

# SOCIAL STUDY ON CAPITAL SOCIETY IN THE ADAPTATION OF THE KABA VOLCANO ERUPTION DISASTER, SUMBER URIP VILLAGE, KEC SELEPU REJANG LEBONG REGENCY, BENGKULU PROVINCE

\*Wiwik Riana Mandasari<sup>1</sup> and Ode Sofyan Hardi<sup>2</sup>

<sup>1</sup>Geography Education Master Program, Faculty of Social Sciences, Padang State University, Indonesia.

<sup>2</sup>Departement of Geography, Jakarta State University, Indonesia

Email: [wiwikrianamandasari06@gmail.com](mailto:wiwikrianamandasari06@gmail.com)

\*Corresponding Author, Received: March 17, 2020, Revised: May 10, 2020, Accepted: May 28, 2020

**ABSTRACT:** The purpose of this research is to propose the Study of Social Capital of the Community in the Adaptation of the Kaba Volcano Eruption Disaster, Sumber Urip Village, Selepu Rejang. Regency of Rejang Lebong. The type of research used is qualitative research, or the writing and behavior observed from the people (subjects) themselves. The sampling technique is purposive sampling. Data collection techniques used are interviews and documentation, then the data obtained are analyzed qualitatively to express the facts found in the field. The results of the research in the field are as follows: 1) Social Capital Studies Community is very related to the values, norms, social trust that collaborate in the environment, especially in the community tradition that produces local wisdom in the adaptation of the Kaba volcano eruption disaster, 2) The role of the government in disaster mitigation efforts in the form of periodic and measured training and simulations, coordination and cooperation in anticipation of facing disasters, 3) Preventive efforts in reducing disaster risk through local wisdom values that are understood as social social capital, 4) Mitigation is generally interpreted as an action taken in minimizing the impact of disasters on both the loss of life, property that affects human life.

**Keywords:** *Social Capital, Adaptation, Volcano Eruption*



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## 1. INTRODUCTION

Indonesia as an archipelagic country is in a geographical, geological, hydrological, and demographic position that is prone to disasters [1-3], and because of its location on the equator causes Indonesia to become a country that has very complex disaster potential disasters [4-7]. Thus, natural disasters have become a part of the lives of the Indonesian population, because natural disasters in Indonesia occur almost every day. Natural disasters that occur always result in loss of human life, environmental damage, loss of property, and psychological impact. Indonesia has the potential for natural disasters in the form of floods, flash floods, droughts, volcanic eruptions, landslides, earthquakes, tsunamis, forest and land fires disasters [7-10]. The ring of fire region formed in Indonesia is caused by the meeting of the Eurasian plate in the north, the Australia plate in the south and the pacific plate in the east disasters [11-16]. Indonesia itself has 127 active volcanoes or around 13% of the world's active volcanoes, which consists of 76 type A volcanoes, 30 type B volcanoes and 21 type C volcanoes disasters [17-20]. One of the

active volcanoes is type A is the Kaba volcano. Volcano Kaba has three active craters with a height of 1952 MDPL. In addition, Mount Kaba has been a part of the volcanic belt in Sumatra, precisely in the Rejang Lebong Regency, (Ministry of Energy and Mineral Resources, 2014). Volcanic activity in the past few years has always shown its activities. The monitoring results of the Kaba volcano observation post volcanology center and geological disaster mitigation Ministry of Energy and Mineral Resources (ESDM) in Bengkulu revealed that the Kaba volcano has been raised to alert status since September 2009 due to increased volcanic seismic activity. The increase in volcanic earthquake activity is normally only 200 to 300 times per month. But it rose to 350 times in September 2009, and now it rose again to 1,130 times in October. Volcanic earthquake in November 852 times, and most in December 2009

Map of evacuation routes and locations as well socialization the formulation of maps is a matter which is important in disaster mitigation disasters [21-24]. Formulation of a road map and this evacuation site is very needed to display a picture of where to go passable and safe area destinations

on when an eruption occurs. However needed also socializing about this map, so that the public can know and understand evacuation routes and locations.

In this study shows that the level of ability and capacity of families in reducing natural disasters specifically the volcanic eruption of Kaba. Every family has awareness of the high risk of natural disasters for themselves and their environment by making preventive efforts in reducing disaster risk through local wisdom values that are understood as social capital. The values of local wisdom come from the experiences and habits that exist in each family. Local wisdom values are not all the same in every family. Only the people who have concern and attention to disasters that are moved to have a preparedness for their families in dealing with disasters based on the experience of the Kaba volcano eruption disaster and previously by learning from experience and exchanging information among fellow citizens so as to form resilience and preparedness in disaster reduction. . The picture shown does show that families who want to increase their knowledge of disasters have a mental attitude that is more concerned with disaster through family preparedness. Meanwhile, people who do not have or implement local wisdom values lack knowledge and preparedness in facing disasters.

