



## ESTABLISHMENT OF DISASTER PREPAREDNESS THROUGH HIKAYAT SMONG ON SIMEULUE ISLAND

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### **Abstract**

*Western Indonesia is an area where the Indo-Australian Plate meets the Eurasian Plate, making it vulnerable to natural disasters such as earthquakes, volcanic eruptions, and tsunamis. Indonesian people who are rich in wisdom have effective local references in disaster mitigation management. These references need to be explored to strengthen the cultural basis for disaster preparedness and mitigation. Through ethnographic and psychology studies, this study examines aspects of mental formation of disaster preparedness in the people of Simeulue Island based on local wisdom contained in the Hikayat Smong. This study found that Hikayat Smong proved to be an effective disaster mitigation for the people of Simeulue during the 2004 Tsunami and 2005 Earthquake. Apart from providing disaster information through oral history, it also provides an ethical and aesthetic foundation in shaping the character and mentality of the community in dealing with disasters. It is proven that with a large population, the victims of the tsunami and earthquake on Simeulue Island were very few and the post-disaster recovery process was fast and effective.*

**Keywords** : Disaster Preparedness, Hikayat Smong, Simeulue Island

### **A. INTRODUCTION**

Geologically and geographically, Simeulue Island was the area closest to the subduction zone and the epicenter of the earthquake during the 2004 Tsunami, but when the 2004 Tsunami occurred, only 7 people died out of a total of 70 thousand people who died from the mega disaster. The cause of the large number of fatalities was strongly influenced by the tsunami mitigation factors at that time, which were almost unheard of in the people of Aceh Province, so ignorance of the tsunami disaster had an impact on the large number of fatalities.

Residents of Simeulue Island know that a tsunami wave will occur with the term smong. Through this local wisdom, it makes contextual learning for the community that is closely related to natural phenomena. The signs of an impending tsunami are

recorded in the smong saga which has been taught to the next generation of community leaders. The people of Simeulue Island were spared from ignorance of the tsunami from the culture of telling the legend of the Smong story from generation to generation which is still preserved in the community. So, when seismic activity occurs, the people of Simeulue understand what they are going to do (rescue themselves/evacuate to high areas). History records that the Smong Hikayat previously strengthened again after the 1907 earthquake and tsunami on Simeulue Island. (Dadek, et al: 2019). Local wisdom has made disaster learning effective in building disaster mitigation in the region. Local wisdom has become an alarm for disaster anticipation passed down by community leaders from history and saga. Several meanings of stanza smong explain the signs of an imminent tsunami. If the sea recedes unexpectedly as usual, then there are lots of fish floundering on the shoreline, then there will be a disaster. The elders there then ordered the residents of Simeulue Island to flee to higher ground. (Borokoa in Desfandi, 2014).

## **B. METHOD**

This research is a conceptual based study *literature review* in understanding the power of local cultural treasures as a basis for disaster mitigation. This research is devoted to studying the Smong saga on Simeulue Island which is suspected of being an "oral mitigation" that made the people there responsive to the tsunami hazard. Field findings (*field research*) analyzed, processed and sought a summary of the findings to be obtained. Using the local wisdom approach, the informative values and characters generated from smong are examined so that they form the construction of disaster preparedness in the community. Disaster mitigation theory is used to measure how these values contribute to disaster mitigation for the people of Simeuleu Island, both in pre-disaster preparedness, disaster resilience and post-disaster response.

## **C. FINDINGS**

Tasnim Lubis's 2019 research examines the Nandong Oral Tradition in Simeulue District which is studied through an Anthropolinguistic approach. Research at the Faculty of Cultural Sciences, University of North Sumatra in 2019 explained that nandong as a key tradition in the Simeulue community, both in performance and content, has educational and informative values in shaping societal order. This research does not focus on the Hikayat Smong which is part of Nandong Simeulue's poetry, but explains that poetry can give a warning to the community how to live a life according to religion.

