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Community Adaptation Strategies in Facing Land Movement Prone Areas in Deliksari Village, Gunungpati Subdistrict, Semarang City

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ABSTRACT

Deliksari Village, Gunungpati Subdistrict, Semarang City, is an area prone to land movement disasters due to geological conditions and high rainfall. This research aims to find out the community's adaptation strategy in facing the disaster. A qualitative approach was applied to understand the role and strategies of the community in disaster prevention and management. Data were collected through interviews and observations with residents and the Head of RT of Deliksari Village, to identify the occurrence of land movement disasters and the adaptation strategies applied. The results showed that the community has high awareness and preparedness, reflected in the initiative and collection of contributions for infrastructure improvements. Despite facing obstacles such as lack of information and embarrassment in asking for help, the spirit of mutual cooperation is the key to community resilience. This research confirms that disaster mitigation is not only the responsibility of the government, but a collective effort of all elements of society. With support from the government and the private sector, communities can improve their preparedness for future ground motion risks. The findings provide valuable insights for the development of more effective disaster mitigation strategies, and serve as a model for other areas facing similar risks.

Keywords: *Adaptation strategies, disaster mitigation, land movement prone, Deliksari,*

INTRODUCTION

Deliksari Village is located in Gunungpati Sub-district, Semarang City. This area is known as one of the areas prone to land movement. Historically, various land movement events have often occurred in this area, especially during the rainy season. Unstable geological conditions and high rainfall make Deliksari Village an area with a high risk of landslides. Based on research on Deliksari, it was identified as having high landslide potential. The disaster map created in 2019 even marked Deliksari with a blue triangle symbol indicating the area as a serious landslide risk area (Wahyuni, 2020).
One of the main factors that cause ground movement in Deliksari is very high rainfall. When the rainfall intensity increases, the soil in the slope area becomes water-saturated, leading to a decrease in the bearing capacity of the soil. As a result, the soil becomes unstable and prone to movement. This condition is exacerbated by the steep slope around Deliksari, which makes it easier for

landslides to occur. Steep slopes naturally have a higher risk of landslides, especially when the soil in the area is unable to withstand excessive water loads due to high rainfall. According to Wakhidah (2017) the geological conditions in Deliksari Hamlet, which consist of clay, clayey sand, sandstone, and limestone, create a situation that is prone to ground movement. The slip planes detected in traverses 1, 3, 4, and 5, along with the resistivity patterns indicating the presence of sandstone layers, indicate the potential for water accumulation. If rainfall increases, water can accumulate, making these layers slippery and less able to withstand pressure. adaptation refers to the actions or processes taken by individuals or groups to change the way they think, act or interact in the face of emerging changes or challenges (Wiratuningsih et al, 2018).

Data from the Meteorology, Climatology and Geophysics Agency (BMKG) shows that rainfall intensity in the Semarang area, including Gunungpati, has increased over the past few years. The rainy season with high rainfall makes the soil in Deliksari Village more prone to soil movement. During periods of heavy rainfall, water that seeps into the soil cannot be fully absorbed by the soil layer, causing the soil to become saturated and lose its grip. This phenomenon increases the chance of landslides, especially in areas that do not have strong enough soil retaining vegetation. As a result, the soil becomes unstable and prone to movement. This condition is exacerbated by the steep slope around Deliksari, which facilitates landslides. Steep slopes naturally have a higher risk of landslides, especially when the soil in the area is unable to withstand excessive water loads due to high rainfall.

Based on the results of research conducted by Maria (2020), land movement in Deliksari Village is caused by several factors. Geologically, this area is suspected to be adjacent to a fault, based on the geologic map of Magelang sheet. The sloping topography also requires good drainage arrangements to prevent risks. Land use regulations in the red zone need to be enforced so that development is not carried out in landslide-prone areas. Early warning system installed in one of the vulnerable areas is one of the efforts to give early warning to the community. The sound of the siren as a warning is sometimes a concern for residents, as it sounds every few hours. Community efforts in preventing soil movement that have begun to be applied using the gabion wire method or using large stones arranged with wires that rise lengthwise in order to produce containment of moving soil. According to Hardiyatmo (2002), retaining wall buildings are used to withstand lateral soil pressure generated by unstable soil or native soil. The high cost of installing brojong stones makes people confused in pursuing it, it is necessary to have synergy efforts from several parties of the local government and central government so that the installation of brojong stones can be maximized at certain points that are very prone to soil movement so that this prevention can be maximized.

