

Natural Disasters and Agrarian Conflict

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Abstract

The tsunami disaster that stroked Aceh in 2004 not only resulted in massive casualties and huge economic losses, has also resulted in massive horizontal agrarian conflicts. This article will discuss how the natural disaster causes symmetrical agrarian conflicts among inhabitants of neighborhoods. The question to be answered is how did the tsunami cause the agrarian conflicts among the people? How did such agrarian conflicts affect the reconstruction effort of after tsunami which is a series of disaster mitigation. This article uses a literature review consisting of research reports, scientific journal articles, and media reports on the impact of the 2004 Aceh tsunami. Study results suggest that the tsunami disaster resulted in the loss of boundaries of residents-controlled lands and this caused land disputes among neighbors that influences reconstruction efforts undertaken by governments and NGOs. However, local wisdom on conflict mitigation contributes to the settlement of land conflicts and this has contributed to post-tsunami reconstruction efforts in Aceh. With that this article contributes to the development of knowledge on disaster mitigation.

Keywords: Natural Disaster, Tsunami, Impact of Natural Disasters, Agrarian Conflict, Conflict Resolution.

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1. Introduction

A huge tsunami hit Aceh in 2004. The tsunami left deep wounds and sorrow for victims. This was because the natural disaster claimed about 130,000 lives and made approximately 37,000 missing [1], destroyed infrastructure and a lot of buildings, especially residents housing. Additionally, the tsunami caused a massive incident of agrarian conflicts between residents of neighborhoods.

This paper shows how the tsunami caused the occurrence of agrarian conflicts. The question that will be answered is how did the tsunami cause agrarian conflicts among residents of neighborhoods (gampong)? How did such agrarian conflicts affect the reconstruction effort which is a series of disaster mitigation? This article uses a literature review consisting of research reports, scientific journal articles, and media reports on the impact of the 2004 Aceh tsunami. This article would reveal that the tsunami disaster caused agrarian conflicts between neighbors through three things: disappearance of housing land boundaries caused by the tsunami, loss of a land certificate and the death of parents. The article would also

like to demonstrate how land conflicts hindered reconstruction efforts undertaken by governments and NGOs. This submission also shows how local community's wisdom contributes to the settlement of land conflicts and this has contributed to post-tsunami reconstruction efforts in Aceh.

2. Literature Review

2.1. Impact of Aceh Tsunami Disaster

The tsunami disaster had a major impact on the people of Aceh. The tsunami disaster caused many difficulties for the people and this affected the rehabilitation and reconstruction process as an effort to recover the tsunami impact. The areas affected by the tsunami left almost no traces, including the infrastructure that was also destroyed. The following Table 1 shows the total amount of infrastructure collapse in Aceh due to the tsunami disaster.

Table 1. Infrastructure Losses in Aceh's Impacted Areas By 2004 Tsunami

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No	Types of Infrastructure	Amount of Loss
1	Small and Medium Business Buildings	104.500 (unit)
2	Houses	139.195 unit
3	Agricultural land	73.869 ha
5	Fishing boat	13.828 unit
6	Road	2.618 km
7	School Buildings	3.415 unit
8	Health facilities	517 unit
9	Government Buildings	669 unit
10	Bridge	119 unit
11	Port	22 unit
12	Airport	8 unit

Source: Recovery Platform, BRR Breakthrough

From the above table it can be seen that considerable losses occurred in residents' houses with the total number of houses destroyed reached 139,195 units. This made what was densely populated areas turned into blank expanses with no longer noticeable land boundaries due to the tsunami disaster hit.

2.2. Horizontal Agrarian Conflicts Caused By Tsunami

Before speaking of land conflicts, it would be better to be aware of the definition of the conflict itself first. Conflict is the pursuit of incompatible goals of different people and groups. It shows a wider range of time and wider class and group struggles than violence conflicts, with it being followed by means of peace or by using force. And a deep conflict involving human needs and can only be solved by eliminating the hidden causes [2].

