies is carried out through providing opinions and suggestions in a tourism activity. Influence on the community is given through counseling and guidance in promoting tourism activities.

The governance structure is mostly determined by the central government, which depends on the historical development of a country, laws, institutions, and certain political culture (Scott and Marzano, 2015). The concept of governance means the decrease of state power, as the collective decision-making process requires stakeholders' involvement at all stages, and collective or public problems are transferred to non-government or private actors to increase the problem-solving ability of the political system.(Hazenber, 2015). It is line with the results of the research which stated that in the relationship mechanism between the parties in TNGR, the key player is TNGR Center as a form of central government in the region.

## CONCLUSION

The stakeholders come from provincial and city government agencies, private institutions, community groups, individual entrepreneurs, and the community. The twenty-eight stakeholders included in government agencies are TNGR Center, West Nusa Tenggara (NTB) Provincial Tourism Office, North Lombok Regency Tourism Office, Central Lombok Regency Tourism Office, East Lombok Culture and Tourism Office, BMKG (Indonesian Agency for Meteorology, Climatology, and Geophysics), NTB Regional Police, Korem 162 Wira Bhakti Mataram, Regional Development Planning Agency (BAPPEDA) of NTB Province, NTB Provincial Office of Energy and Mineral

Resources, NTB Provincial Office of Environment and Forestry, Regional Disaster Management Agency (BPBD) of NTB Province, NTB Provincial Public Works and Spatial Planning Office, Mataram Search and Rescue Office, Center for Volcanology and Geological Hazard Mitigation (PVMBG) of Sembalun, Head of Sembalun Subdistrict, Head of Bayan Subdistrict; Community groups are EMHC (Edelweiss Medical Help Center), Rinjani Tourism Image Forum, Rinjani Porter Guide Forum, North Lombok TO Association, Central Lombok TO Association and East Lombok TO Association, IMGAs Lombok, Orplas, Tourism Activist Group (Pokdarwis) Rinjani Perkasa, DPH Geopark UGG Rinjani Lombok, and Grahapala Unram. The roles of stakeholders in managing ecotourism hazards in TNGR are divided into four: the supporting roles, actors, decision makers, and facility and infrastructure providers.

Stakeholders who are categorized into key players in managing ecotourism hazards in TNGR are Mount Rinjani National Park Center and West Nusa Tenggara Province Tourism Office. Stakeholders categorized in the Subject Group are North Lombok Regency Tourism Office, Central Lombok Regency Tourism Office, East Lombok Regency Culture and Tourism Office, Edelweiss Medical Help Center, NTB Environment and Forestry Office, Mataram Search and Rescue Office, BPMVG Sembalun, Porter Guide Rinjani Forum, IMGAs Lombok, Head of Sembalun Subdistrict, Head of Bayan Subdistrict, Sangkreang Green Peace Organization, and Pokdarwis Rinjani Perkasa. The stakeholder categorized in the context setter group is NTB regional disaster management agency. The stakeholders categorized in the crowd group are NTB Regional Police, Korem 162 Wira Bhakti Mataram, Bappeda of NTB Province, NTB Provincial Office of Energy and Mineral Resources, NTB Province Public Works and Spatial Planning Office, Rinjani Tourism Image Forum, North Lombok TO Association, Central Lombok TO Association, East Lombok TO Association, DPH Geopark UGG Rinjani Lombok and Grahapala Unram. NTB Regional Police and Korem 162 Wira Bhakti Mataram have an influence because they are the national defense agencies and during a disaster they also help evacuating the visitors. Bappeda has a great influence in planning its region. Office of Energy and Mineral Resources and Spatial Planning Office have an influence on spatial planning in their area. Rinjani Tourism Image Forum, North Lombok TO Association, Central Lombok TO Association, East Lombok TO Association are very influential in bringing and managing visitors who will climb up and down the Mount Rinjani, while DPH Geopark Rinjani is more focused on managing Rinjani as a Geopark area. Meanwhile, Grahapala UNRAM can influence government agencies, NGOs and local communities.

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## REFERENCES

- Cakar, K. 2018. Critical success factors for tourist destination governance in times of crisis: a case study of Antalya, Turkey. *Journal of Travel & Tourism Marketing*. 35(6):786-802. doi:10.1080/10548408.2017.1421495
- Hazenberg, H. 2015. Is governance democratic? *Critical Review of International Social and Political Philosophy*. 18(3):285-307. doi:10.1080/13698230.2013.826499
- Groenendijk, L. 2003. Planning and Management Tools. Enschede (NL): The International Institute for GeoInformation Science and Earth Observation (ITC).
- Mikkelsen, B. 2003. *Metode Penelitian Partisipatoris dan Upaya-Upaya Pemberdayaan. Sebuah Buku Pegangan Bagi Para Praktisi Lapang*, Penerjemah. Jakarta: Matheos Nalle-Ed.3. Translated from: *Methods for development work and research: A Guide for Practitioners*.
- Muntasib EKSH, Nadhira F, Meilani R. 2019 Hazard management in tourism: A case study of The Senaru – Sembalun Hiking Trail, Mount Rinjani National Park, Indonesia. *Jurnal Manajemen Hutan Tropika*. 25(3):199-208
- \_\_\_\_\_. 2009. *Undang-undang Nomor 10 Tahun 2009 Tentang Kepariwisataaan*.
- \_\_\_\_\_. 2010. *Peraturan Pemerintah Nomor 36 Pengusahaan Pariwisata Alam Di Suaka Margasatwa, Taman Nasional, Taman Hutan Raya, Dan Taman Wisata Alam*.
- Nelson LD, Quick JC. 1994. *Organizational Behaviour: Foundations, Realities and Challenges*. Amerika Serikat (US): College & School Division West Publishing Company
- Reed MS, Anil G, Norman D, Helena P, Klaus H, Joe M, Christina P, Claire HQ, dan Lindsay C. Stringer. 2009. *Who's and why? A Typology of Stakeholder Analysis Methods for Natural Resource Management*. *Journal of Environmental Management*. 90(5): 1933-49
- Schmerr, K. 2009. *Stakeholder analysis guidelines*. <http://www.lachsr.org> [6 April 2011].
- Scott N, Marzano G. 2015. Governance of tourism in OECD countries. *Tourism Recreation Research*. 40(2):181-193.
- Wildemuth BM. 2009. *Application of Social Research Methods to Question In Informant and Libriry Science*. London: Greenwood Publishing Group