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## Aceh tsunami and government policy in handling it: a historical study

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**Abstract.** Tsunami occurred in Aceh in 2004 was determined by the Government as a national disaster. The criteria supported Aceh Tsunami as a natural disaster to be determined as national disasters are (1) The victims and Losses incurred after Aceh Tsunami in 2004 and (2) The Public Service condition after Aceh Tsunami in 2004. Aceh Tsunami caused many problems that the government had to solve. These problems included regional governments that were not operating properly, logistics vacuum, ongoing armed conflicts with GAM, the rejection of international assistance in terms of military, disaster management agencies had been formed, disaster management laws did not exist, and state budget of 2004 was not available for Aceh Tsunami emergency response. This research used historical methods with the following steps: heuristics, criticism, interpretation, and historiography. The results of the research were the processes and efforts undertaken by SBY Government in handling the Aceh Tsunami after the issuance of Presidential Decree Number 112 of 2004. The lessons obtained from Aceh Tsunami handle can be utilized by Regional Government or Central Government for disaster mitigation, namely (1) allocating resources for risk mitigation; and (2) disaster preparedness is an important investment for a country.

### 1. Introduction

Aceh Tsunami is one of natural disasters that had great effects in the world, after the earthquake occurred in Tangshan in 1976. Aceh Tsunami in 2004 was the deadliest natural disaster in the historical record of natural disasters occurred in Indonesia. 1883 tsunami occurred in the Indian and Pacific Oceans was due to the eruption of Mount Krakatau. This killed 36,000 until 120,000 people. In 1782, around 40,000 people died due to the tsunami occurred in South China Sea [19].

According to the data from BPS, there were around 130,013 people killed and 37,066 people missing. Aceh tsunami also destroyed settlements, leaving many people homeless and displaced. Out of around 500,000 refugees were mostly children, women and elderly people. In addition to physical impacts, this disaster also caused psychological impacts resulted in prolonged trauma. Based on the results of the census, dozens of buildings were destroyed by the main earthquake, especially in Meulaboh and Banda Aceh at the tip of Sumatra. In Banda Aceh, around 50% of all buildings were destroyed by the tsunami. However, most of the victims were caused by the tsunami that hit the west coast of Aceh and North Sumatra [8].

The natural disaster of Aceh Tsunami caused many problems that had to be resolved by the government of Susilo Bambang Yudhoyono. These problems included, regional government is not operating properly, logistical vacancies, ongoing armed conflicts with GAM, rejection of international assistance, including the military, the unavailability of state budget for emergencies, disaster management agencies and legislation have not yet been formed. The government created a policy aimed at ensuring that all form of emergency response operations must be carried out as soon as possible, including rehabilitation and reconstruction activities after the emergency response had been completed.

SBY government in resolving the problem and handling Aceh Tsunami, took some policy steps like, declaring the disasters in Aceh and Nias as a national disaster as stated in KEPPRES No. 112 of



2004, mobilizing national and regional resources for emergency response efforts and restoring the function of Regional Government which was no longer functioning due to Aceh Tsunami. President SBY issued Presidential Instruction No. 1 of 2005 concerning emergency response activities, planning and preparing for the rehabilitation and reconstruction of the earthquake and tsunami disaster in the Provinces of NAD and Nias, North Sumatra. After the issuance of the President's instruction, the Deputy Governor of NAD (Nanggroe Aceh Darussalam) immediately coordinated and controlled disaster management. After that, Aceh Special Implementing Coordination Unit was formed with the issuance of Decree of the Head of Bakornas PBP Number 1 of 2004 dated 30 December 2004. The Satkorlak was chaired by the Vice President and Coordinating Minister for People's Welfare as the Daily Chief Executive and Deputy Governor of NAD as the Implementer at the Provincial level. However, how is the implementation, is it appropriate to the implementation instruction so that it affected the success of emergency response operations toward Tsunami's natural disaster in Aceh.