The main objective of this research is to understand the extent to which communities are involved in preventive measures and assess the effectiveness of mitigation efforts that have been made against disaster risks.

MATERIALS & METHODS

This research was conducted in Deliksari Village, Gunungpati Subdistrict, Semarang City, which is a land movement prone area. The Kelurahan is located in a hilly area at the foot of Mount Ungaran, which has a high potential risk of ground motion due to its steep geographical conditions. As part of Gunungpati Sub-district in the south of Semarang City, this area is known for its hilly landscape that is prone to land movement, especially during the rainy season. This location was chosen because it often experiences ground movements that can threaten the lives and environment of local communities. This research was conducted in October 2024.

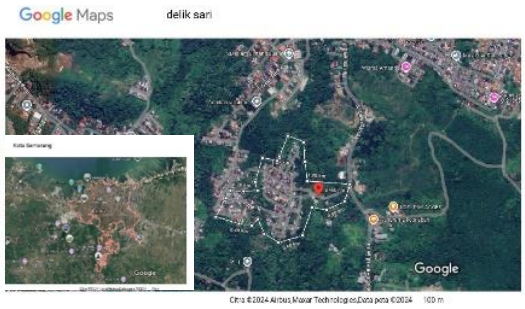

Figure 1. Map of Semarang City & Deliksari

The approach used in this research is qualitative according to Fiantika et al (2020), a qualitative approach aims to deeply understand the phenomena or events experienced by the research subject. Therefore, this approach was chosen in order to gain a deeper understanding of the community's role in disaster mitigation related to land movement. The qualitative approach also helps describe the real situation in the field, including community involvement in disaster prevention, mitigation and risk reduction. This research used a survey method with interviews and observations to identify the active role of communities in ground motion mitigation as well as the challenges and adaptation strategies they have developed.

Data collection was conducted by direct observation and interviews with residents and RT heads in Deliksari Village. The interview technique used was semi-structured, where initial questions were asked to understand respondents' knowledge and experience of ground movements that occurred in the area. Follow-up questions were designed to dig deeper into the community's role in disaster mitigation and the challenges they face. In this way, it is hoped that comprehensive information can be obtained about the steps taken by the community as well as the adaptation strategies they have developed in facing disaster risks. The observations conducted in Kelurahan Deliksari aimed to understand the geographical and environmental conditions that are prone to land movement, so that these observations provide an overview of the disaster risks faced by the local community and how far they are involved in preventive measures. With this approach, this research seeks to find out the community's adaptation to adaptation strategies in prone to movement.

Data analysis in this study followed the steps proposed by Miles and Huberman, namely data reduction, data presentation, and conclusion drawing. First, data from interviews and observations were filtered to find important information about the role of the Deliksari Village community in ground motion mitigation and the challenges and adaptation strategies they face. After that, relevant data was presented in the form of descriptive narratives, which were grouped by themes, such as community cooperation, understanding of risks, and adaptation measures taken. Finally, the researcher draws conclusions about how the community plays a role in disaster mitigation, the challenges that remain, and the effectiveness of the efforts that have been made. This research also provides suggestions to increase community involvement in strategic efforts in dealing with ground motion prone areas, in order to strengthen community resilience to ground motion risks in the future.

