

Community Empowerment in Disaster Risk Reduction

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Abstract

Indonesia is one of flood-prone areas. About 30% of the 500 rivers in Indonesia cross populated areas. More than 220 million people, some are poor and live in flood-prone areas. In general, the flood disaster occurred in the western part of Indonesia that received higher rainfall compared to the East. This research uses qualitative approach. Data were obtained from leprosy studies and in-depth interviews with community leaders. In the context of the Lhong subdistrict, it is not only natural and community factors that cause flooding. The existence of private companies also trigger the destruction of nature. The company engaged in mining is considered as one of the ecological damage factor Lhong area. Building community participation requires a reliable facilitator to mobilize the community involved. Similar to the people in Lhong, what is needed now is outside support to mobilize the community to care about disaster. There is no pure participation that comes from the village community because people are less concerned about disaster preparedness.

Keywords: community empowerment, disaster risk reduction

1. Background

After the 2004 Tsunami disaster, Indonesia has begun to show its seriousness to the disaster. This seriousness is evidenced by the special law that regulates the disaster that is Law no. 24 of 2007. Although in the implementation still need quality improvement, at least there is a legal umbrella that regulates the disaster. The handling of natural or man-made disasters must be done thoroughly and integrated from before, during, and after the disaster, which includes prevention, preparedness, emergency treatment to recovery by emphasizing the disaster management aspects into the emergency response effort. requires speed and precision of action.

The National Action Plan for Disaster Mitigation by Bappenas in April 2007 and Law No. 24/2007 on Disaster Mitigation passed by the House of Representatives on 29 March 2007 have provided a strong legal basis for undertaking Disaster Risk Reduction (DRR) activities. According to Eko Teguh Paripurno (2008) as cited by Lestari (2014) describes the process of Disaster Risk Reduction (DRR) by the community through several stages: the starting phase, mobilizing, risk reduction program, and follow-up. Therefore, disaster organizations, especially the government should receive, process, and act effectively against all disaster information.

Disasters that occur can cause material harm, physical to life and can cause deep injury to disaster victims. Many people are less aware of the importance of managing disasters well. One is because the disaster is not certain yet and it is not known when it happened. As a result, humans often care less, and do not take precautions and preventive measures.

Law no. 24 of 2007 on disaster management provides a positive space for civil society to participate actively in reducing disaster risk in Indonesia. So the community can play a role as an agent of change in Indonesia dynamic development. It is also a manifestation of the multi-stakeholder role in tackling disaster risks as a common interest.

Judging from the geographic and geological characteristics of the region, Indonesia is one of the areas prone to flooding. About 30% of the 500 rivers in Indonesia cross populated areas. More than 220 million people, some are poor and live in flood-prone areas. In general, the flood disaster occurred in the western part of Indonesia that received higher rainfall compared to the East.

Based on the morphological conditions, the cause of flooding is due to the varied reliefs of Indonesia's landscape and the many rivers that flows between them. These flood-prone areas are exacerbated by deforestation or land-use changes that do not pay attention to water catchment areas. Changes in land use which then resulted in flood disaster, can be proved, among others, in urban areas along the coast, especially those flowed by the river.

Uncontrolled logging also leads to an increase in high and uncontrollable water flow of settlements, resulting in banjir bandang and environmental damage in the river basin area.

Flood is one type of disaster that must be watched by the community because the time comes suddenly and shrinking too fast. Flood damage is very destructive, be it settlement, agricultural land, infrastructure can even claim human life because of the swift water. These floods usually do not occur in the highlands, but hit the lowlands whose source of water from the mountains.

The flood disaster that once hit Aceh region occurred on 2 s / d 6 November 2014. Heavy rain that continues flushed Aceh causing floods in the South West Coast of Aceh (covering Aceh Besar, Aceh Jaya, West Aceh, Nagan Raya, Aceh Barat Daya , Aceh Selatan, and Aceh Singkil). In fact, heavy rain when it caused the impact of landslides in several roads of the area of Mount Paro, Mount Kulu (Aceh Besar), and Mount Geurutee

(Aceh Jaya).