## **2. Research Methods**

The research method used was historical method. The historical method is the process of critical examination and analysis of records and relics of the past and writing the results based on facts that have been obtained called as historiography [14]. The first stage was Heuristic which was finding and gathering historical sources related to the problem studied. At this stage, the writer looked for various sources related to the environmental history, references to Aceh Tsunami, and the government's coping policies. The second stage was the stage of criticism. External criticism in this real search aimed at investigating the authenticity of the source by looking at it physically. For oral sources, the researcher tried to investigate the age and how close the informants involved with the topic being studied. At this stage of external criticism, checking was carried out to the sources before they were assembled into historical studies. Whereas, internal critics tried to investigate the contents and comparing it in order to obtain valid information. Internal criticism was carried out in order to obtain credible and reliable facts. The third stage was interpretation, the researcher compiled facts from historical sources that had been obtained chronologically. Then, the researcher interpreted the event of Aceh Tsunami and the government policy in its handling. The fourth stage was historiography that was the writing stage to reconstruct the event that actually took place in the form of a historical story scientifically. The activities of historical story compilation were carried out by compiling historical facts that had been obtained so that it became a chronological and systematic sequence.

## **3. Results and Discussion**

### *3.1. Determination of National Disaster Status*

Aceh tsunami in 2004 was declared as a national disaster by President SBY through Presidential Decree of the Republic of Indonesia Number 112 of 2004 after previously held a meeting in Lhokseumawe. There were three main points in Presidential Decree, first, the statement of Aceh Tsunami disaster on December 26th, 2004 as a national disaster; second, to urge all of Indonesian people to raise half-mast flag for three days as a sign of national mourning; third, urge to Bakornas PB as the main organizer of disaster management to immediately conduct a program. In addition, the President gave operational instruction to take emergency response actions. The essence of the instruction issued by the President is conducting Search and Rescue (SAR) activities, which included searching for victims, saving lives and caring for victims. In determining the status of national disaster, there are several criteria that support Aceh Tsunami as a national disaster, namely (1) Victims and Losses incurred after Aceh Tsunami in 2004, (2) Public Service Condition after Aceh Tsunami in 2004.

The damage of the environment caused many residents lost their livelihoods in which the majority of the residents were fishermen and farmers, the damage reached one fifth of the total sector. Aceh tsunami was a big disaster, this can be seen from the number of victims, the area

affected by the disaster, and the damage toward the facilities and infrastructures. The number of tsunami victims in Indonesia was estimated to reach 130,000 people [12]. The loss caused by the tsunami reached US \$ 5 billion [21]. According to Bappenas, Aceh Tsunami was one of the biggest natural disasters in the period 2004 to 2007 and the losses incurred reached more than US \$ 4.45 billion [2]. This can be seen from the following Bappenas data,

**Table 1.** Natural disasters in Indonesia range from 2004 to 2007

No	Disaster Name	Economic Loss (US\$ billion)		
		Direct	Indirect	Total
1	Aceh & Nias Tsunami December 26 <sup>th</sup> 2004	2.92	1.53	4.45
2	Avian Influenza (2004 -2005)	0.6	-	0.6
3	Merapi Volcano Eruption- April 2006	-	-	20,000 refugees
4	Yogyakarta Earthquake May 27 <sup>th</sup> 2006	2.5	0.7	3.1
5	<i>Lumpur Panas</i> Sidoarjo East Java -May 29 <sup>th</sup> 2006	1.2	1.8	3
6	South Java Tsunami July 17 <sup>th</sup> 2006	0.031	0.063	0.094
7	Jabodetabek Flood until February 2007	0.7	-	0.7
<b>TOTAL (US\$ billion)</b>				12
• <b>3.1 percent from Indonesia PDB (2007)</b>				(Rp. 110,4 T)
• <b>15.8 percent from total APBN 2007</b>				

Source: Bapenas

### 3.2. *Post-Tsunami Aceh Rehabilitation and Reconstruction Efforts*

The Government of Indonesia formed a response team in the emergency response phase which is responsible to handle the disaster area and provide first aid. The team of military, health, and voluntary agencies, from within and outside the country, provided assistance to Aceh and Nias directly. After the emergency response phase, rehabilitation was carried out in Aceh and Nias because the damage was very severe. This problem required large funds and a long time. The government formed a special agency to rehabilitate Aceh and Nias. on April 30th, 2005, President SBY formed the Rehabilitation and Reconstruction Agency or Badan Rehabilitasi dan Rekonstruksi (BRR). The direct executor of the rehabilitation and reconstruction called as Implementing Agency or Badan Pelaksana (Bapel) and BRR was led by Kuntoro Mangkusubroto [7].

