



Original article

Rural community resilience in dealing with a land disaster avalanche: Talamau Kanagarian study Pasaman Barat District

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ABSTRACT

Kanagarian Talamau is an area that is prone to disasters such as landslides. Disasters that occur cause losses in the form of physical, economic, and psychological damage. The focus of this study is to analyze the resilience of rural communities in dealing with landslides in Kanagarian Talamau. This research study used a qualitative approach, with a descriptive type. The informants of this study were people who experienced landslides in Kanagarian Talamau, West Pasaman Regency. The data collection method in this study was carried out in several stages, starting from observation, in-depth interviews, and document data collection. Analysis of the data using the thinking of Miles and Huberman carried out in several stages, namely data collection, data reduction, and drawing conclusions in accordance with the research objectives. The results of this study indicate that the landslide disaster has had an impact on the economy, culture, and social community in Kanagarian Talamau. The Kanagarian Talamau community continues to carry out activities in the disaster area, because there is no other job, which only depends on the agricultural sector. The Kanagarian Talamau community has a sense of love for their homeland and settlements in the category of family ties. This shows that the Kanagarian Talamau community did not leave their settlements even though their area experienced a landslide.

KEYWORDS: *Rural Community Resilience, Land Disaster, Avalanche*

1 INTRODUCTION

Indonesia is a country that is vulnerable to various types of natural disasters. According to Law No. 24 of

2007, a disaster is an event or series of events that threatens and disrupts people's lives and livelihoods caused by natural factors or non-natural factors, which are human factors, resulting in fatalities, environmental damage, property loss, and psychological impact (Eka Saputra et al., 2016).

A landslide was one of the disasters that occurred. A landslide disaster that occurs and often takes lives, loses property and causes damage to facilities and infrastructure that are affected by the economic and social conditions of the community in which they live. A landslide is the movement of slope-forming material in the form of rock, debris, or soil. The mixed material moves down or out of the slope.

The number of people in the West Pasaman district currently amounts to 436,298 people. In Kanagarian Talamau, the majority of the population make a living as farmers and gardeners of commodities such as rice, corn, vegetables, rubber, and palm oil. The Talamau people rely on crops from farming and gardening for household life. The harvest is sold to meet the needs of daily life. The majority of people who live in Kanagarian Talamau are mostly Minang people, but there are some from the trans community, namely Tapanuli and Batak. (Hidayat, 2018; Irwan, 2015).

Kanagarian Talamau is a lowland area, but there are several sub-districts located in the highlands. Kanagarian Talamau belongs to the highland area. This area often experiences natural disasters in the form of landslides (Amni Zakarsyi Rahman, 2015); (Irwan, 2015c). Initially, there was a landslide in Talamau in 2014, and it is still continuing today. Disasters that occur cause losses and even disrupt the psychology of the community. an estimated loss of Rp 1.76 billion. so that it causes a fairly large impact and is very detrimental to the local community.

When viewed from the topography in the Kanagarian area, Talamau is an area with a hilly topography. This is one of the factors that causes landslides. There is an

active mountain, namely Mount Talamau, which is the highest mountain in West Sumatra. Recently, there was a landslide disaster in Talamau Kanagarian, precisely at the foot of Mount Talamau. The disaster certainly had a big impact on the local community.

The unique thing is that the Talamau nagari community persists in living in the area, even when this area often experiences disasters. Therefore, this article analyzes the resilience of rural communities in the face of landslide disasters: a Kanagarian study of Talamau, West Pasaman Regency.

2 METHODS

This research was conducted in the Talamau Kanagarian, West Pasaman Regency. This research is of a qualitative approach with a descriptive nature. Withdrawal of informants is done by purposive sampling by determining certain considerations. The information for this research came from people in rural areas who live in Talamau Kanagarian. The data collection method in this study was determined by several stages, starting from observation, in-depth interviews, and document data collection. The unit of analysis of this research is the miso level at the community level. The data analysis used the thinking of Miles and Huberman (Matthew, 1992) which was carried out in several stages, namely data collection, data reduction, and drawing conclusions in accordance with the research objectives.

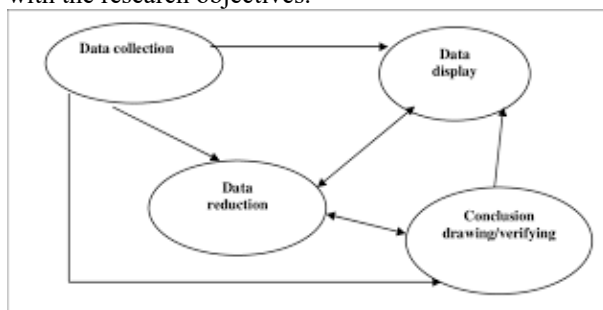


Figure 1. The iterative qualitative data analysis model (Miles and Huberman)

3 RESULTS AND DISCUSSION

Landslide as a Rural Area Disaster in Kanagarian Talamau, West Pasaman Regency

Resilience is an individual's capacity to respond to everything in a healthy and productive manner when faced with difficulties or trauma. It is important to manage the stresses of everyday life and have a set of thoughts that allow one to seek new experiences and view life as progress. Resilience generates and maintains a positive attitude to be developed (Satria & Sari, 2017; Irwan, 2021).