The complexity of the flood disaster problem requires a structuring or a mature planning in rehabilitation, so that it can be implemented in a focused and integrated manner. Countermeasures carried out so far have not been based on systematic and planned steps, so there is often overlap and even important steps of effort are not addressed.

Based on the description above, in the effort of disaster risk reduction there are still many communities or communities around us who still do not understand and care about disaster risk reduction efforts. Forms of disaster risk reduction can be done in many ways one of which is community empowerment through analysis of the capacity and vulnerability of the community.

2. Problem Formulation

This study has important questions to be answered, namely how community empowerment in disaster risk reduction flood in Gampong Krueng Kala Lhong, Aceh Besar District?

3. Method

a. Research Methodology

Research sites

The research will be carried out, taking the location of Distric Aceh Besar District. Sampling by using purposive sampling, that is from the whole population taken some people who become respondents and informants who are considered able to answer the problems under study and can represent the entire population, so it will be more objective in obtaining data in the field.

Data collection

a. Interview

Moleong (2004) said that the interview is a conversation with a specific purpose. The conversation was done by two parties, the interviewer (interviewer) who asked questions and who interviewed (interviewee) which provides answers to the question. Interviews were conducted to collect research data from secondary sources. Among others interviews with parties who understand (experts) about history, either in the form of traditional leaders, religious leaders, and people who are considered competent with the theme of this research.

b. Observation

Observation or so-called observation, in simple terms is the process by which researchers or observers go directly to the study site. This technique is done by looking directly at the research site about the reality that occurred in relation to the title of the study. Observing is staring at events, motions or processes. Field research conducted by directly involved in the research location, this is done because the object of research is in the open so that to obtain concrete data it is deemed necessary for researchers to be involved directly to the research location. The author uses field research to locate and collect the necessary data from the study site, either directly or indirectly. The targets that are observed are all components of the Lhoong sub-district of Aceh Besar District who became the object of research, either directly or indirectly and others that have to do with the data needed for this research.

c. Documentation

Documentation is one method of data collection in social research. Some of the available are in the form of letters, diaries, keepsakes, reports, and so forth. Documentation study was conducted to retrieve data related to the research needs, which included in primary data category in research among others: documents, original manuscripts and others related to research data.

4. Library Studies

Many of the writings on regional disaster risk reduction in Indonesia as published in various mass media including the internet, as well as books. Yet the paper leads to more pure disaster risk reduction without combining with community empowerment through the analysis of the community's knowledge level on disasters. In this case the authors would like to describe the improvement of community capacity as the front guard to reduce the risk and impact of flood disaster. It is interesting to examine because a community empowerment process through experience of coping with and dealing with disasters focusing on participatory activities to conduct studies, planning, organizing community self-help groups, and involving and involving various stakeholders, in tackling disasters before, during and after disaster. The goal is for the community to manage risk, reduce, or recover from the impact of disaster without dependence from outside parties.

Korten (1987) was cited by Wardhani (2009), suggesting three things that could be the basis of why community development can not be uniformly and centrally managed. These are: local variations, local resources and local responsibilities.

Capacity is a combination of all the strengths and resources available within a community, community or institution that can reduce the level of risk or impact of a disaster (ISDR, 2004). Coping capabilities are the way

people or institutions, both local and external, use their resources and abilities to deal with adverse consequences that can lead to a disaster.

Resilience is the capacity of a system, community or community that has the potential for exposure to disasters to adapt, by surviving or changing in such a way as to achieve and maintain an acceptable level of function and structure. This is determined by the ability of the social system to organize itself to increase its capacity to learn from past disasters, better future protection, and increase disaster risk reduction efforts.

Capacity is a form of adjustment mechanism and strengthening strategy to survive in reducing existing hazards to reduce disaster risk. Affeltranger (2006), mentions the basic approaches to vulnerability and capacity assessment and analysis (VCA) is a way to integrate these assessments and analyzes into planning projects and show how hazards and natural disasters are a factor in consideration in them. Suhardjo, D. (2011) cites gunawan (2011), in his book *Social Condition of Society in Disaster Management* also peeled Readiness of society in facing disaster is one indicator to reduce risk. This condition can be seen as a low literature as an information center.

