

BEHAVIOR BASED DISASTER MITIGATION LOCAL WISDOM IN RAHTAWU VILLAGE

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Abstract

Rahtawu Village, Gebog District is the northernmost village in Kudus Regency which is geographically located on the slopes of the Muria Mountains and is directly adjacent to the Muria forest. Rahtawu village has a natural view of the Muria mountain area, prone to disasters and has unique characteristics, namely that there are many punden or petilasan which will be crowded by pilgrims on the night of one suro. The biggest disaster recorded in Rahtawu Village was in 2006 there were flash floods and landslides in 2014. The purpose of this study was to identify disaster mitigation behavior in the community in Rahtawu Village based on local wisdom. The research methodology uses qualitative phenomenology with five informants born and living in Rahtawu Village. This research instrument uses interviews and observations with coding data analysis. Based on the results of the study, it shows that the behavior of disaster mitigation in the form of local wisdom of the people of Rahtawu Village, namely alms of the earth and barikan. Disaster mitigation behavior originating from these ancestors is still preserved until now.

Keywords: Rahtawu village, local wisdom, disaster mitigation behavior.

INTRODUCTION

The disaster that occurred in Rahtawu village was the umpteenth time. It was recorded that on March 20 2006 the village of Rahtawu experienced a flash flood, which resulted in the death of two residents and the destruction of five houses and the loss of the residents' animals such as four cows and twelve goats. Then in January and February 2008, landslides occurred which caused one house in Semliro hamlet and seven houses in Wetankali hamlet, Rahtawu Village to be totally damaged, and 47 houses to slightly damaged. Another loss that cannot be counted is the loss of land cultivated by farmers which leads to a bend in the river flow and a loss of sense of security, giving rise to feelings of anxiety that another landslide will occur. (Widjanarko & Minnafiah, 2018).

Not a decade from mid-January to early February 2014, again, villages on the edge of the Muria forest, such as Rahtawu Village, Kudus Regency and Tempur Village, Jepara Regency and several villages in Pati Regency experienced floods, wind gusts and landslides that worried all parties. The landslide in Kudus started from the forest edge village of Muria, in the villages of Soco, Ternadi, Colo, Menawan and Rahtawu. The landslide condition in Kambangan Hamlet, Menawan Village, Gebog District, Kudus Regency has resulted in 12 deaths. Meanwhile, in Rahtawu Village, the cliffs are 150 meters high in the Gambir area, Wetankali lomgsor hamlet



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which caused about 15 hectares of agricultural land to be damaged or lost, the mosque was heavily damaged and approximately 1,480 people took refuge in the Rahtawu Village Hall (Widjanarko, 2014).

The organizer of disaster management consists of 3 stages, namely the pre-disaster, during the disaster and post-disaster stages. Traditional communities in general have long coexisted with nature in harmony, so there are various ways to use natural resources in a sustainable manner. In environmental wisdom, conservation is also manifested by the community. Local wisdom which is manifested in the form of adaptive behavior towards the environment has an important role in disaster risk reduction. Local wisdom that applies in a community has a positive impact on the community in facing and responding to the coming disaster. Local wisdom is an extraction of various experiences that are passed down from generation to generation from ancestors or previous people who have experienced disaster events (Marfai, 2012).

Keraf (2002) explains that local community wisdom is all forms of knowledge, belief, understanding or insight as well as customs or ethics that guide human behavior in life in an ecological community, concerning how to relate well to all the contents of nature. This wisdom is holistic because it involves knowledge and understanding of all life and all its relationships in the universe.

Various examples of wisdom in preserving the environment of local communities can also be found, for example in the Kasepuhan community (West Java), the Siberut community (West Sumatra), the Kajang community (South Sulawesi), and the Dani community (Papua). Generally, local people think that the environment around them belongs to and inhabits other than humans. Therefore, people who live around it must respect and protect their places, such as forests, mountains, valleys, and water sources. In fact, not a few of these places are used as sacred or sacred places (Darmanto, 2009; Adimihardja, 2009; Boedhihartono, 2009; Purwanto, 2009).

Local wisdom can also be interpreted as a view of life and knowledge as well as various life strategies in the form of activities carried out by local people in responding to various problems in meeting their needs, covering all elements of life, namely religion, science, economy, technology, social organization, language and communication and the arts. They have understanding, programs, activities, related implementation to maintain, improve and develop elements of needs and ways of fulfilling them by taking into account human resources and natural resources around them. Local wisdom is seen as very valuable and has its own benefits in people's lives.