## 2. METHOD

This type of research is a qualitative study, to propose the Social Capital Study in adapting the Kaba volcano eruption in Bengkulu province. The method used in this study is a qualitative method in the form of a description of the facts found in the field which are then elaborated with words in the opinion of respondents, according to the research question, then analyzed. The population in this study is the community at the source, with a sampling technique, namely purposive sampling technique. Data collection techniques used are through interviews and documentation, interviews conducted with the community and related parties to obtain data in accordance with the research objectives.

## 3. RESULTS AND DISCUSSION

Bengkulu Province is located in the western part of the island of Sumatra and directly borders with the Indonesian Ocean with a beach of  $\pm$  525 KM and an area of 32,366.6 KM<sup>2</sup> which extends from the border of West Sumatra Province to Lampung Province with a distance of  $\pm$  567 KM. Sumber Urip Village is one of the villages in Selupu Rejang District, Rejang Lebong Regency, Bengkulu Province, with an area of 650 hectares. Distance

from Village to Capital District of 7 KM, Distance from Village to Capital District of 17 KM.

The area of the village of Urip is the area where most of the people or residents have a search as farmers. Sumber Urip Village Area, 60% is in the form of land which is mostly used as plantation land with the main commodity; Vegetables Mayur and 40% of the land area is used for housing residents around. Socially, Sumber Urip Villagers come from various regions, where the majority of the population are native Javanese. So, the tradition of consensus, mutual cooperation and local wisdom that exists tends to be more effective and efficient in solving problems than using legal channels, this is useful to avoid the existence of friction against the norms and values in society.

In this case, especially in Sumber Urip Village, Selupu Rejang District, Rejang Lebong Regency, Bengkulu Province in tackling the eruption of G. Api Kaba disaster, then in this region a post was prepared for disaster. In addition to continuous seismic observations made through the Kaba volcano observation post from Sumber Urip village, temporary seismic observations are also made. During the seismic crisis in June - September 2000, a temporary seismic observation was carried out disasters [19]. The results can be used as basic seismic information that is valid for this active volcano. Communities or residents who occupy the area in the event of a volcano eruption disaster. Residents are directed to a safe place from areas prone to volcanic eruptions of Kaba. And residents or the community usually find a location and gather at a safe point. Such as the Siaga I area is placed in Sumber Urip and Siaga II is placed in the Sambirejo field. In this case the community or population before the disaster is given a simulation from the government which is held once a year.

Here are some disaster mitigation activities:

- 1) Introduction and monitoring of disaster risk.
- 2) Participatory disaster management planning.
- 3) Development of a culture of disaster awareness.
- 4) Implementation of physical, non-physical, and disaster management arrangements.
- 5) Identification and recognition of sources of danger or threat of disaster.
- 6) Monitoring of natural resource management.
- 7) Monitoring of the use of high technology
- 8) Supervision of the implementation of spatial planning and environmental management.

Disaster risk reduction is an option in the disaster management system in Indonesia. This can be seen from the community adaptation as a form of efforts to adapt to the eruption of the Kaba volcano disaster in the Curup district, Bengkulu Province. Social capital is seen as a social institution involving networks (networks), norms (norms), social trust (social trust) which encourages a social

collaboration (coordination and cooperatives) for the common good.

[1-2] Emphasizes that social capital as a value of mutual trust between members of society and society as a whole to its leaders. This social capital is seen as a social institution that involves networks, norms, and social trusts that encourage social collaboration (coordination and cooperation) for the common good. This also implies that there is a need for a social network (networks of civic engagement) social ties / networks that exist in society, and norms that encourage community productivity. According to Putnam, social capital is changed from something that is obtained by individuals to something that is owned (or not owned) by another individual or group of people in a region, community, city, country, or continent. Putnam, explained that social capital is a resource that individuals or groups of people have or fail to have disasters [1]. Commitment is understood as social norms that are components of social capital such as honesty, attitude of commitment, fulfillment of obligations, mutual relations and others. These social norms are rules that are not written in a social system that regulates society to behave in their interactions with others. The use of this theory is aimed at studying, knowing and analyzing existing patterns of belief, norms and networking, the dynamics created and the sources that shape the existence of existing relationships, norms and networking and subsequently how these aspects are implemented in the family and their relationships with the existing social environment.

In this study shows that from the state of adaptation of the Kaba volcano disaster. The community shows in the state or level of ability and capacity of the family in reducing natural disasters, especially the need to adapt at the time of the Kaba volcano eruption, through social studies social capital of the community in understanding the values of local wisdom derived from experiences and habits in Public. As in the source village of Urip, Selupu Rejang Subdistrict, Rejang Lebong Regency, Bengkulu Province. Having the value of local wisdom in the community in the form of the earth alms tradition, which is a form of community tradition. Where, this activity is carried out once a year as a form of gratitude, after this activity the community gathered in the village hall. In this case the adaptation of the Kaba volcano eruption needs to be done through actions or efforts in the approach to the hazard level aspects in the form of an early warning system based and centralized in the community, the community's knowledge system in understanding the environmental situation.

