THE EMPOWERMENT OF THE LOCAL KNOWLEDGE IN HANDLING AND TACKLING THE DISASTERS IN SINJAI REGENCY

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Abstract— The disaster of the landslides and the flash floods do not just completely crush tangible properties but also those intangible things, (economic, psychological, social, and cultural), and more specifically they cause great impacts on the communities lives. In connection with that, this article will analyze comprehensively and intensively the community understanding about the disasters, the local strategies, and the community response to the disaster susceptibilities as the main component in the *disaster management plan*, which the Sinjai communities still have. This research used the ethnographic approach with the data collection techniques of observation, in depth interviews, and focused discussion. Then the data were analyzed descriptively and analytically. The research results revealed that the communities in Sinjai still preferred to use their local knowledge when treating the environment and avoiding the disasters. The interpretation of the disasters was done by the communities in two parts, namely the cause and the meaning of the disasters. With the results of this research, it was hoped that we could create a new strategy for the *local policy management* and to design a plan for the local-knowledge-based policy in order to *mitigate the vulnerability* and the *disaster management* in handling and tackling the disasters.

Keywords— local knowledge, disasters, mitigation, handling, tackling.

I. INTRODUCTION

Various problems caused by the disasters need reactions and response because of their direct correlation with the human life (Khagram et al, 2003; Lofland, 1971; Miyagawa, 2004; Nakagawa, 2004; Narayan and Prichett, 1997). In the very first stage, the appropriate process adaptation to the change of the natural environment, the adaptation process is influenced by the community perception towards an object. The perception of the community was the organizing process and interpretation of the stimulus received by the organism and individual (Fajar, 2012; Aalst and Burton, 2002; Iskandar and Ellen, 2000; Imran and Hijjang, 2012). The study about the local knowledge and the disaster mitigation among the traditional communities in Indonesia actually had a correlation with the natural resources and the human resources. In the traditional communities, human beings and nature are considered as a unity because they are both created by the Almighty. The nature and human beings were believed to have spirits. The nature could become friendly if the human beings treat it wisely, and could be angry if the human beings destroy it. If the nature gets angry and disasters like floods, landslides, and mountain explosions occur, the traditional communities will respond with the local knowledge they have. The community who live around *Merapi* mountain, for example, are able to predict the possibility of the explosion by using an indicator of various wild animals which will go down from the mountain slopes; such migration is actually unusual during the normal condition of the environment (Iskandar, 2009; Adger and Ngunyen, 2001; CCFSC, 2006).

Some examples of the knowledge about the preservations of the life environment of the communities can be found among *Kasepuhan* community in West Java, *Siberut* community in West Sumatera, *Kajang* Community in South Sulawesi, and *Dani* community in Papua. Those communities generally believe that aside from the human beings, there are some other beings who own and live in the environment around them. Therefore, any human beings who live there must pay respect and take care of the nature, such as the forests, mountains, valleys, and springs. In fact, many places are considered sacred and possessing supernatural qualities (Darmanto, 2009; Adimihardja, 2009; Boedhihartono, 2009; Purwanto, 2009; Baynes and Lee, 1998; Delvi, 2010; Putnam, et al., 1993; Triana, 2009; Hijjang, et al., 2014).

The potential and tragedy of the disasters which occurred around *Bawakaraeng* and *Latimojong* mountains has been caused by one factor, the high degree of slopes; consequently, landslides have happened. The conditions of the slopes and lithology is susceptible to cause the land movement; hence if the triggers (the rainfall and its inten city occur, then the landslides like ones in *Kompang* area and its surroundings have taken place (Imran and Hijjang, 2012; Hijjang, et al., 2014). The materials of the landslide and its loaded materials were carried into the river and then carried away by the great debit of the river current (Dixit, 2004; Djakamihardja and Soebowo, 1996; Hasnawir, 2012).

In such susceptible geological conditions towards the disasters, the communities of Sinjai have possessed local knowledge in the culture which is related to

disasters. The communities in Sinjai, though they were 100% moslems, in their daily life still believe in the supernatural powers beside the natural (relious) powers, which they apply in several forms of beliefs (magic). In principle, they treat the natural and the supernatural powers equally as the superior powers and not as the profane power (Gazali, 2012; Hijjang, et al., 2014).

