THE PUBLIC ADAPTATION TO THE FLOOD CONDITIONS OF KOTO PARIK GADANG DIATEH, SOUTH SOLOK DISTRICT

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ABSTRACT

This study was intended to explain active and passive adaptation, social adaptation, economic adaptation and cultural adaptation of society to the risk of catastrophic flooding at Koto Parik Gadang Diateh, South Solok District. Kind of the research was qualitative descriptive research. The location of this research in the slick Koto Parik Gadang Diateh of South Solok District. The purposive sampling was as sample technique, the society found while research in the field was a society affected by the flood using observation techniques, interviews and documentary studies. The type of data used were primary and secondary data. Primary data interviewing informers such as the community in the research area. Secondary data were library data consisting of book, scientific journals, and articles in print or electronic media, papers, and other literature. The data analysis techniques used the interactive analysis of the stage of data reduction, data presentation and deductions. The public adaptation to disaster risks include, (1) Active adaptation includes: a) activity in increased incomes, b) elevating the household and home equipment. Passive adaptation includes: a) people understand the phenomenon of floods seen by the intensity of rain falling, b) the priority of public was basic needs. (2) Social adaptation, 1) kinship system, a) citizens and relatives helped each other in case of flooding, b) labor was committed to men, 2) public system, a) social interaction among good citizens, b) values were still in effect and no violate when a flood, c) have shared and assisted by social groups. (3) economic adaptation includes: a) clothing needed when floods were generated from the aid pf social institutions and governments, b) food needed waiting for help from volunteers and donors in the form of a nuclear, (4) cultural adaptation include : customs.

Keywords: Adaptation, risks, floods
INTRODUCTION

Geographically much of Indonesian is in a high-risk region and one of the more common disasters is the fire hydration (floods, avalanches, ecology, land degradation, cyclones and droughts) (Hermon, 2012; Hermon, 2015; Hermon, 2016; Hermon, 2017). Western Sumatra is one of the provinces of Indonesian where natural disaster occur (Oktorie, 2017; Oktorie, 2018). Natural disasters are natural events caused by natural processes, either occurring naturally or initiated by human life both to material possessions and to life (Oktorie, 2017; Kristian and Oktorie, 2018). According to BNPB (The National Disaster Relief agency), the highest number of natural events from 2010-2019 in western Sumatra is flooding (246 times). Flooding involves overheating river flows over the capacity of filling the river so that it overflows and flooding the land or lower areas around it (Hermon, 2001; Yulaelawati, 2008; Hermon, 2009; Hermon, 2010). Floods are due to high intensity of precipitation (Umar, 2018; Hermon et al., 2018; Hermon, 2019; Hermon et al., 2019). The Southern Solok District is the one located in the eastern part of the western province of Sumatra with a total area of 3,346,20 km² with a population of 147,369 (BPS, 2011). On January 17, 2019, there has been a catastrophic flood in three sub-district of the Southern Solok District. This disaster is caused by an avalanche of rain that has resulted in an explosion of several rivers in the sprouts of the Koto Parik Gadang Diateh sub-district, Sungai Pagu sub-district and Pauh Duo sub-district.

The disastrous floods of the 3 sub-district includes 506 KK/1,858 affected souls, 449 affected houses, 1 submerged houses, 3 bridges cut off and 15 acres of rice. In the 3 sub-district area of the flooding, the risk of the flooding that became a case study is Koto Parik Gadang Diateh sub-district. The risk of a flood disaster is the potential loss caused by a flood disaster in a region and period of time that may include death, wounds, pain, loss of life, loss of security, refuge, destruction or loss of property and disruption of community activities (Hermon, 2012; Hermon et al., 2017; Hermon et al., 2018). The public adaptation to the dangers of the flood is an act done by the public to conform to danger of the flood when the rains come (Triyatno et al, 2018). Adaptation and mitigation efforts are deemed essential to achieving disaster resistance (Hermon, 2012; Hermon, 2014; Hermon, 2016; Dahroni, 2017). Natural disasters in the region

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have some direct implications for society in that region. The public of participation to reduce and avoid the risk of major disasters is done by increasing public awareness and capacity (Suryanti et al., 2010; Hermon, 2014; Hermon, 2015; Hermon, 2016). Response is the beginning of an adaptation strategy by society that results through understanding of natural disasters. A public understanding of a knowledge of actualized perceptions in attitudes and actions in the face of disaster. The result of society’s attitudes and or actions in the face of disaster is an adaptive strategy that means adjustments made because of environmental threats. Adaptation is one way of achieving human survival. Humans have always survived disasters by adapting. According to Darwin’s theory “Survival of the fittest” that everything in life needs adaptation in order to achieve survival (Arifa’illah, 2016; Hermon, 2016).

Adaptation is divided into 4, among others active adaptation that means personal influence the environment (Soetjipto, 1995; Hermon, 2016). While according the Gerungan (1991) is individuals striving to change the environment according to self, their nature is active (alloplastis). So that adaptation can be called an active human strategy for dealing with the environment. A passive adaptation according the Gerungan (1996; Hermon, 2016) is to change according to passive environment (autoplastics). Social adaptation includes kinship and social systems. Economic adaptation is a human activity in meeting the necessities of life for both food and clothing.