RESULT & DISCUSSION

A. Environmental Conditions in DelikSari Village

The village of Deliksari is located in an area that is prone to land movement, especially during the rainy season. This has caused significant damage to houses. There are houses in this Kelurahan that have cracks or severe damage due to soil movement. Some families have even had to undertake periodic renovations to repair the damage, hoping to increase the resilience of their homes to disasters. Despite ongoing repair efforts, this condition remains a major threat to the welfare of the community. There are also houses affected by ground movement when landslides occur. These houses eventually became uninhabitable and some residents moved out. Administratively, Kelurahan Deliksari is included in Sukorejo Urban Village, Gunungpati Subdistrict, Semarang

City with a total area of 2.43 ha. Deliksari urban village is located in RW 06, Sukorejo urban village, Gunungpati sub-district, Semarang city. The village consists of one RW and six RTs, with 215 households and 694 people. Finding the location of Kelurahan Deliksari is not too difficult, if you are coming from Sampangan or Jatingaleh, just take the road towards Unnes. Kelurahan Deliksari is located one kilometer after the iron bridge near the T-junction that is the meeting point from the direction of Jatingaleh or Sampangan on the right side of the road. The main gate at the entrance of the village has also been written so that everyone can easily find it. The number of buildings in Deliksari is around 215 buildings with various public facilities such as mosques, Kelurahan groups, posyandu and kamling posts.

Figure 2. Affected houses (October 2024)

Figure 2 shows that a house in Delikasari Village, located in Block Deliksari view RT 3, was damaged by ground movement and resulted in a landslide. This shows that the area is one of the landslide hotspots and has topographic conditions that are prone to landslides, such as steep slopes and unstable soil, especially during heavy rains. In addition, the soil characteristics in the area may be loose or less dense, which is easily eroded when receiving large amounts of rainwater pressure. Loose soil has a lower weight content than compacted soil (Puspitorni et al., 2024). Areas with such topographic conditions require special attention in building arrangement and environmental management to reduce disaster risk. The impact of landslides not only damages people's homes, but also causes economic losses. Residents whose houses are damaged need to make repairs or even rebuild their homes, which requires a lot of money. In addition, these disasters can affect the local economy by reducing property values in landslide-prone areas, making the area less desirable for residential investment or local businesses.

Figure 3. Road collapse (October 2024)

Figure 3 shows a road that has collapsed due to ground movement. Although repair efforts have been made by installing paving blocks on some parts of the road, the ongoing problem of ground movement makes the damage more frequent. As a result, the road surface is uneven and severely damaged, especially during heavy rains. The condition of these damaged roads severely disrupts the mobility of residents. Some roads have even become impassable, becoming dead ends, further complicating people's daily activities. When roads are impassable, residents find it difficult to move around.

Ground movements in Deliksari have caused damage to homes and road infrastructure, despite regular repair efforts. Persistent ground movement means that house renovations and the installation of paving blocks on roads are unable to provide a long-term solution, so the threat to community welfare remains. In addition, the damage to road infrastructure further worsens the mobility of residents, especially during heavy rains, which negatively impacts daily activities.

B. Community Readiness in the Face of Land Movement

Delikasari is located in Semarang, which is a city surrounded by hills and slopes. The area has a diverse topography, with many areas having steep slopes, increasing the risk of ground movement, especially during the rainy season. High rainfall and eroded soil conditions are factors that can trigger landslides in this area. Ground movement or landslide is like when soil or rocks fall from a high place. This happens due to the force of gravity, which pulls all objects downwards (Botjing et al., 2023). Factors that can cause landslides include additional weight on the ground, heavy rainfall that results in soil saturation, and erosion that destabilizes the slope. Under certain conditions, a combination of these factors can cause soil or rock to no longer be able to withstand the load and eventually experience movement. So that the community must carry out disaster mitigation against the threat of land movement that often occurs. According to Law Number 24 Year 2007, mitigation is an effort to reduce disaster risk with two main approaches.

The Regional Disaster Management Agency (2022) explains that the disaster mitigation cycle consists of three stages: pre-disaster, during disaster, and post-disaster. In the pre-disaster stage, the government and related parties conduct socialization and education to prepare the community to face disasters. During a disaster, known as the emergency response stage, the focus is on saving oneself and the closest people by ensuring personal safety first. In the post-disaster stage, which includes reconstruction and rehabilitation, damaged buildings and infrastructure are repaired, community activities begin to return to normal, and preparations for future disasters are made.