The task carried out by BRR was not an easy task throughout the Indonesian history. Even in the world, a special agency had never been established as a coordinator, implementer of rehabilitation and reconstruction after a disaster with his leader at the Ministerial level. Moreover, BRR did not have guidelines or examples in carrying out its duties. Therefore, BRR tried hard to build NAD and Nias better than the conditions before the disaster (build back better). It was carried out by increasing the capacity of human resources, implementing a "flat" administrative and management structure as well as a functional and concise support system [1].

The targets of the rehabilitation phase were the implementation of public services improvement, that were: (1) the recovery of the condition of human resources; (2) the recovery of economic,

financial and banking facilities; (3) the restoration of basic public infrastructure and facilities in the affected area, including access to transportation and communication between regions; (4) the construction of temporary housing facilities; (5) the recovery of government function and public services; (6) upholding the law and ensuring public order; and (7) the restoration of land rights, saving of land documents, handling the trauma of the disaster victims, and others. Out of the 7 objectives in the rehabilitation of post-tsunami Aceh in 2004 above, it was grouped into 2 important parts of recovery, namely social psychological recovery and the function of public services.

Mental health problems were a continuous impact. The period after the disaster, the symptoms of post-traumatic stress reaction or commonly referred to as Post-Traumatic Stress Reactivity (PTSR), were apparent in Aceh Tsunami victims. Generally victims will feel numb or nostalgic about the Tsunami. This was mostly experienced by victims living in the areas with the most damage. However, these symptoms were reported by the respondents living in other areas. Symptoms of high PTSR were also reported by those who experienced traumatic event. Over time, the symptoms reported were less, but faster recovery was actually reported by those from the most severely damaged areas [11].

Other impacts also affected the condition of children after the Tsunami. Many children lost their parents due to the disaster. Comparison of changes that occurred in children aged 9-17 years who were one parent or both, with children whose parents survived. Five years after the Tsunami, the detrimental effects of losing one or both parents were more visible in the oldest boys (dropping out of school and working) and in girls (married). While the impact of younger children was not very visible [9]. Psychological recovery was carried out by the Rehabilitation and Reconstruction Agency in collaboration with other recovery institutions, for example the Pulih Foundation. From the foundation, Jackie Viemilawati's team jumped into the field and implemented Trauma Healing to help restore the psychological condition of the victims of natural disasters [3].

Reconstruction efforts aimed at rebuilding urban areas, villages and regional agglomeration. By involving all affected communities, experts, representatives of non-governmental organizations, and the business world. Reconstruction of Aceh region included reconstruction of the road network, in the coastal area of Banda Aceh, relocation of housing and population mobility after the Tsunami [20]. Infrastructure and facility development had started since the adjustment of the spatial plan at the provincial level. Mainly at the district and city levels that had experienced damage, especially in coastal areas. The final goal of the reconstruction phase was to rebuild better community lives in the affected areas.

Based on the a fore mentioned targets, within the past one year to May 2007, several results of rehabilitation and reconstruction activities had been achieved, namely the completion of 77,194 new housing units; construction of 804 school buildings; the provision of 21,962 teachers; construction of 405 health facilities; construction of 881 worship facilities; making ponds of 12,385 ha; making rice fields and gardens covering an area of 75,483 ha; road construction along 1,553 km; construction of a bridge of 181 units; the construction of a sea port of 17 units; and the construction of 7 airports.