The system was developed because of the need to live, maintain and continue life in accordance with the situation, conditions, abilities and values that are lived in the community concerned. In other words, local wisdom then becomes part of their wise way of life to solve all the life problems they face. Thanks to local wisdom they can live their lives and even develop in a sustainable manner (Permana, 2010).





Research by Permana, Nasution and Gunajaya (2017) states that local wisdom in disaster mitigation belonging to the Baduy community is actually based on pikukuh (traditional provisions) which serve as guidance and direction in thinking and acting. Pikukuh is the basis of wise and prudent traditional knowledge, including disaster prevention.

To answer the statement above, the question posed in this research is whether there is still local wisdom owned by the people who live in Rahtawu Village, Kudus Regency related to efforts to carry out disaster mitigation? If it's gone, why? If so, what form of behavior is it?

METHOD

Based on the objectives and problems to be studied, namely to obtain data on the behavior of local wisdom in the people living in Rahtawu Village, Kudus Regency related to disaster mitigation. The author uses a qualitative research method with a phenomenological approach. According to Creshwell (Mamik, 2015) phenomenology, is a type of qualitative research, where researchers collect data with participant observation to find out the participants' essential phenomena in their life experiences.

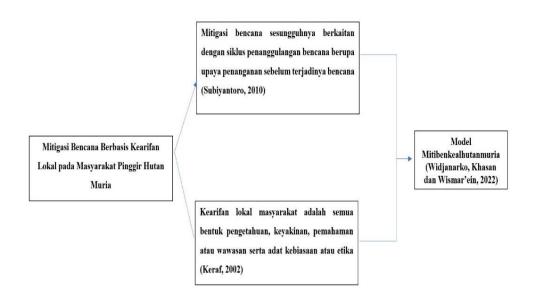
Research informants were determined using the snowball technique, namely data collection by researchers through interviews with one informant to other informants who meet predetermined characteristics. The characteristics of the informants in this study were: individuals who were born and who live in the research location and are active in the community or community leaders and know about the disaster that occurred in their village.

The data collection methods used to reveal the problems in this study were interviews and observations. The interview technique in this research is direct interview, where the writer deals directly with the informant and asks several questions. While what is observed can be a description of the attitudes, behavior, behavior of research informants related to disaster mitigation based on local wisdom.

The instrument used in conducting interviews and observations, namely the Mitibenkealhutanmuria research instrument (Muria Forest Local Wisdom-based Disaster Mitigation) is an instrument or measuring tool intended to detect disaster mitigation based on local wisdom of people living in the Muria mountains (Widjanarko, Khasan and Wismar'ein, 2022).







In this study, researchers used coding techniques as a method of data analysis. According to Herdiansyah (2013) coding techniques are data that have been obtained from interviews, observations, or other methods that have been converted into transcripts based on certain themes and certain categories, given a certain code.

All data collected in this study were transcribed, then edited, and coded according to the type of data.

RESULTS

There were five people who became informants of this research, namely Srm, Strn, Sdi, Kms and Akk. Regarding the knowledge of the disaster that had occurred in Rahtawu Village, each informant gave the same and different answers as well as complementing each other.

The events of flash floods and landslides are always remembered by informant (Srm) _P1a, this is the story:

"Around 1960, how much was an it, 12 or so landslide hit houses, but 8 people died, 3 didn't find them. In the RW Krajan, which is a bit worrying, in 2014, namely a mountain landslide next to the Wetan River, about 10 hectares of movable land, the landslide covered the Gelis River, the Krajan Hamlet became a river,"

Confirmed by Sdi_P3a:

"There were landslides and floods, the last time in 2014 was the same wet season here, krajan also has a landslide"





Clarified by AKK_P4a who says:

"A landslide occurred in 2014, in the RT 01 area, in the same garden area"

In more detail by Srm P1b:

"The flash floods in Semliro Hamlet were in 2006, the victims were 4 cows and 15 goats that found my dead person, his head was perforated, the body had been lying there for 3 days, and the smell was different"

Added again by Srm P1c

"Every year there are small landslides. Then in the Jambu area in 2014 there was a crack in the ground 15 meters long, about 5 cm wide."

The Strn_P2a informant said the same thing:

"The natural disaster in 2006 was a flash flood or a flood, which resulted in the death of 2 people from Semliro Hamlet.