1. Community Awareness and Preparedness

The ground motion disaster adaptation strategy carried out by the community in Deliksari Village begins with awareness and preparedness for the potential threat of ground motion. Community awareness and preparedness in land movement disaster adaptation strategies are very important to reduce the risk and impact of disasters (Hardian and Mahardani, 2022). By understanding the potential for disaster and knowing the appropriate steps, communities can minimize losses and accelerate recovery. Good education and preparation enable communities to deal with disasters more effectively. Preparedness includes activities such as understanding ground motion hazards, developing emergency response plans and engaging communities in training.

Preparedness is a crucial component in disaster mitigation efforts, including in Deliksari prone to land movement. Preparedness includes a series of activities undertaken to anticipate threats, viz: understanding of ground motion hazards, development of emergency response plans, construction of early warning systems, community involvement in training and simulations. According to the National Disaster Management Agency (BNPB), preparedness is the key to safety when facing disasters, as it relies on a good understanding of the risks as well as the strategic steps that can be taken.

Although communities are aware of the threats they face, complacency and lack of proactive measures remain a challenge. Therefore, active involvement of the community in preparedness activities, such as evacuation training and disaster simulations, is essential to build a sustainable culture of preparedness. By developing an emergency response plan and establishing an effective early warning system, the Deliksari community can increase its resilience to disasters. These measures are expected to not only make the community more prepared for ground movement, but also to reduce the impact, thus minimizing losses in terms of both lives and property. The role of community leaders, such as Mr. RT, is very important to motivate residents to actively participate in disaster mitigation efforts. The involvement of community leaders in this

activity can increase residents' awareness and participation in maintaining mutual safety.

Figure 4. The point that collapsed (October 2024)

Figure 4 shows one of the locations that collapsed due to ground movement. In the midst of efforts to build preparedness, there are serious challenges related to the condition of residents' homes. Some houses are no longer habitable and are potentially damaged by the threat of ground movement. Although residents are aware of the risks, many of them continue to live in unsafe houses due to economic limitations and do not have alternative housing. This attitude reflects the low level of public awareness of the importance of moving to a safer location, despite the risks faced.

Figure 5: House Condition (October 2024)

Figure 5, shows the condition of one of the houses in Deliksari that was seriously affected by the ground movement. The house is in a very poor condition, with visible cracks in the walls and foundations indicating that the structure of the building is unstable.K ondition shows the need for greater intervention from the government and related institutions to provide support, either in the form of relocation or repair of houses to make them more resilient to disasters. Community awareness of nearby hazards, coupled with limited housing options, underscores the importance of a more comprehensive approach to disaster mitigation. Building awareness of the importance of living in a safe environment must be balanced with efforts to provide practical solutions that are accessible to residents, so that they are not only aware of the risks, but also have concrete steps to avoid them..

2. Community Involvement in dealing with Land Movement

Community involvement is very important in dealing with disaster risk, especially in terms of prevention in the prone area of land movement in Deliksari Village. Active community involvement provides an opportunity to understand the threats that occur in the surrounding environment, learn how to deal with disasters, and build preparedness (Umeidini et al., 2019). This participation can take the form of disaster training, evacuation simulations, and the creation of disaster management plans at the local level. In addition, community involvement strengthens social networks and solidarity among residents. In emergency situations, solidarity and mutual cooperation go a long way in reducing the psychological and physical impacts that may occur. A prepared and responsive community also eases the burden on the government and aid agencies in handling disasters, creating a more disaster-resilient environment.