### *3.3. The Obstacles and Effect in Handling Natural Disaster*

Rehabilitation and reconstruction in the Province of NAD and Nias Islands was carried out with various funding sources, namely: APBN, Countries or Donor Institutions (multilateral and bilateral), Indonesia Red Cross or Palang Merah Indonesia (PMI) of other countries and Indonesia, NGOs/NGOs (international and local), as well as domestic and foreign business sectors (private sector) totaling more than 900 institutions [4]. The first obstacle was building the trust of international donors. This happened because Indonesia is known for its high level of corruption. BRR tried to resolve this problem by establishing SAK or Satuan Anti Korupsi (Anti-Corruption Unit), making integrity pacts, and Ernst and Young's financial system, and efforts to eradicate corruption by conducting educational tours with the Corruption Eradication Commission or Komisi Pemberantasan Korupsi (KPK) in 21 districts or cities in NAD and Nias [6]. BRR strengthened SAK's position not only under the Implementing Agency or Badan Pelaksana (Bapel), but also BRR's Supervisory Board

or Dewan Pengawas (Wanwas). The presence that reaps positive reviews from the community had increasingly convinced SAK in carrying out its functions. In terms of monitoring activities and data access, Wanwas, through SAK, carried out the process of collecting data at each deputy, working unit, regional, district, even any working package without any obstacles [5].

Another obstacle came directly from the field, namely obstruction of damage to information, communication and transportation. According to the IFRC World Disaster Report (2005), information played a very important role in responding to disasters, and the information itself was a form of assistance [18]. Due to the preparation of emergency, response activities and relief activities can be said to be controlled by the information available. Therefore, sharing information between interested parties became very necessary and was mutually beneficial in launching disaster response activities. A vital problem was transportation problems. Presidential spokesperson, Andi Malarangeng, said that transportation problems were an obstacle in the distribution of disaster relief to Banda Aceh. As a result, there were reliefs that piled up at Banda Aceh Command Post since there was no transportation [15].

The above problems were able to be solved with the help from voluntary agencies and neighboring countries. Aid that was come from the United States, which was US \$100,000 in the form of goods such as generators, tents, survival equipment. Other countries that provided further assistance of US \$ 2 million, and other assistance in the form of tools to purify water of US \$ 200 thousand were channeled through the Indonesian Red Cross. The Australian Government disbursed US \$ 10 million in goods sent directly to Medan. Canada provided US \$ 4 million in aid and gave hercules to Indonesia. The assistance that came to Indonesia was given through several ways, such as through the Indonesian Red Cross, International Red Cross (ICRC), the country's Red Cross and directly through the government (Bakornas). In addition to the state there were also 12 foreign NGOs that provided assistance such as Medecins Sans Frontieres from Belgium [13].

The task of reconstruction and rehabilitation in Aceh is the main responsibility of the Rehabilitation and Reconstruction Agency (BRR). BRR was the target of criticism and praise for facing a great challenge to rebuild Aceh. The biggest complaint was addressed to the slow pace of reconstruction and rehabilitation efforts. The Speaker of the DPR, Agung Laksono, for example, in mid-2006 expresses concerned over the slow pace of reconstruction in Aceh [23]. A survey of the Indonesian Survey Institute (LSI) found that although many Acehnese agreed that BRR had performed much better in 2006 than in 2005, the majority of residents still complained about their inaction [22]. Therefore, it was very important for BRR's successor, the Aceh Reintegration Agency (BRA), to improve its performance in continuing the BRR's task in developing the Aceh region.

SBY's leadership in overcoming the Aceh Tsunami brought many positive impacts on the image of the government and the Democratic Party. This was proven when SBY was re-elected as President of Indonesia in 2009. Many people at large were impressed with SBY's success in overcoming the natural disaster in the form of the 2004 Aceh Tsunami. The central and regional governments must play a major role in maintaining post-conflict peace in Aceh [10]. The government must establish a mechanism for peaceful resolution of conflicts in a democratic order. These tasks include, strengthening the justice system, consolidating conflict management institutions, fostering good relations between the center and the regions, and creating a democratic political order.

With regard to the need for a strong and long-lasting justice system, the challenge faced by Aceh concerns the imperative to establish effective, independent and neutral law enforcement agencies and institutions (police, court, prosecutors). Strengthening legal institutions and professionalism of law enforcement officials (especially the police) required a broader focus on security sector reform. Although reforms in these two fields will depend on broader reforms at the national level, the special context of Aceh as a post-conflict area must be taken into account. Clean governance of legal institutions and law enforcement officials will clearly reduce the possibility of growing a sense of injustice [17].