So, from the existing literature the authors have not found any special research on disaster risk reduction based on community empowerment through capacity and vulnerability analysis (Gampong Krueng Kala case study, Lhoong, Aceh Besar district). Therefore the writer tries to do the research, Can provide little contribution to readers and policy makers.

5. FINDINGS AND ANALYSIS

Society is defined as a group of people who occupy a certain area and in it there are rules or norms that govern their daily lives. Society between one region is different from other regions, both in the form of culture and customs.

Bungsampuhi (2016) said in the last decade, there emerged a phenomenon of global concern that affects all human children will the survival of the planet Earth where they stand. Anxiety about the survival of the human race was echoed by one of the top UN officials, saying, "Our world is on the edge of human destruction".

Large-scale development can bring a negative impact on the environment. The flow of detergent foam into the sea will endanger fish life, siltation of water dams, urban air pollution due to toxic fumes in motor vehicles, dust pollution, pollution of large rivers flowing through the city which is a source of water, and many more cases of human-caused pollution.

Humans and their environment have a dynamic relationship. Changes in the environment will cause a change in human behavior to adjust to new conditions. This change in human behavior will lead to changes in the environment. Given the dynamic circular relationship between humans and the environment, it can be said "Only in a good environment, human beings can develop maximally, and only with a good human environment can develop towards the optimal." Because it is clear how important environmental coaching.

Damage that occurs with the environment one form of the spiritual crisis experienced by mankind. Just as rapid and sophisticated knowledge changes, should not cause a decline in the quality of the environment. Science and religion must equally maintain the survival of mankind from the destruction of nature.

The reaffirmation of environmental change material is very important as a strategy in the implementation of religious practice. The view of the community that views the environment is not an interesting practice of worship to be reviewed as a discussion material. Only with education will this increasingly frightening condition be resolved. It must be believed that only with human-environment and God is the spirit of change to create a harmonious environment for human civilization.

On the other hand, community counselors should also be honed with environmental material and its preservation. Broadly speaking, this material will be a theological study material and modern fiqh so it will be easy to convey the community by using the religious arguments. More than that, it will be part of the life of the dai himself and a movement along with other environmental activists.

Religious life should also be understood as an effort in preparing the community to be ready to deal with the disaster. Disaster events that took place in Lhong is one example of the absence of an organized community facilitator in the field of disaster.

Lhong's Keusyik (2015) recognition Readiness of citizens to face the flood, no special preparation. There is indeed a visit from the government especially from BNPB and invite people to join the meeting. But until now not been built. Their plans will build facilities that can withstand erosion during floods. While society does not do anything. Currently it is desirable that help comes from outside.

When the floods come, the people save themselves based on experience and habits. Ideally, there are outside parties, especially the government intervention in building a region that often floods. Lhong Sub-district generally requires layout and community empowerment, especially in disaster area. Geographical conditions surrounded by hills and watersheds make this area very vulnerable to floods and landslides.

To build community participation requires a reliable facilitator to mobilize the community involved. Similar to the people in Lhong, what is needed now is outside support to mobilize the community to care about disaster.

There is no pure participation from the village community. It is undeniable that people are less concerned about disaster preparedness. There is no special preparation. Mutual is done, but it is impossible to dredge the river. This village is in fact a vulnerable area with floods.

Citizens acknowledge that there is their activity to cut timber. It has to be done for economic needs. It is not easy to earn a living by cutting down the forest. Risks rise to the mountain especially when the rainy season conditions are very high. The journey must be taken within four to five hours. The road to the middle of the forest is not flat, not infrequently must be done by foot.

Cutting down forests with all risks is not without reason. Sources of income as a strong reason to stay afloat in search of forest sustenance. Judging from the natural potential, Lhong is not only rich in forest and timber resources. Moreover, the area of rice fields and marine should be the main income of the people.