The people of the village show active involvement in disaster mitigation strategies, especially in relation to the risk of land movement that threatens their area. One important step taken by the community is to submit a relief plan to the government. Through this step, the community not only demonstrated awareness of the importance of external interventions, but also sought to strengthen the foundation of disaster mitigation at the local level. By submitting a plan, residents hope to receive the necessary resources and technical assistance to reduce the risk and impact of disasters in their

neighborhood. The submission of this plan can be interpreted as the community's effort to strengthen the foundation of disaster mitigation at the local level. It reflects their desire to not only passively rely on government assistance, but also actively participate in the process of planning and implementing mitigation measures. Communities expect to receive resource support and technical assistance, while also showing that they recognize the need for more knowledge and expertise in managing disaster risks. This step illustrates the spirit of shared responsibility, where communities are trying to take concrete steps in reducing disaster risks and impacts. Awareness of the importance of external intervention in disaster mitigation efforts shows that communities do not feel alone in facing this challenge, but rather see it as a problem that requires multi-stakeholder collaboration.

The community of Kelurahan Deliksari has taken the initiative to collect a monthly contribution of 20,000 rupiah per family. This step shows the residents' high awareness of the importance of good infrastructure, especially as an effort to reduce disaster risk. The collected funds are used to repair damaged roads, especially by casting, so that road conditions remain safe and comfortable for users. Through this contribution, local residents not only improve public facilities but also demonstrate the spirit of mutual cooperation and care for the surrounding environment. This simple effort is a tangible manifestation of their commitment to improving safety and well-being together, while creating an environment that is better prepared to face various risks in the face of land movement prone.

Figure 6: Road repair activities (October 2024)

Shown in Figure 6 is the activity of the community working together to repair the road and make asphalt. This activity was carried out to improve accessibility for local residents, thereby facilitating their mobility in carrying out various daily activities. Gotong royong in improving the road infrastructure reflects the spirit of togetherness and solidarity of the village community, who are aware of the importance of adequate infrastructure for a comfortable and smooth life. It reflects collaboration and solidarity among residents who understand that adequate infrastructure can help reduce the impact of land movement. This initiative not only has a financial impact, but also strengthens the sense of community among residents. By contributing collectively, they create stronger social bonds and support each other in facing challenges. This collective responsibility is important in building community resilience, as each individual feels involved in maintaining the safety and well-being of their neighborhood. Overall, this step illustrates the spirit of gotong royong that is still alive in the community of Deliksari Village, where they understand that disaster mitigation is a shared responsibility. This initiative serves as a positive example of how collaboration between citizens can contribute to the creation of a safer neighborhood that is prepared for future disaster risks.

The involvement of the people of Kelurahan Deliksari shows that awareness of disaster risk is a key driver in taking action. The community's efforts in proposing a relief plan and collecting monthly dues reflect their commitment to protect their neighborhood and community from the threat of land movement. In this case, the community does not only rely on assistance from the government, but also actively seeks solutions and contributes to mitigation efforts. This collaborative approach is important in building community resilience, as it can optimize existing resources and strengthen social ties among residents. To build community resilience by efficiently utilizing resources, strengthening social ties, and

involving all community members in disaster mitigation strategies, collaborative approaches such as land movement are essential (Tamitiadini et al., 2019). In addition, this kind of collective action can also increase community awareness and knowledge about the importance of mitigation strategies in land movement. Overall, the community's involvement in the aid application and contribution collection initiatives shows that disaster mitigation is not only the responsibility of the government, but also an active role of all elements of the community. This creates a strong foundation for improving disaster preparedness and response in Deliksari Village.

C. Community Adaptation Strategies in the face of Land Movement

Identifying the challenges and adaptation strategies of the Deliksari community in facing disaster risks is essential to improve resilience and preparedness. The challenges of disaster mitigation in Indonesia include several important aspects. Many communities still focus on response after a disaster, not prevention, so there needs to be a paradigm shift (Arif, 2020). In addition, a lack of understanding of the importance of mitigation necessitates increased education and awareness. Limited resources, both financial and human, also hamper mitigation programs. Ineffective communication between the government and the community needs to be improved to make disaster management more organized. Given Indonesia's geographical vulnerability, a more integrated mitigation strategy is needed. Community engagement through the Disaster Preparedness Village program is also important to improve disaster preparedness. By understanding these challenges, it is hoped that disaster mitigation strategies can become more effective and sustainable (Taslim, 2024).