According to Reivich & Shatte (2002), resilience is

the ability to adapt and remain firm in difficult situations. Resilience is built from seven different abilities, and almost no individual has these abilities well (Taufiq et al., 2014; Irwan, 2015).

Number of victims due to the landslide disaster in Kanagarian Talamau. Based on data obtained from the landslide natural disaster in Kanagarian Talamau, West Pasaman Regency, landslides have occurred precisely in Kanagarian Talamau 5 times this year, where the first is in the sub-district of Talu, then there are three points leading to the talu causeway to the intersection of four, namely in the sub-district of Kajai, Kanagarian Talamau. Then, the second occurred on the ridge of Mount Talamau. As a result of the landslide, many lives were taken. The number of victims who died was as high as 13 people. Among them are 11 adults and 3 children. Then the number of victims who suffered serious injuries rose to as many as 29 people while the victims who suffered minor injuries were as many as 86 people.

Damage to infrastructure due to landslides. Based on data that has been obtained from several informants, land damage caused by landslides is quite large. The land damage in Kanagarian Talamau is 25 hectares. Then in Talu sub-district, 10 hectares of rice fields were damaged. In Sinuruk sub-district, the damage to rice fields is 15 hectares. In addition, the impact felt was also quite large, namely the damage to infrastructure, including the damage to houses in Talamau Kanagarian, amounting to 3,094 damaged houses. Then the damage to buildings of worship amounted to 29 buildings; 33 school buildings were damaged while damage to health service buildings resulted to 10. Additionally, 5 office buildings were ruined (Siti Nurjanah, 2022).

In addition to losing property, people also lost their families in death. The community also felt fear and sadness at that time; there were even people who experienced trauma (Profile of Gampong Blang Krueng, 2014). Another related research conducted by Thomas J. Huggin, Robin Peace, Stephen R. Hill, David M. Johnston, and Alicia Cuevas Mun (2015) entitled "Innovative visual demonstration of community resilience to disaster simulation strategies" states that resilient communities have experience in disasters that can help the community in simulating disaster preparedness (Satria & Sari, 2017).

The impact felt by the Talamau Kanagarian community from the landslide was quite large, especially when traffic road access was cut off. so that the activities of the people who usually trade, farm, and garden are hampered. Landslides also damage agricultural areas. For example in the Batang Lango area, the landslide was detrimental to agriculture. It damaged rice fields and irrigation systems that should have functioned. As a result of the landslide, it cut off irrigation flow, resulting in considerable losses to the community.

Not only is the physical impact felt by the Kanagarian

Talamau community, but also the psychological impact, such as adjustment within the community due to the changes that occur and are experienced by them, both in their social life and post-disaster economic life. Psychological impacts due to disasters can cause various things such as trauma, stress, PTSD, and paranoia (M. N. Rahman, 2020). Psychologically, almost all people experience stress after experiencing natural disasters such as landslides. because many people panic and think about the state of their houses, rice fields, and plantations (Deviantony, 2020).

Carrying out the resilience of the Kanagarian Talamau community resources, "economic resilience" was reviewed by Sina et al (2019), who stated the importance of paying attention to economic aspects, especially livelihood factors that need to be paid attention to by all parties in the context of disaster recovery in realizing disaster resilience. (Osmar Shalih, 2020).

Public awareness of the changes that occur in the environment itself due to disasters that hit is very important as an effort to reduce disaster risk that can caused and strengthen the resilience of the community itself in dealing with disasters. (Gondokusuman et al., 2021).

Of course, the landslide natural disaster has had an impact on the economy of the Kanagarian Talamau community especially for people whose livelihoods are trading, farming, and gardening (Qaiyim Asy'ari, 2018). In the past, they worked in their own fields and gardens, but now, as a result of the disaster, they work in other people's fields and gardens while waiting for their own fields and gardens to be managed again. Of course, this will greatly affect the economy of the Talamau Kanagarian community, who are affected by the natural disaster of landslides.

Experiences and lessons learned for the people of Kanagarian Talamau (Sobirin, 2017). People live in refugee camps and temporary shelters after the landslide disaster in Kanagarian Talamau. Because it is no longer possible to carry out activities in their own homes, due to the impact of the landslide disaster, the houses of the affected people were severely damaged. However, there are some people in the community who stay in their homes because the purpose is to look after their belongings, and there are also things that cannot be left behind.

After the landslide disaster in Talamau Kanagarian, the community lived in refugee camps and temporary shelters. Because it is no longer possible to carry out activities in their own homes, due to the impact of the landslide disaster, the houses of the affected people were severely damaged. However, there are some people in the community who stay in their homes because the purpose is to look after their belongings, and there are also things that cannot be left behind.

The economy is the main reason most of the victims

of the landslide disaster in Kanagarian Talamau return to their original places of residence, in addition to the need for housing so that they can survive and continue their next life. Damage to various dimensions ranging from income, economy, work, home, and environment motivates them to immediately reorganize their lives (Dyanti Febianitri, 2021).