II. THE RESEARCH METHOD

This research is the qualitative one with the ethnographical approach. The data collection was conducted using the techniques of observation and in depth interviews. The process of entering the study site (*getting in*). Researchers bring formal license as proof to conduct research on the site. At this stage, researchers are working also to introduce an early merge to gain empathy in order to reduce the social distance between researchers and informants. And then (getting along). At this stage the researchers sought to strengthen the relationship to explore data, information, and grasp the meaning. The collected data and information were analyzed descriptively and analytically. The data analyzed comprised are (customary regulations), the local statements, the local norms, and the local wisdom.
Setting this research sites in the district of Sinjai. The research conducted for 6 months, starting in April until October 2015.

III. RESULTS AND DISCUSSION

The groups of the communities which maintained the local knowledge were the simple traditional communities, but were still rich as the knowledge sources which could become the examples or the guide spelled as follows:

The Interpretation of Disasters by Communities

As already pointed by Gazali (2012), the meaning of the disaster for an individual or a community was not single minded for either those who had experienced the disaster or for those who had not. The research by Homan in Egypt and in Britain revealed that the interpretation by the community who had suffered from the disaster was often referred to the religious interpretation, though there was a different scales in every community. Bernard Adeney-Risakotta wrote "religious and theological reflection by people who experience natural disasters is different from those who discuss them as a philosophical problem". It means that in a certain community, the religious interpretation could be much dominant, while in other communities the interpretation can show total equality between the religious and the non-religious interpretation, or did not even involve any religious factors (Gazali, 2012).

The various interpretations of the disasters could be found in the affected communities in Sinjai. In this research the interpretation by the affected communities was divided into two parts, namely the cause and the meaning of the flood. There were three different views about the dominant factors why the flood occurred, namely: the divine decree or the God, the human beings including the nature itself, and the combination of the human beings and the God's decree. The three factors did not stand alone, but rather interconnected with one another so that there was no single factor (Gazali, 2012).

There was even a group of affected communities who viewed the flood which had struck their areas as something solely caused by the power of God. For this goup, if God did not permit the flood to happened though it was raining very hard, the flood would never occurred. One of the analogical arguments they gave to prove their argument was that *Baiturrahman* Mosque was not damaged when tsunami occurred in Aceh, while other buildings around it were seriously damaged (Gazali, 2012). Other affected community groups had the opinion that the factors causing the occurrence of the flood were the combination between the God's decree and the human factor. These groups placed the roles of God and human beings as balanced. They believed that flood occurred because of the human factor (such as deforestation and other natural damages) and it was also due to the God's decree. Thus, these groups thought that the human behavior went hand in hand with the God's decree. In plain view, the negligence and the damage of the nature by human actions were the factors that caused the flood, but in essence the God was the main factor causing the flood. In other words, the flood occurred because of the human behavior which destroyed the environment together with the God's decree (Gazali, 2012).

According to the affected groups of the communities, there was no need to separate human beings from the God in every accidence that befell on earth. The reason was that it was the human beings who settled on earth where they could do anything they wanted so that whether the earth was damaged or not, it depended on them. These groups presented an analogical argument about the Prophet Ibrahim. It was told that the Prophet Ibrahim, because he worshipped the idolatry as the Egyptians instead of the God, was punished to be burned, though the Prophet Ibrahim did not get burned. Logically, any person who was burned should actually got burned, but because it was not decreed by God, the Prophet Ibrahim did not get burned but safe. This means that if a person was burned it was because the fire burned him and at the same time because of the God's decree. So did the flood occur because it was due to the God's decree and simultaneously because the human factor had done

damages to and neglected the nature (Gazali, 2012; Hijjang, et al., 2014).

Then, what about the meaning behind the flood event? Like in the case of the factors causing the flood, the affected communities also had different interpretation about the meaning of the disasters. There were at least three meanings of the disasters which could be categorized into two parts, namely, (1) *bala'* and *azab*, and (2) *"peringatan" (warning).* The affected communities said *bala'* and *azab* in the same category because both of them had had the same meaning, except that they had different targets, and separate *"peringatan"* because of its general meaning. The term *bala'* means the test intended for the Moslems, while *azab* means the sanction for the non-moslems (Gazali, 2012).