Rice fields and plantation areas are very promising to work perfectly. But what happened was leaving the fields empty. There are several experiments in farming, such as rice and palawija. The high price of seeds and fertilizers is the main factor causing people not to utilize agricultural land.

Planting papaya trees is also very good for cultivation and Lhong plantations. During this time there are some people who do planting papaya trees with marketing targets to Banda Aceh. This activity is done by involving the youth and other citizens. In doing business in this field of agriculture people need assistance especially from agricultural extension workers who are in District Lhong.

Saiful (2015) said that the citizens of Lhong only ask for consumptive assistance. The help provided is spent for a moment's benefit and not to empower. This statement is not entirely true, as there are several successful business groups in the community empowerment.

The villagers demanded extension workers to be more serious in working and together with citizens in developing agriculture. Field workers should not only work in the Sub-district office, but rather see directly and assist the community in fostering their business.

Lhong Flood and the Causes

Floods usually occur due to high rainfall so that the place that holds like a river and other water drainage overflowed because of excess water. Streaming systems are also crucial if not well controlled such as reservoirs and artificial canals. The system of water flow can also change due to natural and human factors. The occurrence of narrowing and shallow river usually occurs naturally. While humans ruin it by littering garbage disposal no matter the river becomes a stopper.

The density of the population also contributed to the flood disaster. Not only the littering of garbage, the construction of houses, buildings and others can also make the absorption of ground water becomes reduced. Soil water uptake is crucial in order not to overflow the surface water of the settlement. Physical development carried out by humans negatively impacts the natural cycles that occur in nature.

The Government of Indonesia formulates several flood mitigation strategies that include the coordinating agency for disaster management (BNPB) at the district / municipality level. Regents and Mayors also acted as the main responsibility in all disaster that occurred. Implementation of course requires coordination and utilization of the entire network. The handling of this flood is not possible by one party alone, but also the entire organization and the community.

Bakornas (2008) in the guidance of flood prevention mentioned generally, the steps taken in the face of flood disaster are

1. Conducting disaster search efforts reported missing,
2. Conducting care and service to refugees by giving
 - food
 - health and medicine
 - clean water and sanitation
 - tents and shelters
3. Mobilize all existing resources and logistics including:
 - TNI aircraft and helicopters
 - Navy ships for Re-supply
 - inflatable boat.
4. Mobilize TNI, PMI and other elements and be well coordinated.
5. Repair (relief operation) main infrastructure such as embankment, road and electricity.
6. Using central government funds quickly and accurately, and accountable,
7. Communicating through the press in the form of accurate news and not cause panic.

To implement the above policy, several strategies are developed as follows:

1. Preparedness covering prevention, mitigation including lagkah-step preparedness, with steps such as counseling and socialization must be widely implemented, the community is expected to have the ability and willing to play an active role in preventing and preparing anticipatory measures even on a small scale (community level).

2. Each related agency to prepare a good plan especially prepares contingency planning for flooding in its area.
3. The handling of flood disaster is focused on the utilization of human resources and equipment available at the national and regional levels, in various parties both in government agencies, including TNI and POLRI, private entities and communities to be able to do the best possible.
4. International cooperation and assistance in flood disaster management is carried out under the following general principles: No burden of State finances, As far as possible utilizing Indonesian experts, Comply with Indonesian laws and regulations, Respect local customs and traditions and Such assistance is non-binding
5. Increasing community participation in efforts to prevent and reduce the risk of flood disasters include; Counseling to avoid littering, not living in riverbanks, stopping deforestation in water catchment areas.

Furthermore Bakornas (2008) mentioned in terms of geographical and geological characteristics of the region, Indonesia is one of the areas prone to flood disasters. Approximately 30% of the 500 rivers in Indonesia cross populated areas. More than 220 million people, some are poor and live in flood-prone areas. In general, the flood occurred in the western part of Indonesia which received higher rainfall compared to the East.

