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Abdul Rozak¹, Mochammad Mahfudz², Mochammad Sinung Restendy³, Mukhammad Sahlan⁴, Achmad Zaky Faiz⁵, Lukman Hakim⁶

¹Fakultas Dakwah dan Komunikasi, Universitas Islam Negeri (UIN) Sunan Kalijaga, Jl. Laksda Adisucipto, Kecamatan. Depok, Kabupaten Sleman, Daerah Istimewa Yogyakarta 55281*

Email: abdul.rozak@uin-suka.ac.id

²Fakultas Ilmu Sosial dan Humaniora, Universitas Islam Negeri (UIN) Sunan Kalijaga, Jl. Laksda Adisucipto, Kecamatan. Depok, Kabupaten Sleman, Daerah Istimewa Yogyakarta 55281

Email: mokhamad.mahfud@uin-suka.ac.id

³Fakultas Dakwah dan Komunikasi, Universitas Islam Negeri (UIN) Sunan Kalijaga, Jl. Laksda Adisucipto, Kecamatan. Depok, Kabupaten Sleman, Daerah Istimewa Yogyakarta 55281

Email: muhammad.restendy@uin-suka.ac.id

⁴Fakultas Dakwah dan Komunikasi, Universitas Islam Negeri (UIN) Sunan Kalijaga, Jl. Laksda Adisucipto, Kecamatan. Depok, Kabupaten Sleman, Daerah Istimewa Yogyakarta 55281

Email: mukhammad.sahlan@uin-suka.ac.id

⁵Program Studi Komunikasi dan Penyiaran Islam, Sekolah Tinggi Agama Islam Mulia Astuti, Jl. Cempaka 6, Wonoboyo, Kec. Wonogiri, Kabupaten Wonogiri, Jawa Tengah 57615*

Email: achmadzakyfaiz@staimaswonogiri.ac.id

⁶ Fakultas Ushuluddin dan Dakwah, Institut Agama Islam Negeri (IAIN) Kediri.

Email: lukmanhakim@iainkediri.ac.id

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Abstract

The potential for natural disasters to increase in intensity in various regions requires early attention and vigilance. That's why disaster mitigation needs to be disseminated to all levels of society. One area that has a high level of vulnerability is Kulon Progo is a case study with a descriptive type in this research. Recorded in 2019 having 53 landslide-prone areas in 5 sub-districts. To anticipate victims, the Regional Disaster Management Agency (BPBD) of Kulon Progo Regency formed 3 Disaster Response Villages as bottom-up disaster mitigation pilots, one of which is Kalirejo Village. This effort is interesting in examining how communication patterns are carried out in natural disaster-prone areas (Kalirejo Village) in mitigating natural disasters. This study is qualitative and involves several elements including Kelurahan government officials, self-help groups, disaster risk reduction forums, volunteers, and residents who represent stakeholders related to mitigation. A qualitative approach is used to deepen understanding through observation, interviews, and focus group discussions. Data analysis uses an interactive model recommended by Miles and Huberman. The main findings of the study show that the most frequent natural disasters are landslides and floods. This is caused by the topography which causes unstable soil conditions so that it easily causes landslides when rainfall is high. The dominant communication pattern in terms of natural disaster management/mitigation is bottom-up, from the community to the Village, Kapanewon, and

Regency Governments as well as BPBD. However, ritual communication patterns, both based on local traditions and wisdom as well as those with nuances of religious teachings, are still sustainable and ongoing.

Keywords: *communication patterns, natural disaster mitigation, ritual communication*

Abstrak

Potensi bencana alam yang semakin meningkat intensitasnya di berbagai daerah membutuhkan perhatian dan kewaspadaan dini. Karena itulah mitigasi bencana perlu disosialisasikan ke segenap lapisan masyarakat. Salah satu daerah yang memiliki tingkat kerawanan tinggi adalah Kulon Progo yang menjadi studi kasus dengan jenis deskriptif dalam penelitian ini. Tercatat pada 2019 memiliki 53 kawasan titik rawan longsor di 5 kecamatan. Untuk mengantisipasi korban, Badan Penganggulangan Bencana Daerah (BPBD) Kabupaten Kulon Progo membentuk 3 Desa Tanggap Bencana sebagai percontohan mitigasi bencana secara *bottom up*, salah satunya adalah Kalurahan Kalirejo. Upaya tersebut menarik secara lebih dalam mengkaji bagaimana pola komunikasi yang dilakukan daerah rawan bencana alam (Kalurahan Kalirejo) dalam mitigasi bencana alam. Studi ini bersifat kualitatif dan melibatkan beberapa unsur diantaranya: aparat Pemerintah Kalurahan, kelompok swadaya masyarakat, forum pengurangan resiko bencana, sukarelawan, dan warga yang merepresentasikan stakeholder terkait mitigasi. Pendekatan kualitatif dilakukan untuk memperdalam pemahaman melalui observasi, interview, dan focus group diskusi. Analisis data menggunakan model interaktif yang dianjurkan Miles dan Huberman. Temuan utama studi menunjukkan bahwa bencana alam yang paling sering terjadi adalah tanah longsor dan banjir. Ini disebabkan oleh topografi yang menyebabkan kondisi tanah labil sehingga mudah mengakibatkan longsor ketika curah hujan tinggi. Adapun pola komunikasi yang dominan dalam hal penanganan/mitigasi bencana alam bersifat *bottom up*, dari masyarakat menuju ke Pemerintah Kalurahan, Kapanewon, dan Kabupaten serta BPBD. Namun pola komunikasi ritual, baik berdasarkan tradisi dan keraifan lokal maupun yang bernuansakan ajaran agama masih lestari dan tetap berlangsung.