Land conflicts is about the interaction process between two or more persons or groups each fighting for their interests or the same agrarian objects, ie land and other objects related to the land such as water, plants, mines and also air in the boundary of land concerned [3]. In general there are several types of land conflicts, among others: 1) issues involving the establishment of legal rights to land that already have rights over it or to land that have no rights over it, 2) denial of the reasons for the right or proof of acquisition of land rights, 3) mistakes or errors in giving rights due to the application of incorrect rules, and 4) conflicts or other issues that contain social aspects [4].

Interestingly, the land problems that occurred due to the tsunami disaster in Banda Aceh did not cover the four general characteristics of the above mentioned land problems. The problems were related to the loss of boundaries of land owned by residents due to the tsunami and land clearing using heavy equipment for reconstruction. Not only that evidence or supporting

documents on land rights and land boundaries were destroyed by the tsunami and this contributed to difficulties in clarifying land boundaries. The results were disputes over land boundaries which were difficult to solve by disputants themselves.

The loss of land documents due to the tsunami was confirmed by the National Land Agency. This central government agency said the tsunami disaster resulted in 10% of land books being lost and 90% of land books in critical conditions (wet, muddy with sea water) and 80% of lost land documents including cadastral land maps. The damage to the BPN Aceh and Banda Aceh office buildings and facilities and the loss of 30-40% of BPN government employees resulted in land problems when the disaster made resolving land conflicts quickly and precisely became much more difficult [5].

A few days after the tsunami and in the time of emergency stage of disaster mitigation, people visited their homes to identify the condition of their homes and land as well as to look for what was left that can be taken. They observed the house buildings were gone and the boundaries of their lands were not visible because the plots along the coast have been completely or partially submerged by sea water. "Many plots of land along the coast were clearly marked with trees or trails, but after the wave wiped the markers were lost" [6]. People then tried to identify their lands and their boundaries. This was the beginning of disputes between gampong dwellers [7]. There were cases gampong inhabitants mutually claimed rights to a plot of land. False statements about land ownership by some irresponsible persons were spoken [7].

Clashes between gampong dwellers of mutual land claims affected the reconstruction effort where the government and NGOs providing houses for homeless people. An NGO undertaking the Aceh reconstruction effort stated:

As of November 2006, 48,000 houses have been built in the province, but much remains to be done to reach the target of 128,000 homes. Two years after the tsunami, rebuilding destroyed houses and finding housing solutions for homeless people were two of the most important tasks facing Aceh. The issue of land rights - the question of who owns the land - should be resolved if the people of Aceh will be rebuilt on a solid foundation. Without clear land rights, people who are rebuilding houses are at risk of a third party coming and claiming ownership of the land [6]

According to Oxfam, reconstruction of houses for Acehneses affected by the tsunami can be done if "survivors can clearly legalize land and property rights to minimize disputes and provide a strong social and legal basis for the rebuilding of Acehneses society" [6].

Oxfam insisted that the settlement of land conflicts that have occurred was difficult because of three things [6]. The first was because of lack of benchmarks or landmarks and documents that can be proven. The second was most, if not all, of the affected packages did not have their

border coordinates in the WGS84 system. The process of boundary relocation using technology was therefore difficult or impossible to do. The third was many cadastral survey monuments were destroyed or lost by the earthquake and tsunami. This complicates the reconstruction of boundaries in areas whose coordinates are directly or indirectly linked to this survey monument.

3. Research methods

This article is compiled by using literature review method, with the aim to reveal a phenomenon occurred by using available data, these were by obtaining information from research reports, journals articles, and media reports on the impact of the 2004 tsunami Aceh. Literature review was conducted to obtain information and data by finding as many references as possible in order to produce good writing without having to conduct interviews in the field.

4. Research Results and Discussion

4.1. Land Dispute Settlement

Agrarian conflicts can be solved in two ways, litigation and non-litigation. Litigation is defined as the settlement path through the judiciary, while non-litigation is a settlement of disputes outside the judiciary. Afrizal conveys how the community succeeded in using non-litigation channels to resolve their agrarian dispute with a company. According to Afrizal, the presence of competent third parties, knowing ways to resolve conflicts outside the judiciary, and the absence of state legal barriers are two important factors leading to the success of conflict resolution outside the judiciary [8].