After the landslide disaster, mitigation efforts can be carried out. For example, giving posters that are distributed and reproduced to the wider community so that they are aware and understand the dangers of landslides. Then, a socialization program was carried out where the activity was useful to provide awareness to the public about the importance of disaster mitigation. Then lastly, training and disaster simulation were carried out (A. Z. Rahman, 2015).

Efforts of the Talamau Kanagarian community to deal with landslides. During the first week of the community affected by the landslide disaster, they still live in refugee camps by utilizing and relying on assistance from volunteers throughout Indonesia. To survive, they try to get up again and scavenge the results of the plantation, which are still suitable for use. There are several rice fields and land that are still suitable for use, one of which is at the Timbo Agu intersection. They are gradually starting to replant (Rizkyah Isnaini, 2019).

The existence of the landslide natural disaster means that the efforts that can be made by the Talamau Kanagarian community to overcome the occurrence of landslide natural disasters are: maintaining the balance of the forest ecosystem, protecting the forest, not cutting down trees illegally, carrying out reforestation and reforestation to avoid landslide disasters. (Rauh Jaril Gifari, 2022)

Restoration of community agricultural land affected by the landslide disaster. Efforts are made by the community if the impact is severe and the land cannot be accessed or reused. If the impact is mild, it is still possible to rework the land and also fertilize it so that the nutrients, friability, or soil fertility can be reused for agricultural activities (Ivan Taslim, 2017). It can be seen from several points in Kanagarian Talamau, especially in Batang Ingu, where the community has started farming again by cultivating the land, which has an impact on agriculture, namely they are processing and fertilizing the soil and also mixing organic fertilizers to restore the fertility of the soil after the landslide disaster that occurred. happened to their land.

Rural Community Resilience in Facing Landslide Disasters

The resilience of the Talamau Kanagarian community is still quite low, because the protection and restoration aspects in society cannot be fully implemented properly (Cucut Satria Barona, 2018). Harmony and communication as part of the aspect of

protecting the community can indeed be implemented properly, but for resilience and the use of time together and daily routines, it is not so maximized. Moreover, attention to health is not taken seriously enough, firstly related to mental health (restless, restless, etc.).

The way for the Talamau Kanagarian community to survive and recover after the landslide occurred is that the community still hopes for help from good people, volunteers and the government. They still need a helping hand after the landslide occurred.

As for the Resilience of the Kanagarian Talamau Community, they still live in the area, even though natural disasters often occur in the area.

1. No Other Jobs

The reason people in Kanagarian Talamau stay in the rural area is because it is a source of livelihood for the community, namely the average community works in the agricultural sector. such as gardening, farming, and so on. With the potential they have, they can produce foodstuffs such as rice, vegetables, and fruits. So that's the reason they stay there. Because basically, the people there rely on their agricultural land as a source of livelihood without taking advantage of other jobs. The community only focuses on the agricultural sector.

2. Birthplace in the Village

Every individual has his or her own place of birth. In accordance with the existence of the homeland of the community itself, the village community is famous for the values of togetherness and kinship between families living in their homeland (M. Husein, MR, 2021). The village is a residential area for the community. Therefore, the people in Kanagarian Talamau cannot move to other areas because the Kanagarian Talamau rural area is their birthplace. The people there own their own land and houses. Since childhood, they have been settled in the Kanagarian Talamau rural area. Of course, it is very difficult for local people to leave the area where they were born. So, the reason the community persists is because their homes and land are in the area, so they want to protect their homeland. and facilitate community access to work in their gardens and on their farms.

3. Family Ties

Families play an important role in society. Every individual certainly has a family (Su, Ritohardoyo, 2016). The family plays an important role in the social life of the community. In carrying out its duties, the family becomes the strongest institution owned by the community because it is through family that we get our "humanity". John Locke (1985) suggests that the first position in educating individuals lies with the family. The family as a social institution, has a network system of interpersonal interactions which is, the most important

means of implementing culture. Families in rural communities in Kanagarian Talamau continue to live in the area even though landslides have often occurred because family factors bind and cause them to still want to survive in these rural areas. Since birth, the people there already have a family bond formed in the Kanagarian Talamau (Dicky Setiardi, 2017). Therefore, even though natural disasters have often hit the area, they will not give up on the situation. The people there will continue to defend their homeland and also their families who are in the area. With all their might, they will take care of each other and protect their own families.

4 CONCLUSIONS

As a result of the landslide natural disaster, it certainly has had an impact on the economy of the Kanagarian Talamau community-especially for people whose livelihoods are trading, farming, and gardening. The resilience of the community to natural disasters from landslides in the Talamau Kanagarian is quite large. It can be seen from the enthusiasm of the community in tackling the landslide disaster. The community can increase resilience so that they can run their lives well-especially the Talamau Kanagarian community, who still live in disaster-prone areas. The Talamau Kanagarian community still lives and survives in the area because they have to defend their homes and agricultural land. They will try to recover and rise above the landslide disaster. After that, they began to gradually cultivate and manage their agricultural land again as a source of economic income for the Talamau Kanagarian community.

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