Landslide in Rahtawu Village, which has happened for a long time, was explained by Strn_P2b that:

"In 1964 there was a landslide disaster in the hamlet of Wetan Kali, the victims were 6 people died, 2 people were not found buried, so 8 people died'

Is there any way to reduce/prevent this disaster? Was this method taught by parents?

Mr. Sdi_P3b said:

"MIn my opinion, there has been a change in cropping patterns, from seasonal to non-seasonal crops, annual crops are like corn, if the crops are not seasonal, yes.... that coffee, that change since 2014 as a whole"

Added by Akk P4b:

"Efforts to anticipate disasters are given socialization to the community on agricultural lands which are located on slopes, and we are trying to reforest those slopes, the crops used to be seasonal"

Also added by Strn_P2c:

"As for reducing disasters in general, socialization is held to the community members. Apart from that, a salvation is held every year, asking those in power to be kept away from disasters by giving alms feasts in certain places. So local wisdom like that has been passed down from our ancestors"

What do you do during a disaster?

"We evacuate as best we can (during a disaster)" explained Pak Sdi P3c





Added by Akk_P4c:

"The first time during a disaster, improvements were made to the water flow, to protect it, plants were planted"

And Mr. Srm_P1d:

"The first is to do it, the victim is evacuated until they are found, then the second is that the access to the main road is repaired, continuing to improve the drinking water channel, if it stops being treated. If there is an avalanche like in the Wetan Kali hamlet in 2014, if there is concern for the general public, evacuate,"

Spliced by Mr. Strn_P2d:

"Psave the community so that there are no victims"

What did you do after the disaster?

Mr Sdi P3d says:

"We cover the land, do the planting"

Added by Mr. Srm_P1e:

"From 2007 to 2012, every season before it rains, in our area we held reforestation. I asked to plant bamboo. If you want to plant anything, it's okay as long as there's bamboo, then below, there are bamboo and palm trees,"

And

"There is socialization, an appeal in vulnerable places such as in the Wetan Kali hamlet not to be planted with corn,"

Added by Mr Akk_P4d:

"Efforts to anticipate, given socialization to the community on agricultural lands that are located on the slopes, then we are trying to make it green again"

With regard to confidence indicators, each informant also has a different answer but the essence is the same. The informants believe that disaster can happen in this village if there are several signs, as stated by:

Srm_K1a informant who said:

"When it rains for 5 days 5 nights on Wednesday kliwon or wage Friday, it is certain that there will be a disaster,"

Likewise with an informant named Strn_K2a who said:

"We believe that because of the geographical conditions of this area, if the land here is rocky soil then the community believes that landslides will not occur, but if there is no rocky or steep or strong soil then the community believes that landslides can occur."





"In our opinion, it is never wrong because of the science of titen, a routine habit that often occurs there"

Added by Sda_K3a opinion:

"K because of the geographical conditions, the location is hilly, the slope of the land is so sloping, and the rainfall is so large.

Explained further by Mr. Akk_K4a:

"Signs of disaster according to individual beliefs, in general we speak according to facts, logic, when it comes to mystical matters, nothing"

Emphasized again:

"Personally, I don't believe in mystical things, if there is a landslide it is related to the sloping place and due to natural factors"

On indicators of understanding or insight, the informants' answers also varied. Informants know that Rahtawu village is a disaster-prone village:

The informant Mr. Srm_PW1a said:

"I learned from the BMKG from Bandung in 2011 who explained that Rahtawu village is prone to disasters, especially the Wetan River hamlet,"

Unlike the opinion of Mr. Strn_PW2a: "Yes, I know from the routine earlier (titen science)" Sdi PW3a explained:

"From experience alone, there is also PMI to conduct education for residents and then there are social services as well"

Added by Mr. Akk_PW4a:

"From the existing facts, after we understand the condition of the soil and the commodity factors of the farmers that have been arranged, in fact landslides and flash floods can be minimized...

Informants after knowing that Rahtawu village is a disaster-prone village, have various ways of informing others:

Mr. Srm_PW1b's story:

"The information is to each RT,"

If Mr. Strn_PW2b:

"Whenever there is a meeting in the village and it is needed there, I often convey it"





Likewise with Mr. SDi_PW3b:

"Yes, it has been passed down from generation to generation, when it's been a long dry season and then it rains, we have to be vigilant about that. That's all the information is given to the children."