Ayu Suciani et al's research in 2018 which examined Smong as local wisdom in reducing disaster risk through a study of literature explains that local wisdom can be an early warning in preventing disaster risk. Local wisdom is easily understood, adapted and used by the community. smong is the right choice to use to reduce the impact of disasters such as earthquakes and tsunamis.

Brian G. Mc Adoo, et al in 2006 reviewing Smong: How an Oral History Saved Thousands on Indonesia's Simeulue Island During the December 2004 and March 2005 Tsunamis explained that Simeulue's oral history provided an incredibly powerful mitigation tool that has saved countless lives. a number where even a high-tech alert system with a 15-minute response time doesn't help.

Alfi Rahman and Kahirul Munadi 2018 from Syiah Kuala University on Communicating Risk in Enhancing Disaster Preparedness: A Pragmatic Example of Disaster Risk Communication Approach from the Case of *SmokeStory*. This research describes a case study of Smong that was successfully used to convey tsunami risk with a simple message and assisted large numbers of people in making the right decision, taking the right action, and saving lives during the 2004 Indian Ocean tsunami. risks and other messages, expressing concerns, opinions, even reactions to risks in risk management to strengthen community preparedness before, during, and after a disaster.

A N Gadeng, et al in 2017 studied The Value of Local Wisdom *Smoke* in Tsunami Disaster Mitigation in Simeulue Regency, Aceh Province. This study uses a qualitative verification approach which results that the local wisdom of smong is a tsunami early warning system implemented by the Simeulue community through manafi-nafi (folklore), mananga-nanga (songs for lulling babies), and nandong (humming). The local wisdom of smong is socialized through information boards and songs that are consumed by the community. all of these methods have become effective in increasing public knowledge about tsunami disaster mitigation. The government's consistency in socializing smong needs to be intensified to the younger generation so that this local wisdom is not lost in the Simeulue community.

Local wisdom or local wisdom is the cultural wealth of an area including understanding, knowledge and wisdom that guides the community in solving a problem. As an embodiment of knowledge, experience and wisdom, local wisdom grows and develops in a long process that interacts in a mutually beneficial system and relationship (Suparmi, et al, 2014).

Local wisdom in a broader sense is personality, community cultural identity in the form of values, norms, ethics, beliefs, customs, special rules that are agreed upon and have been tested over a long period of time in people's lives (Sartini, 2009). Thus, local wisdom can be interpreted as a view of life, knowledge, strategies and activities of local communities in a particular group for the purpose of answering various problems and meeting needs in all aspects of life such as religion, knowledge, economy, technology, social organization, language, communication, art and so on (Suparmi, et al, 2014)

In social life, local wisdom is useful in carrying out the social system that applies in society. This social system is needed because of the feasibility of life, maintaining traditions, environmental adaptation, and guidelines for local community life. In solving problems in society, local wisdom becomes a wise and wise part in solving problems. Thanks to local wisdom they can live their lives and even develop in a sustainable manner (Permana, 2010).

The most critical part of implementing mitigation is the level of full understanding of the nature of a disaster. In each region there are different types of hazards from disasters that will be faced differently. The understanding of natural hazards and the processes that cause disasters is a shared responsibility from scientific experts, government and society. The worst effect of any disaster is the death and injury it causes. The scale of the disaster and the number of fatalities are the main justifications for mitigation actions. Mitigation also requires economic protection against disasters in communities and regions. Identifying the elements of disaster risk shows the attitude of priorities in mitigation.

According to Law Number 24 of 2007, According to Law Number 24 disaster is defined as one or a series of events that threaten and disrupt human life and livelihoods. These events can be caused by natural factors (such as earthquakes and volcanic eruptions) or non-natural (such as leaking gas cylinders, fires) or due to human intentional factors (such as war or acts of terrorism) which cause casualties and damage to the environment and property as well as giving psychological impact on humans. Paragraph 11 explains that rehabilitation is not only about physical and psychological recovery after a disaster, but also emphasizes the restoration of public services at all levels of the bureaucracy. This is intended so that people can return to normal life after a disaster.