According to the affected communities, the flood event was *bala'* and *azab* at the same time. It means if the flood struck the Moslem communities who were devoted to God, then the flood was *bala'* intended to strengthen their faith to God. On the other hand, if the flood struck the communities who did not believe in God and did not obey the God's commandments, the flood was *azab* which was intended to make them believe in God and did the teaching of God. Here, the meaning of a disaster became very subjective, whether it became *bala'* or *azab*, it was determined by whether the person had strong faith or not.

The Local Strategy and the Response of the Communities towards the Susceptibility of the Disasters

The disasters were understood as the result of the interaction between the nature and the culture. In other words, a disaster illustrates a correlation process between the material world and the cultural world. With this meaning, the disasters were the problems which has a complex relationship between the physical, biological, and socio-cultural aspects In facing the disaster risks, the communities were not only demanded to make physical adaptation to the nature, but also the social and cultural adaptation (Malik, 2012; Hijjang et al., 2014).

The process of adaptation which had been done by the communities since a long time ago has proven to stay on for a long period in the disaster conditions. The local knowledge-based prevention was started from the past experience will stay on in the future. It was the past practices in handling the disasters which became the framework for the communities in doing the mitigation. Such a strategy remained in the communities when facing the nature and the environment which kept changing from time to time. It was understood from here that the communities apparently had the local capacity and ability which should be paid close attention to and to be adopted through a different approach in order that the disaster control and the susceptibility did not just flow from above downwards (Malik, 2012; Gazali, 2012).

A prominent figure of a community stated that the illegal cutting which had lasted sporadically since 1998 was an important phenomenon that had resulted in the forest damages. The economical activities of the communities which had taken into consideration the susceptibility and the physical endurance of the environment was one of the causes which worsened the susceptibility of the disasters in the mountain slopes.

After the independence, the forest condition did not become any better, but in the upper slopes of *Latimojong* mountain the intensive cultivation had destroyed the soil endurance and fertility; consequently it caused erosion. Beside the green revolution policy, another thing that worsened the forest condition during the New Order was the effort to make the forests as the productive and commercial land (Malik, 2012; Hijjang et al., 2014). For the affected communities, the nature was he main source where they earned their living. When the nature, where they lived, was gradually damaged, then their living was at risk. Mountains and rivers were the back bones of the economy of the communities who operated in the fields of agriculture with the irrigation and the lake fishing, while the farmers on the slopes of the mountains were threatened by the land that continuously being eroded. At the same time, there appeared the social disputes between the communities who felt the threads as specific problems. Those farmers who took water from the irrigation would feel that a loss was inflicted on them because of the denudation of the mountain slopes, but for the communities who operated in the field of agriculture on the mountain slopes, the opening of the new lands in order to get new lands was a need. The fire also might be a thread for some of the communities, but there were also those benefit from it, especially those who needed charcoal. Thus, the polarization of interests did not happen only between the government and the communities, but also between the groups based on the economic and social classes (Malik, 2012; Hijjang et al., 2014).

Such conditions of the nature and the socio-cultural processes had pushed the communities to sit down together in order to find a good strategy which could tackle the disasters and reduce the ever increasing susceptibility. The communities in fact had realized that the preservation of the environment only was not enough without reducing the social susceptibility. The cultural and social susceptibility was a thread which was not less serious compared to the that of the nature. This condition had made some of the village elders to

find effective media in order to reduce the environmental and social susceptibilities. By exploiting the the existing cultural richness, there appeared the ideas to promote the preservation of the environment by adopting the green agenda by way of enclosing the cultural potentials of the local communities as a valuable capital.

CONCLUSION

Disaster was a process in a community which relates the human beings with the nature around them. Therefore, in the problematic disaster discourse of how to face the risks and susceptibility of the disasters became important and must be done before and after the disasters. One of the clear steps which should be done by government was to prepare a policy to handle and tackle the disasters based on the local knowledge. Although the policy action had been done, such policy action was still considered as unable to provided the affected with any satisfaction and fair feeling for the affected (or the real victims and the potential victims).

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