1. Barriers to Land Movement Readiness

Barriers to landslide preparedness include a lack of public awareness, limited technology, and suboptimal coordination between relevant parties. These factors reduce the effectiveness of mitigation and increase the risk of disaster impacts (Huesein & Onasis, 2017). The Deliksari community faces significant challenges in requesting further assistance from the government. Shyness and reluctance to apply for support creates a social barrier that can hinder disaster mitigation efforts. In this context, social barriers not only impact individuals, but also reduce collective effectiveness in addressing disaster risk. This embarrassment may stem from stigma or negative views of those dependent on assistance, making people reluctant to apply, even if they genuinely need support. In addition, they often feel that the process of applying for assistance is long and convoluted, which further exacerbates the sense of hopelessness.

Figure 7: Disaster warning tools (October 2024)

In Figure 7 a disaster warning device has been installed in Deliksari Village. The Landslide Early Warning System or Sipendil is a landslide disaster warning tool intended to provide warnings about the possibility of landslides. This tool functions as an early warning system that provides information based on the possibility of landslides due to rainfall (Kalisha & Fadhil, 2019). However, having a warning system that sounds every hour during the rainy season can cause panic among residents, especially when there is heavy rain at night. This inconvenience can disturb people's peace of mind, which in turn can affect their disaster preparedness. As a result, the people of Kelurahan Deliksari feel

depressed and anxious, so they ask the authorities to turn off the warning device, which is considered to only add to the panic. After listening to the aspirations of the community, the warning device was finally turned off. Despite this, residents did not give in to uncertainty. They began to build their own preparedness, especially during the rains. In an effort to increase community resilience, the community started holding meetings to discuss and plan the steps to be taken in an emergency situation. In this way, they established evacuation procedures and determined safe locations to take shelter when disaster strikes. Through this collective effort, the Deliksari community demonstrated resilience and a willingness to adapt to the challenges at hand. Although the warning devices are no longer functioning, they are able to create a mitigation system that better suits their needs and conditions, while maintaining a sense of calm and preparedness when severe weather strikes.

Uncertainty in preparedness is felt by Kelurahan residents. Uncertainty in preparedness is particularly felt by Deliksari residents during the rainy season, where they often feel anxious and have trouble sleeping due to anxiety about the possibility of a disaster occurring. This uncertainty arises due to many factors, including a lack of clear information about the risk of ground movements threatening their area. Residents are often unaware of when and where potential hazards will arise, leaving them feeling unprepared for emergency situations. In the past, existing warning systems have added to anxiety, as hourly alarms without adequate explanations have triggered panic, especially during heavy rains at night. Low knowledge of disaster mitigation measures makes people feel trapped in uncertainty. An in-depth understanding of disaster mitigation strategies is critical to improving community safety and resilience, as it enables individuals and communities to take effective preventive measures, reduce the risk of disaster impacts, and accelerate the recovery process after a disaster (Septianan et al., 2022).

People in Deliksari Village have a fair understanding of how to deal with disasters or what evacuation procedures to follow. This uncertainty also has an impact on their mental health; prolonged stress can interfere with the quality of daily life and social interaction within the community. In situations like this, it is important for communities to receive more systematic information, including training on disaster preparedness and the development of more effective warning systems. By improving knowledge and preparedness, residents of Kelurahan Deliksari can reduce the anxiety they feel, strengthen their sense of security, and be better prepared for the risks that may occur during the rainy season. This will not only increase individual resilience but also strengthen solidarity within the community, creating a sense of mutual care and collaboration in the face of disaster threats.