Based on the causal factors, the disaster can be divided into 3 (three) namely the first natural disaster, namely disasters caused by natural factors such as earthquakes, tsunamis, volcanoes, landslides, and hydro-meteorological disasters. The second is non-natural disasters, namely a series of events caused by human activities such as technological failures, the collapse of building structures, failed modernization, epidemics and disease outbreaks. The third factor is social disaster which is a series of events caused by human activities which include terrorism, social conflict and sabotage. As for Disaster Mitigation in the same Law it is stated as a planned effort that is carried out appropriately in order to minimize the impact of damage caused by a disaster. Disaster mitigation itself includes pre-disaster (in the form of prevention, mitigation, preparedness, early warning); during a disaster (emergency response, search and rescue, emergency assistance and evacuation); and post-disaster (covering recovery, rehabilitation and reconstruction activities as well as evaluation) (Theophilus Yanuarta et al, 2019)

Disaster emergency response is a series of activities carried out immediately at the time of a disaster to deal with the negative impacts that have arisen, which include activities to rescue and evacuate victims, property, fulfillment of basic needs, protection, management of refugees, rescue, and restoration of infrastructure and facilities. Disaster-prone is a geological, biological, hydrological, climatological, geographical, social, cultural, political, economic and technological condition or characteristic in an area for a certain period of time that reduces the ability to prevent, reduce, achieve preparedness and reduce the ability to respond to adverse impacts certain danger. Disaster risk is the potential loss caused by a disaster in an area and a certain period of

time which can be in the form of death, injury, illness, threatened life, loss of sense of security, displacement, damage or loss of property, and disruption of community activities.

In Article 26 of Law Number 24 of 2007 it is explained that several unified rights of the community are to obtain social protection and a sense of security, especially for disaster-prone groups of people, to receive education, training and skills in implementing disaster management. Obtain written and/or verbal information about disaster management policies. Participate in the planning, operation and maintenance of health service provision assistance programs including psychosocial support. Participate in decision-making regarding disaster management activities, especially those relating to oneself and their community, and carry out supervision in accordance with the regulated mechanism for the implementation of disaster management. Every person affected by a disaster has the right to receive assistance to meet basic needs. Everyone has the right to receive compensation due to a disaster caused by a construction failure.

In addition to rights, the community also has obligations as stipulated in article 27 of Law Number 24 of 2007. The obligation is to maintain a harmonious social life in society, to maintain balance, harmony, harmony and preservation of environmental functions; carry out disaster management activities; and provide correct information to the public about disaster management.

### **1. The story of Smong**

The term 'Smong' comes from Simeulue Island which is one of the districts in Aceh Province. In the local language, Smong is interpreted as an appeal to the public to immediately run to higher ground after an earthquake because soon the sea water will rise (Sara Masroni in Achmad Firdaus Abdillah et al, 2019)

The Smong saga is one of the contents of the saga which is sung in the Nandong tradition, a kind of tradition of speaking, singing and rhyming. This tradition is also found in other areas with different names. Nandong itself is an oral tradition in the form of the art of speaking which is passed down from generation to generation. The Nandong tradition is also spoken in various situations, both formal (traditional parties or celebrations) and informal (when residents are relaxing at home). Nandong is sometimes also accompanied by musical instruments such as drums and violins. Currently, the Nandong tradition is also contested in various festivals (Tasnim Lubis, 2019).

The Smong Hikayat is an interesting segment of the Nandong tradition because it contains educational and informative values regarding disasters. If you pay attention to the content of Hikayat Smong, there are at least 3 lessons that can be taken in three disaster contexts, namely pre-disaster, disaster and post-disaster.