Explained by Mr. Akk_PW4b:

After a disaster occurs, the community is aware of how to respond, the village government itself has been more alert to dealing with such matters, to bring in reliable, trustworthy personnel, right?

There are habits/traditions related to efforts to prevent or anticipate disasters, informants give answers that are basically the same.

Mr. Srm_A1a said:

"Every month of Maulud, Friday wages, we are together, each brings a whole chicken, and this is still being carried out until now, as a prevention of cracked mountains,"

Added again by Srm_A1b:

"First, the charity slametan before the rain, including the anchoring season, Friday legi, if here at the crossroads, the activity is that there is an appeal from the village government to clean the gutters and I ask them to plant 10 trees. Or vegetables, there are eggs and then there is charcoal, the vegetables have colors 7 the vegetables are free, the important thing is 7 kinds, then there is grilled tempeh and tumpeng,

And

"Provide water sources, the implementation is in the month of Suro, on Saturday kliwon, here there are three points of 5 water sources, in Eyang Jonggring Saloka there are 2 sources, then in the hamlets of Kali Wetan and Kali Kulon and in Growok,"

Pak Strn_A2a's story is different:

"The ritual, for example, in the month of Suro on Friday, we ask God to pray safely in Grandfather Sakri's place, there are various uborampes, there are offerings that prepare caretakers and the bancaa community members bring ingkung or whole chickens to face themselves. In Abiyoso's grandparents there are, in Sakri's grandparents there are, in Jombring Saloko Dukuh Semliro there are and they are routine every year,"

Added again by Mr. Strn_A2 b:

"Then harbor, it's the beginning of the rainy season, in Punden Jogowongso there is a segorogoh barikan which cooks in a kendil (a place for cooking from the ground), there is liwet rice and there is a botok inside, eat it from the inside / take it without using a plate, when in the wetan hamlet there is a cut Gibas goats will later have their feet and head buried there, the meat will be cooked for community members' banca, the average day at Harbor is Friday wages, if there





is no Friday the wages will be shifted to certain days according to the will of the head of the elders there, sometimes in September or October start harbor by seeing the amount of rainfall"

This opinion was clarified by Mr. Sdi_A3a who said:

"There is a port just before the rain on Friday Wage. Every Friday the first wage of the anchoring season we do a ritual, on the first Friday we cut the goats at Eyang Modo's Punden and Eyang Narada, then on the second Friday we do the laying of chickens in the same place earlier. , continue on Friday the third wage of chickens at Grandmother Pandu at Peak 29 "_

Mr Strn_A2c says:

"Earth alms every day on Saturday Kliwon, what is obligatory is tayub and slaughtering buffalo at the village hall, if in Semliro hamlet, it is held alone because it is considered too far away, so the ancestors begged to do it themselves. Not yet, it's a story from an ancestor, for example someone who is possessed by a spirit keeps dancing on the street. If it's alms to the earth, in the past, they used to give alms after harvest, meaning that residents already have more food after continuous generations, finally it is determined to give alms to the earth in the flanked moon, if there is no flanked moon, kliwon saturday will step on to the big moon."

This was also explained by Mr. Sda_A3b:

There is a harbor just before the rain on Friday Wage, every Friday the first wage of the anchoring season we do a ritual, the first Friday wage we cut the goats at Eyang Modo's Punden and Eyang Narada, then on the second Friday we do the laying of chickens in the same place, continue on Friday the third wage of chicken at Grandmother Pandu at Peak 29"

"Then there is alms from the earth in Semliro hamlet, the day is wage Friday, the months are tight, we have feasts at three points, on Friday we have a feast with Grandma Modo, then Saturday we celebrate at Grandmother Narodo and have a feast at the house of the leader of the Semliro hamlet, then every week we hold art events You can't leave it all, including the tayub on Sundays, the chicken or the goat, there are no special provisions."

Likewise with the opinion of Mr. Akk_A4a:

"Barikan.. especially in the lazy season and the thing that doesn't change and erase is alms of the earth, alms of the earth with tayub entertainment, even though in a pandemic situation like yesterday, fighting against the government, daring to serve the officers just because they feel that according to our citizens, whatever happens is faced together" _Akk_A4b

Are there any traditions or customs in preventing or anticipating disasters that are lost or not done again?

Mr. Srm_A1d said:

"No customs or traditions are lost or not carried out"

Mr. Strn_A2d affirmed:





"There is no lost tradition, because I think that if it disappears it is dangerous, like the next village where the tradition is not carried out then many victims are affected by landslides, if at the same time the landslides occur, the landslides stop, as if giving residents time to save themselves."