According to the Oxfam study [6] only about 25 percent of the land in the tsunami affected area is private land, another 75 percent of adat land. The following will discuss how local adat institutions are able to resolve post-tsunami land conflicts whose boundaries have been lost and key witnesses have died from the tsunami.

4.2. The role of Gampong Leaders

In Aceh, horizontal agrarian conflicts of peace period or post-tsunami land issues have been largely resolved in gampong, and not in the court. Gampong is the lowest unit of government hierarchy in the Aceh Province. Many residents chose to take this path due to various reasons. One of the reasons residents to use the settlement of land conflicts in the gampong is the cost that is affordable and not protracted.

In gampong village Head, called Keuchik, plays an important role in the resolution of conflicts. Gampong involved are none

gampong officials consisting of Keuchik, tuha peut, tengku imum, and community leaders.

4.3. Indigenous Deliberation

Salim mentioned that the process of settling the land dispute after the tsunami was conducted by Keuchik by holding deliberations based on local customs. Local customs in question is to prioritize deliberation and compromise among the parties who are at loggerheads and assisted by living witnesses to give testimony. The final outcome of the joint deliberations is agreements that have been agreed by the conflicting parties [9].

However, the actual implementation of land settlement according to adat can be found in the formal law of land, namely article 18 paragraph (1) Government Regulation number 24 of 1997 regarding land registration states: "Determination of land parcels already owned by a right that has not been registered or which has been registered but there is no measurement / picture of the situation or the existing situations / pictures are no longer appropriate to the actual circumstances, the adjudication committee in the systematic land registration or by the head of the land office in sporadic land registration, based on border appointment by holder of the adjacent land rights. "Further Article 19 paragraph (1) of PP 24/1997 states:" If in the determination of the boundary of the parcel as referred to in Article 18 paragraph (1) there is no agreement between the holder of the adjacent land rights, the land is strived for temporarily done base bounds that are in reality the boundaries of the parcels of land concerned [9].

Similarly, the settlement of land issues that are carried out through the outer court in the gampong is by deliberations conducted by gampong devices with the aim of reaching agreement on the problems of land boundaries. The form of solving this land problem is called by NGOs CDA (Community Driven Adjudication) or it can be said to be a community based land registration process [9].

The location of deliberations on post-tsunami land issues is not always done in buildings, meunasah, residents or gampong offices, but more often in the field, especially where the lands whose boundaries are to be determined. Deliberation is done many times and takes up to several months. This is because solving the land problem can not be solved only one by one, but also involves all the landowners, or their heirs, located adjacent to the boundary of the land (Salim in Research Report of International Development Law Organization, 2006: 8-9)

When the process of measuring the boundaries of parcels of land in the field was done, the landowners or his heirs presented together with the owners of adjacent parcels, the head of the local hamlet, tuha peut and keuchik to ensure the markers of land boundary. If no agreement is obtained between the owner of the parcels regarding landmarks, the boundary of the parcel shall be

measured and declared a temporary limit. In the event that an owner of the land, or his heirs, is unable to attend or is no longer known to exist, the marker of the land boundary shall be determined on the basis of the knowledge of the gampong stakeholders present at the time and the boundary of the plot shall be declared a temporary limit [9].

5. Conclusions and Recommendations

One of the problems caused by the tsunami natural disaster occurred in 2004 in Aceh for the gampong inhabitants and hindered the after tsunami reconstruction effort was the land conflicts between the gampong residents. The way the tsunami caused the land conflicts was the tsunami and land clearing using heavy equipment removed land boundaries in a gampong. Destroyed people's and local land agency's land documents by the tsunami added the problem. Local wisdom of the gampong community with regard to conflict settlement that has been developing since a long time has significantly contributed to the settlement of land conflicts within the gampong, which has prevented the people from using paid justice channels and thus contributed to the smooth reconstruction efforts made by NGOs and the government.

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