Some poems that provide education and insight into disaster include:

*Smong dumek-dumekmo*

The tsunami is your bath water

*Linon oak-oakmo*

The earthquake is your swing

*Don't be fooled*

Lightning is your drum

*Use flashlights*

Lightning is your lights (Tasnim Lubis, 2019:9)

The poems that provide information on how to respond to the tsunami disaster include:

*Anga nononon malli*

If the earthquake is strong

*Oek suruik sahuli*

The water receded once

*Maheya said*

Hurry up and find it

*Fano me singa tenggi*

Places with high stops (Tasnim Lubis, 2019:9)

One of the important elements in disaster mitigation is the preparedness of the local community. Preparedness is important in reducing the negative impacts caused by disasters, educating the public when facing disasters and accelerating post-disaster recovery. Kusno and Uci wrote that preparedness should place more emphasis on the ability to prepare for a quick emergency response. But even more important is the psychological readiness of the community in dealing with disasters so that there is no panic which will exacerbate the situation during a disaster (Rina Mariana et al, 2019).

When the tsunami disaster occurred, the people of Simeulue Island were ready to face it through learning the local smong wisdom. In Tasnim, the sound of the saga has been written which has been translated into Indonesian, namely "If there is a strong earthquake, the water recedes very quickly, look for it quickly, a place to stop at is high" (Tasnim, 2019). According to Sembiring, et al stated that in the phases of natural disasters, local policies that support the local residents' response to disasters must be

maintained as the most important phase which is shared. The message conveyed is the creativity created by its predecessors which is realized in the daily life of the Simeulue people. This tradition is passed on orally because of the wealth, heritage, and local wisdom that lives and needs to be maintained so that it does not become extinct.

The smong saga makes the people of Simeulue more prepared and alert in dealing with disasters. This makes disaster mitigation run very effectively and quickly. Through historical experiences that have been experienced by previous generations, smong saga is passed on to the next generation. stanza *Ede smong kahan ne (that's the name tsunami)*, *Turiang da grandmother ta (stories passed down from generation to generation by our grandmothers)*, *Mi redem teher ere (remember all of this)*, *message navi-navi da (order their stories)*.

## 2. Informative values and alertness in the Smong saga

The people of Simeulue conveyed their experiences of the tsunami disaster through the saga and hums sung by the parents there when they rocked or put their babies to sleep. So that knowledge about disasters is not lost or even forgotten even though the same disaster has occurred for almost a century. Making knowledge as local wisdom. Yes, this may have to be imitated and applied to other regions, so that the number of fatalities due to the tsunami disaster can be reduced in the future (Sara Masroni in Achmad Firdaus Abdillah et al, 2019)

Tasnim Lubis said that the Nandong poem, which contains the Smong saga, provides information to the people of Simeulue so that they are familiar with changes in environmental conditions. The messages in the poem then show that natural events such as tsunamis, earthquakes and extreme weather are ordinary natural events that do not need to be overly responded to. The rhyme lyrics can ultimately strengthen the soul to overcome fear in facing an event. The use of metaphors that are close to people's lives shows that the Smong Hikayat was created by the local culture. It is hoped that the metaphors of water, swings, gendan and lights can provide an easy understanding for the public regarding the information provided (Tasnim Lubis, 2019:10-11)

Facing the Tsunami, poetry gives a very accurate mitigation message, namely when there is an earthquake (*Anga nononon malli*) and the sea water suddenly receded (*Oek suruik sahuli*), one must immediately get away from the beach and run as fast as possible (*Maheya said*) and seek refuge in higher places (*Fano me singa tinggi*). (Tasnim Lubis, 2019:9)

## D. DISCUSSION

The western part of Indonesia is the area where the Indo-Australian Plate meets the Eurasian Plate, making it prone to natural disasters such as earthquakes, volcanic eruptions and tsunamis. Indonesian people who are rich in wisdom have local references that are effective in disaster mitigation management. These references need to be continuously explored to strengthen the cultural basis for disaster preparedness and mitigation. Knowledge about disaster mitigation must continue to be disseminated from current generation to future generations. Hopefully the community can take

lessons from a disaster event that occurred in their area, such as earthquake waves and tsunami waves which greatly impacted the safety of lives.