#### *3.4. The Condition of Aceh People during Post-Rehabilitation and Reconstruction*

The process of mental and economic recovery of the victims of the Aceh Tsunami showed the high social capital of the population. This can be seen from the victims who were creative and had their own way to rise up independently. Evidences given by the victims of Aceh Tsunami to help each other and show concern for others when the beginning of the tragedy. They shared food resources with each other and wanted to lift the corpse without having to be asked. This showed that the social relations and integrity of Aceh tsunami victims remained strong in times of crisis, besides those victims had strong beliefs that helped the recovery process. The values of Islam (submission, sincerity, and patience) and the rumors emerged are also examples of how a cultural response is born as a way for people to gather forces in responding to disasters that they cannot fully comprehend. It became a force for the community to survive and recover [16].

The process of rehabilitation and reconstruction had also been a challenge for community reintegration in the aftermath of a disaster. The independence of the victims were disrupted when confronted and collided with programs that did not pay attention to the value that was in the community and abundant material assistance that was not managed properly. Too much assistance also had a devastating effect which made most tsunami victims spoiled and money oriented.

#### **4. Conclusions and Suggestions**

An earthquake measuring 8.9 on the Richter scale followed by a tsunami wave struck most of the coast of Aceh and Nias, this disaster occurred on Sunday, December 26, 2004. This disaster claimed many lives and property. This major disaster caused the lives of people in the region to experience total paralysis in almost all fields. Because of this emergency, President SBY issued a Presidential Decree on December 27, 2004. The contents of the Presidential Decree were to declare the natural disasters of the earthquake and tsunami waves in the regions of Aceh and Nias as a national disaster. Furthermore, it also issued directives in the form of 12 directives to all levels of the United Indonesia Cabinet and the Governor of NAD Province and the Regent of Nias to immediately take comprehensive action in handling the natural disaster. As a follow up, Presidential Instruction Number 1 of 2005 was also issued regarding the Emergency Response Activities and Planning and Preparation for Post-Disaster Rehabilitation and Reconstruction.

Rehabilitation was carried out from April 2005 to December 2006. Rehabilitation of the area aims to restore and restore the function of buildings and infrastructure, this is very urgent to follow up on the emergency response phase. For example, rehabilitation of worship places, hospitals, basic social infrastructure, and economic facilities and infrastructure. The main goal is to improve public services so that they are adequate to support people's lives. The reconstruction phase was carried out after the emergency response phase, starting in July 2005 to December 2009. This phase aims to rebuild urban, rural and regional agglomeration areas. This process involves all affected communities, experts, representatives of non-governmental organizations and the business world. The rebuilding of facilities and infrastructure is carried out after the completion of spatial adjustments, at the provincial, district and city levels that have been damaged.

The rehabilitation and reconstruction carried out by SBY did not go as expected. Every policy implementation there is always a gap between expectations and reality. The researcher found a significant obstacle, namely, distrust of donors to BPR due to the high level of corruption in Indonesia and obstacles in the form of (information, communication, and transportation). The post-tsunami rehabilitation and reconstruction process also had an impact on the image of President SBY. The first impact is in the form of laws and regulations and all regulations regarding natural disaster management in Indonesia. This has a positive impact because it is a capital for Indonesia to face natural disasters that cannot be predicted. Second, the people of Aceh have become aware of the importance of living side by side. This can be proven by the end of GAM conflict which is a problem from time to time in Indonesia. In addition, the people of Aceh can learn a lot from the events they have gone through and can face the tsunami disaster.

The suggestions provider in this research are the lessons learned from the handling of Aceh Tsunami can be utilized by the Regional Government or the Central Government for disaster

mitigation. First, allocating resources for risk mitigation and disaster preparedness is an important investment for a country. The Indian Ocean Tsunami Early Warning System is able to send warnings to tsunami control centers in various countries within ten minutes of an earthquake occurring. Next, building coordination between institutions and funding mechanisms should be taken as well.

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