METHOD

It is a kind of qualitative descriptive research (Fitria, 2018). This site of the research was in Koto Parik Gadang Diateh sub-district, Solok Selatan district. The purposive sampling was as sample technique, the society found while research in the field was a society affected by the flood using observation techniques, interviews and documentary studies. The type of data used was primary and secondary data. Primary data were interviews for informants such as the society in the research area (Triningbu, 2013). Secondary data contained library data consisting of books, scientific journals, and articles in print and electronic media, paper and other literature closely correlates either the subject matter in the study, which can help analyze and understand the primary data.
RESULTS AND DISCUSSION

The adaptation of this study is the result of society’s process of facing the pressure of environmental change. The adaptive forms by public in the face of catastrophic floods include a variety of engineering, repairs, or changes in some aspect of life, including:

1. Passive and Active Adaptation
   
a. Active Adaptation
      
1) The activity to increase income when public flood disaster is done is to find fish and dig up sand in the river and pick up rocks that can be sold to a building supply store. The public activity above includes active adaptation in the face of disaster. Iwan (2009) reveals that an active adaptive adaptation strategy is one that is focused on any potential or optimizing human resources in the face of the environment. So that activities normally run in everyday activities can change according to the conditions of the environment.

2) Public activity to reduce the risk of flooding by way (1) elevating the household equipment and equipment in some technique, giving the floor, table, chair and so on, (2) elevating the home to capable citizens.

b. Passive Adaptation
      
1) The public understands the phenomenon of the flood in some way based on previous experiences. A sign of a flood if it continues to rain.

2) Reduce or suppress the spending needs of daily consumption when floods occur. When flood occur, people try to suppress their daily needs in order to survive the floods.

   The emphasis on spending is a passive strategy of reducing family expenses (such as clothing, flood, social costs, transportation, health, education and other daily needs). As Scoot (1981) says that economic life of the farmer public lays the foundation for a subsistence ethnics based on the safety first principle of consideration (survive first).
2. Social Adaptation

a. Kinship System

1) Family relationship when a flood occurs are still well connected. The floods also increased the solidarity of close relatives, the relatives affected by the flood used to visit with some food for souvenirs as a feeling of strong brotherhood. Soetjipto (1995) in the public each person feels a bond because of the same ancestry or ancestral origins.

2) The division of labor when a flood occurs in the family is the division of labor in men. If the work was too much for you, then ask the neighbors for help. Family division is based on the type of work done or on the light of a job. If some work is deemed to much, ask the neighbors for help.

b. Public System

1) Interactions between neighbors and local people in times of flood are still well interwoven as can be seen when people help one another. Inter-relationships between people affected by the flood have been in the form of help. So good citizen interaction can have a positive effect on daily activities in the face of problems caused by floods.

2) The norms established by the public Koto Parik Gadang Diateh sub-district are similar to those practiced by the common people. This is proven by the absence of norms violated during the floods. The above conditions may be summed up that social values and norm have been the guidelines of each citizen. In line with the thing above the Koentjaraningrat (1996 : 77) says that a person in his or her life with another is there some kind of guidelines that regulate a certain behavior or rules.

3) Cooperation

Public solidarity in Koto Parik Gadang Diateh sub-district on high level, its meaning that people’s relationship transform into love, friendship and sympathy of their fellowmen, respect others and feel satisfaction in helping. A form of partnership that appeared during the flood that (1) helped to evacuate; (2) maintaining both homes and local facilities;(3) public stewardship; (4) maintaining a refugee center; (5) people put together a soup kitchen, distributed
food, drink, clothing and so on. Similarly, Bintarto (1980;11) revealed that man’s essence depends in all aspects of his life upon his fellowmen. Therefore, he must strive to be as concomitant as possible, to do the same with his fellow in communion, to be motivated by the soul equally high and low.

Social groups or social organizations on the move to help publics hit a flood. The social groups and local government agencies are moving to help the public get hit by floods, including a Koto Parik Gadang Diathe device, public protections (LINMAS), local government agency south of Solok and BPBD South of Solok. Social groups and local government bodies’ work together to help public affected by the floods. Activities such as these help public set up camps or refugee centers, distributing donations from various volunteers, informing the tides and other activities. According to the Sheriff (in Gerungan 1991:84) describe that a social group is made up of two or more individuals who have had fairly intense and regular social interactions, so that there is a shared task, structure and norms.

3. Economic Adaptation

a. Public activity in meeting the needs of the aid when flood come from relief from social institutions and government agencies. Help provided by social institutions in the form of blankets, clothing, bags and so forth is still viable. This kind of help would be a blessing for public to have free clothing.

b. Public activity in meeting food needs during floods. Public usually wait for help from volunteers and their generous donations of oil or rice from neighbor villages, local governments and various organizations in the public. Already available aid will be directed by social groups to the shelters. The way public meets it food needs when floods depend on the aid of social institutions.

c. Public activity in maintaining household equipment during floods. Public activities in an effort to reduce the damage and damage to the housing equipment caused by the flooding, the public placed important objects in a higher position to avoid flooding. Usually the public use wide cloth from containers of household items that wanted to be placed in a higher position, after all went in the fabric, the cloth with which the items would be tied to the roof of house or placed on top of the closet.
4. Culture Adaptation

There are traditions that people do when storms that yet stand between tahlilan and istoghosa.

CONCLUSION

Based on results and discussions, it can be concluded that: (1) active adaptations included: activities in increasing incomes such as fishing, digging for sand and rock. Passive adaptation included: a) people understand phenomenon based on intensity rain of falling, b) they prioritize basic needs. (2). Social adaptations, 1) Social Adaptations, a) residents flee to relatives in the nearest flood and help one another, b) public sharing is in men, 2) Public System, a) mutual relationships among citizens affected by floods are excellent, b) common norms and no violations of when floods, c) have shared and assisted by social groups such as LINMAS, BPBD and others. 3) Economic Adaptation includes: a) clothing needs when floods are generated from the aid of social institutions and government, b) food needs waiting for help from volunteers and donors in nature, (4). Cultural Adaptations includes: a) tradition such as tahlilan and istighosah.

REFERENCES