Local Wisdom of Coastal Communities Against the Tsunami Cultural diversity that is deeply rooted in the traditions of community life in each region is a distinct resource for Indonesia. In addressing the potential for frequent disasters, it turns out that many people have unique local wisdom in each region. The local wisdom of the community in dealing with this disaster is a form of learning from the traditions of their ancestors who have experienced this disaster before. Several regions in Indonesia have unique traditions in dealing with disasters ranging from adjusting the shape of buildings, understanding natural signs such as animal behavior, naming cities, and composing songs, poetry, saga, or stories about past disasters. Like the Smong in Aceh who saved the people of Simeuleu Island from the 2004 Aceh Tsunami because they have been guided by generations that after a big earthquake occurs and the sea water recedes they must immediately save themselves to higher ground. This local wisdom should be a valuable lesson that we must understand and serve as a guide in the preparation of urban planning, buildings and settlements. So that local wisdom can become a mitigation and preparedness effort for a tsunami disaster that can appear at any time in Indonesia. Local wisdom in the form of poetry about the tsunami (Adi Warsidi, 2013)

From the Smong saga, many Simeuleu people can be educated so that the number of victims who are saved will continue to increase. Communities will continue to be alert and ready to occupy settlements that are vulnerable to disasters. The Simeuleu people conveyed their experiences of the tsunami disaster through tales and hums sung by their parents during the process of rocking and putting their children or babies to sleep. So that knowledge about disasters will not be lost or even forgotten even though the same disaster has occurred for almost a century and makes it a local wisdom. In this mitigation is a potential that can be imitated by other regions as a stronghold when a disaster occurs.

The findings made by the government in commemorating the disaster were to make the tsunami warning that hit Aceh province a national holiday. In this case the government is committed in the policy to socialize the history of disasters to be remembered by the people nationally. This is intended so that the Indonesian people are prepared to face disasters and efforts to strengthen (mental) mitigation will continue to be understood both in pre-disaster conditions, when a disaster occurs, and the stages after a disaster occurs.

Furthermore, campaigning for knowledge of the tsunami through work. This could be by making online games based on disaster knowledge or by making songs and saga as practiced by the Simeuleu people on traditional mitigation for reducing the risk of a tsunami disaster which flows and metamorphoses into local culture and wisdom. (Sarah:2019)

Then the 2004 Aceh tsunami incident will give a signal and automatically be ready to face when a disaster comes. awaken international awareness to spread the news of the tsunami threat programmed by the Disaster Preparedness Village to respond to



disasters. Help is coming. Currently, GITEWS has changed to the Aceh Provincial Social Service. Currently, international groups have arrived with various forms of InaTEWS managed by the BMKG, there are approximately 26 disaster prepared villages. proposed mitigation program. The mistake of synergizing with BNPB, BIG, and Empowerment agencies was done so that the other community was making another warning system. has been prepared for disaster, especially early tsunami in cooperation with Germany when the tsunami disaster came. named GITEWS (Germany Indonesia Not only the technology that is Tsunami Early Warning System). (dw.com)

## E. CONSLUSION

The story of Smong is thought to have been known by the Simeulue people for a long time, even long before the 1907 tsunami. The 1907 earthquake with a magnitude of 7.6 followed by a tsunami is a dark history of disaster in the lives of the Simeulue people. Many say that more than half of Simeulue's population died as a result of this incident (there is no exact record of how many Simeulue's population was at that time). This dark incident was finally poured into the story of Smong which was told orally. The elders of the Simeulue community believe that this incident may recur in the future. Even though the Smong had been known long before the 1907 tsunami, they were unable to save them from the raging waves that occurred more than a century ago. Smong's development was planted and strengthened after that incident.

In general, these initiatives look massive during the recovery period and decrease in intensity and sustainability over time. In fact, earthquakes and tsunamis can occur at any time. That is, it is necessary to ensure that reinforcement must be sustainable over time because generations are constantly changing. The old generation died and was replaced by a new generation who had never witnessed the tsunami directly. Strengthening disaster management capacity in a more comprehensive manner must still be carried out without forgetting the local knowledge that already exists in the community itself. Efforts are needed to record this local knowledge by documenting it so that it can be more accessible, sustainable, and even needs to be integrated into the education curriculum.

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