### **Social Capital Society**

Social capital is seen as a social institution involving networks (networks), norms (norms),

social trust (social trust) which encourages a social collaboration (coordination and cooperatives) for the common good. Emphasizes that social capital as a value of mutual trust between members of society and society as a whole to its leaders. This social capital is seen as a social institution that involves networks, norms, and social trusts that encourage social collaboration (coordination and cooperation) for the common good. This also implies that there is a need for a social network (networks of civic engagement) social ties / networks that exist in society, and norms that encourage community productivity. According to Putnam, social capital is changed from something that is obtained by individuals to something that is owned (or not owned) by another individual or group of people in a region, community, city, country, or continent. Commitment is understood as social norms that are components of social capital such as honesty, attitude of commitment, fulfillment of obligations, mutual relations and others. These social norms are rules that are not written in a social system that regulates society to behave in their interactions with others. The use of this theory is aimed at studying, knowing and analyzing existing patterns of belief, norms and networking, the dynamics created and the sources that shape the existence of existing relationships, norms and networking and subsequently how these aspects are implemented in the family and their relationships with the existing social environment.

In this case, especially in Sumber Urip Village, Selupu Rejang District, Rejang Lebong Regency, Bengkulu Province in tackling the eruption of Kaba disaster, then in this region a post was prepared for disaster. In addition to continuous seismic observations made through the Kaba volcano observation post from Sumber Urip village, temporary seismic observations are also made. During the seismic crisis in June - September 2000, a temporary seismic observation was carried out. The results can be used as basic seismic information that is valid for this active volcano. Communities or residents who occupy the area in the event of a volcano eruption disaster. Residents are directed to a safe place from areas prone to volcanic eruptions of Kaba. As a disaster-prone area, natural disaster mitigation needs to be done in order to reduce the impact of losses caused by natural disasters. In this case the local government, especially in Sumber Urip Village, Selepu Rejang District, Rejang Lebong Regency, Bengkulu Province has obligations and responsibilities in anticipating before and after a disaster occurs.

Mitigation is generally interpreted as actions taken to minimize the impact of disasters on both the casualties, property that affects human life. Disaster mitigation can reduce the worst if a disaster occurs (Law no 24 of 2007). In this case Sumber

Urip village, Selupu Rejang District, Rejang Lebong Regency Bengkulu Province has local wisdom values that are characteristic in the village. This is done in the form of tradition every year. And the implementation is carried out once a year. The tradition is also called the earth alms tradition. In this village, the values of local wisdom still hold fast, especially in the form of gratitude. And usually the people or residents in Sumber Urip Village, Selepu Rejang District, Rejang Lebong Regency, Bengkulu Province, make offerings placed near the crater of the mountain. Which is the trust of the community or residents. And if it is associated with the social capital value of the community, there is a belief in the values of norms in the community.

The forms of policies taken by the government in dealing with disasters based on the level of danger are as follows:

1. Early warning system
2. Evacuation route and location
3. Map of evacuation routes and locations and their socialization
4. Socialization among institutions involved in disaster mitigation

The form of policies taken by the government in dealing with disasters based on risk level aspects as follows:

1. Periodic and measurable disaster training and simulation
2. Coordination and cooperation in anticipation of dealing with disasters

In this case, especially in Sumber Urip Village, Selupu Rejang District, Rejang Lebong Regency, Bengkulu Province in tackling the eruption of G. Api Kaba disaster, then in this region a post was prepared for disaster. In addition to continuous seismic observations made through the Kaba volcano observation post from Sumber Urip village, temporary seismic observations are also made. During the seismic crisis in June - September 2000, a temporary seismic observation was carried out. The results can be used as basic seismic information that is valid for this active volcano. Communities or residents who occupy the area in the event of a volcano eruption disaster. Residents are directed to a safe place from areas prone to volcanic eruptions of Kaba. And residents or the community usually find a location and gather at a safe point. Such as the Siaga I area is placed in Sumber Urip and Siaga II is placed in the Sambirejo field. In this case the community or population before the disaster is given a simulation from the government which is held once a year.

#### 4. CONCLUSIONS

The researcher concludes that the Community Capital Social Studies is very much related to the values, norms, and social beliefs that collaborate in

the environment, especially in the community tradition that produces local wisdom values in the adaptation of the kaba volcano eruption disaster. These social norms are rules that are not written in a social system that regulates society to behave in their interactions with others. The use of this theory is aimed at studying, knowing and analyzing existing patterns of belief, norms and networking, the dynamics created and the sources that shape the existence of existing relationships, norms and networking and subsequently how these aspects are implemented in the family and their relationships with the existing social environment. This can be seen in Sumber Urip village, Selepu Rejang district. Rejang Lebong Regency Bengkulu Province has local wisdom values in the form of earth alms tradition which is carried out once a year and usually in the form of offerings placed in the crater of the mountain which is made a tradition for generations.

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