Added by Mr. Akk_A4c:

"For people who don't dare not do it, if one village forgets, later there will be one or two people who carry it out representing one village"

DISCUSSION

Based on the description above, it can be concluded that there are interesting findings from the four informants. Public knowledge in dealing with disasters today is very much needed, because disasters are rare events that can be predicted quickly and precisely when they will occur, with the knowledge they already have will be able to minimize the recurrence of disasters. Therefore, the memory of people's knowledge of disasters in their environment is very important. On the indicator of knowledge, the informants still remember the landslide in 1964 and the flash flood in 2006 and the landslide in Wetankali hamlet, Krajan in 2014. Even the Srm informant was able to tell in detail when there was a flash flood in 2006 because the informant found one of the victims. Who died?

This is in line with Notoatmodjo (2010) who says that knowledge is the result of human sensing, the result of someone knowing about objects through their senses, namely eyes, nose, ears and so on. by itself at the time of sensing to produce knowledge is strongly influenced by the intensity of the perception of the object, most of a person's knowledge is obtained through the senses of hearing, namely the ears and the senses of sight or eyes. A person's knowledge of objects has different intensities or levels.

Meanwhile, on the confidence indicator, two informants believed that a disaster could occur in this village if there were several signs, namely continuous rain for 5 days and 5 nights and due to the geographical location of the village.located on the hilly slopes of the Muria mountains with sloped soil and high rainfall, and not on rocky, hard ground.

One informant also does not believe in mystical things, if there is a landslide it is related to the tilted place, due to natural factors. Wardaningrum (2018) explained that belief in traditional information such as myths and dreams is generally still held by older citizens while some young people still believe in traditional information because they feel the need to respect older citizens so that there are no conflicts between citizens with different choices of information. This traditional information is usually conveyed by the source of the message (delivery) from generation to generation through fairy tales about myths, implied things such as dreams and certain events which are considered as a sign of imminent disaster or no disaster.

Regarding indicators of understanding or insight, the four informants knew that Rahtawu village was a disaster-prone village, the information was from BMKG, PMI who conducted disaster education to residents and saw the facts related to land conditions. One of the





informants believes in titen science. The science of titen or the science of remembering is one of the local wisdoms possessed by people in Java and also people around the world. This science aims to help local people identify from the start and act to save themselves during a natural disaster (Kurniawan and Soeparno, 2021).

In the indicators of customs or habits, there are customs or traditions in Rahtawu Village related to efforts to prevent or anticipate disasters, namely providing water sources, alms for salvation, harbor and alms for the earth. Haryanto (2013) said that forms of local wisdom in society can be in the form of culture (values, norms, ethics, beliefs, customs, customary law, and special rules. Local wisdom is a view of life and knowledge as well as various life strategies in the form of activities carried out by local communities in responding to various problems in meeting their needs. In foreign languages, it is often conceptualized as a local policy of local wisdom or local knowledge "local knowledge" or local genius. Various strategies are carried out by the local community to maintain their culture (Fajarini, 2014).

There are various social behaviors carried out by the community in forming, carrying out and maintaining natural disaster mitigation based on local wisdom. This is because in reality the people of Rahtawu Village still carry out and believe in natural disaster mitigation based on local wisdom as something important and sacred. Among them are barikan and alms of the earth, where in alms of the earth there is a belief not to perform the art of wayang (Prastyo et al, 2022). Regarding the regard for tayub and the prohibition against responding to wayang in the celebration of alms of the earth, SW, the wife of the former head of the Rahtawu village, revealed the following. "The ladies and gentlemen of Rahtawu Village are all puppets. They feel insulted if they themselves are filmed and used as a spectacle for the surrounding community," he said.

Several years ago, continued this 37-year-old woman, "There was one resident who was about to transmigrate, before leaving he thought he was tired all night. Unfortunately, he died in the morning. The same story is also experienced by newcomers or guests from outside, who intend to think that the puppets in Rahtwu, have become their way of death. Even before arriving at Rahtawu, the dalang and the newcomers died" (Widjanarko, 2016).

CONCLUSION

Based on the results of the study, it shows that the behavior of disaster mitigation in the form of local wisdom of the people of Rahtawu Village, namely alms of the earth and barikan. Disaster mitigation behavior originating from these ancestors is still preserved until now.

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