Based on morphological conditions, the cause of flooding is due to the relief of Indonesia's landscape is very varied and the number of rivers that flows between them. These flood-prone areas are exacerbated by deforestation or land-use changes that do not pay attention to water catchment areas. Changes in land use which then result in flood disaster, can be proven, among others, in urban areas along the coast, especially those flowed by the river.

Uncontrolled logging also leads to a high and uncontrollable runoff of high settlements, resulting in flash flooding and environmental damage in the river basin area.

In the context of the Lhong subdistrict, it is not only natural and community factors that cause flooding. The existence of private company Lhong Setia Mining also helped trigger the destruction of nature. The company engaged in mining is considered as one of the ecological damage factor in Lhong area.

In the event of flood Lhoong Society can not travel, both to Banda Aceh and Aceh Jaya. There are 25 landslide points in the area among others in the area of Mount Paro, Aceh Besar, and Mount Grutee which borders Aceh Jaya. The Aceh government recognizes that illegal logging is still occurring in Aceh. This condition resulted in the occurrence of landslides and floods in Aceh.

The modus operandi of illegal logging takes place in various ways such as carrying wood with becak. There is also logging in the old permit (HGU). The Government of Aceh continues to conduct illegal logging operations. In addition to lack of manpower and operational funds, also difficulty dealing with unscrupulous individuals who backed the use of illegal timber.

The Forum for Environment (2015) also emphasized that floods are common in Aceh due to Illegal Logging. This floods and landslides occur because there are illegal logging practices occur in the mountains, this is very dangerous, hence there is flooding and landslides. The overflowing of river water in Krueng Kulu, Geuteut and Lam Peujen villages in Lhoong sub-district, Aceh Besar district, is an obvious example of illegal logging practices.

6. Conclusion

Flooding that occurred in Lhong Aceh Besar due to the destruction of ecosystem and human intervention. The existence of mining companies also add to the natural damage in the area of flood potential. Handling should involve many parties, such as the government and local residents. People around the site need alternative work in meeting the economic needs of the household. The potential of agriculture and marine local communities is very suitable for community development and empowerment.

Prohibition of logging without alternative development will not be effective in Lhong Aceh Besar. Despite the high risks, people will still go to forest to cut down trees. Because assume, the trees are a source of income that is clear and measurable every day. Meanwhile, if others offer other livelihoods, such as plantations, agriculture and marine, they will voluntarily leave the habit of cutting down trees.

Government policy on illegal logging should be accompanied by strict supervision and supervision. Supervision of the forest police and related fields is essential to ensure that no violations of law are committed by citizens and companies. In addition, community assistance in community development efforts also helps them in household economic empowerment.

The cultivation of flood disaster risk reduction values is very important to be done continuously. The involvement of stakeholders is crucial to building a shared commitment in maintaining the ecosystem, economic, community and enterprise sustainability. The private sector must also play a role, especially in carrying out corporate social responsibility. The programs, can realize the community empowerment around both socially and economically.

The strength of government, private and local communities should be encouraged in minimizing the potential for flooding. Non-governmental organizations are the driving force in connecting various interest groups, especially for those concerned with the environment. Students and researchers are also very important to

be invited to participate in seeing from different sides. This research is limited to the social life of surrounding communities, the next research is expected to see government policy in handling flood. The other side can also be conducted research involving the private sector in the program to protect the community environment.

Reference

- Affeltranger, B. (2006). *Living With Risk: A Global Review of Disaster Reduction Initiatives*.
- Enzyme, R. (2016). The authority and responsibility of the government in the management and utilization of water. *Lex crimen*, 5 (6).
- Lestari, P., Prabowo, A., & Wibawa, A. (2014). Merapi Disaster Communications Management 2010 at the time of Emergency Response. *Journal of Communication Science (JIK)*, 10 (2).
- Lexy J Moleong. *Qualitative Research Methodology*, (Bandung: Teens Rosdakarya, 2004),
- Suhardjo, D. (2011). The Importance of Disaster Mitigation Education in Reducing Disaster Risk. *Jurnal Cakrawala Pendidikan*, (2).
- Wardhani, A. C. (2009). Human-centered development. *Scientific Journal*, 2 (3).
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