2. Community Adaptation Strategies in Facing Land Movement Disaster Prone Areas

Adaptation is the way humans adapt to changes in their environment. This allows them to organize a certain system for their actions or behavior in order to adapt to current circumstances and conditions (Iksan et al., 2018). The adaptation strategy of the people of Deliksari Village is evident in their efforts to renovate their houses and improve their preparedness to face the risk of land movement. The community's ability to adapt to these changing conditions reflects their deep understanding of the risks present in their environment. In this context, home renovation is not just a physical improvement, but also a long-term investment to increase the building's resilience to potential disasters. By making structural improvements, communities are trying to minimize the damage that ground movements can cause, while creating a safer environment for themselves and their families.

Figure 8: House Condition (October 2024)

In Figure 8 is the condition of residents' houses affected by land movement, efforts to increase preparedness show that the community has a strong desire to protect themselves and their families from the threat of disaster. Preparedness is a series of actions and efforts taken to prepare individuals, groups, or communities to deal with the possibility of a disaster (Adiyoso, 2018). This concept is an important part of disaster management that aims to reduce the risks and effects caused by disasters. Communities begin to identify safe locations for evacuation, develop action plans during disasters, and share important information about preventive measures that can be taken. This preparedness is a positive indicator of community resilience, indicating that people are not only dependent on external assistance, but are also actively involved in the protection of themselves and their environment.

The community also demonstrated strong collaboration, with people supporting each other in renovation and preparation efforts, creating a sense of solidarity that can strengthen social ties within the community. When individuals feel a collective responsibility for the safety of the community, it increases the community's confidence in dealing with disasters. As such, this adaptation strategy does not only focus on physical measures, but also includes a social dimension that is crucial in building long-term resilience. Therefore, efforts to continuously educate and empower communities on disaster mitigation will go a long way, ensuring that they remain prepared and resilient in the face of upcoming challenges.

Figure 9. Wire gabions (October 2024)

The strategy used by the community in mitigating ground movement in Deliksari is to build wire gabions, which are retaining structures made of stones wrapped in steel wire (Figure 9). A gabion is a retaining structure consisting of a wire mesh filled with material, usually stone or gravel, to prevent soil erosion, slope stability, and water flow regulation (Krisdiyanto & Dewi, 2023). These wire gabions serve to strengthen landslide-prone slopes and prevent further soil movement. However, the community still faces major constraints related to cost, as the manufacture of wire gabions requires considerable funds. As a result, wire gabions have only been installed in one location, while other areas that are also prone to landslides have not been addressed. While this strategy is effective in reducing the risk of landslides, budget constraints mean that mitigation efforts are not yet comprehensive, leaving some areas vulnerable to the threat of landslides.

Communities are also working on other measures such as planting trees on landslide-prone slopes to naturally strengthen the soil structure, to reduce ground movement. Tree planting on slopes prevents landslides by strengthening soil structure, absorbing water, reducing rain energy, and helping ecosystems stay healthy and mitigate climate change (Kurniati et al., 2020). However, limited financial and technical support

remains a challenge. Therefore, collaboration between the community, government and the private sector is crucial. Assistance from the government in the form of subsidies or special disaster mitigation programs can help speed up the response. Residents also hope for assistance in the form of providing gabions from the government and related institutions, so that larger areas can be better handled.

CONCLUSION

The Deliksari community has a significant role in ground motion disaster mitigation. The community's awareness and preparedness in facing the threat of disaster is evident through the initiative of submitting a relief plan and collecting monthly dues for infrastructure repair independently. Despite challenges such as inadequate living conditions, the spirit of mutual cooperation and collaboration between residents is key in building community resilience. This research shows that disaster mitigation is not only the responsibility of the government, but also a collective effort from all elements of society to create a safer environment and be ready to face future risks. Deliksari community faces various challenges in disaster mitigation, in the form of challenges such as having shyness in asking for help, lack of information, and inconvenience from the warning system. Nevertheless, they showed significant adaptation efforts through house renovation, gabion construction, and tree planting to increase soil resilience. Collaboration between communities, government and the private sector is essential to overcome resource limitations and strengthen preparedness. With the right support, communities can be better prepared for future disaster threats.

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