Kata Kunci: komunikasi ritual, mitigasi bencana alam, pola komunikasi

Introduction

Exploitation of nature to meet human needs has triggered environmental damage and increased the risk of disasters. The World Risk Report notes that the level of environmental damage is one of the factors that influence the level of disaster risk in an area, especially in an archipelagic country like Indonesia. The report shows that Indonesia is the second most disaster-prone country globally with a Global Risk Index (WRI) score of 43.5 which is divided into five areas. The first scope is disaster exposure with 39.89 points (very high), the vulnerability scope has a score of 47.43 points (high), the vulnerability scope is in the high category with a score of 45.46 points. Furthermore, the scope of the lack of disaster management capacity which has a score of 50.59 (very high) and the last scope is related to the lack of capacity to adapt to disasters with a score of 46.38 in the medium category (Ilona & Radtke, 2023).

long before that, the series of major disasters that occurred in 2010 alone claimed 1,076 deaths and material losses of Rp. 4,500,000 trillion. Casualties, material and immaterial losses, and psycho-social problems did not only occur at the time of the incident but also started from initial fears of a disaster and post-disaster, such as the death of refugees in the barracks due to illness or old age. That's why it is necessary to carry out a series of appropriate actions to understand the signs of a disaster, take action during an incident, and handle it after a disaster.

A disaster is an unexpected event or series of events that cause suffering to humans, loss of property, environmental damage, damage to buildings and infrastructure, and disruption to people's way of life. (Wulansari et al., 2017) Natural disasters such as floods, landslides, volcanic eruptions, shifting soils, droughts, forest fires, tornadoes, earthquakes, and tsunamis often have not been matched by awareness and efforts to protect and handle disasters that are good, coordinated, and professional. This resulted in many fatalities such as the tsunami that occurred in Aceh, the Mentawai Islands, Palu, and Banten; landslides in Cianjur and Wasior West Papua; earthquake in West Nusa Tenggara; and eruptions of Mount Merapi in Yogyakarta and Semeru in Lumajang.

Studies on disasters in the last decade show that there has been a change in orientation, which initially discussed more technical issues regarding events that trigger disasters and the handling of victims, shifting to an approach that emphasizes humans and society. This gave rise to proposals for disaster management in integrated community development and empowerment. Disaster management should not be limited to a temporary physical approach, but should also be carried out according to the socio-economic life of local people who are vulnerable and affected by disasters in a sustainable manner. Because it is a sign of a disaster in an area (Pramono, 2016). It is at this point that communication between various parties becomes an important node for the successful handling of potential disasters that may occur.

Communication is central to successful disaster preparation, preparedness, responsibility, and post-disaster physical and psychological recovery (Hardiyanto & Pulungan, 2019). According to Mulyana (2001) in the research of Sucianty Dyah Astuti et al. explained that there are three categories that can be used to categorize communication: 1. communication as a one-way action, or the act of sending a message from one party to another, 2. Communication as interaction, especially communication as an action-reaction or cause-and-effect process that changes direction, 3. Communication as a transaction is a personal process because the meaning or understanding obtained is basically personal (Astuti & Idola Per dini Putri., 2020).

Communication about disaster mitigation is part of environmental communication which is very important to be well understood by the community (Rudianto, 2015). So as to minimize the impact of material losses and casualties that may occur. In doing so, the relevant parties must pay attention to the culture, territoriality, habits and local wisdom of the local community because in some cases the early warning system such as the sound of sirens from competent parties (BMKG, BPNB) does not work and is often secondary to the disaster-affected

community. They prioritize *ilmu titen*, beliefs, habits, folklore, and local wisdom that live in their environment.

The large number of areas in Indonesia that are prone to natural disasters require early attention and vigilance to anticipate them. That's why disaster mitigation activities need to be disseminated more intensively to all levels of society. The Special Region is one of the many areas prone to landslides (Fitriani, 2018). One area that has a high level of vulnerability is Kulon Progo Regency, which is still within the province of the Special Region of Yogyakarta. In 2020 this area is suspected to have 47% landslide-prone areas in 5 sub-districts. This is very worrying because it can threaten lives, cause material losses, and close access roads between sub-districts and even villages (Darmawan, 2020). Geographical factors are one of the causes where the contours of the mountains are incised and the terrain is difficult to make the risk increase higher if it rains with long intensity and causes large landslides. For this reason, the swift steps of the Kulon Progo Regional Disaster Management Agency (BPBD) by forming 3 Disaster Response Villages as bottom-up disaster mitigation pilots should be appreciated.

This effort attracted the attention of researchers to see how the communication patterns used by disaster-prone areas in disaster mitigation through research on Disaster Mitigation Communication Patterns: Case Studies in Natural Disaster-Prone Communities in Kulon Progo, Special Region of Yogyakarta.

Based on this background, this study can formulate several issues, namely: first, what are the dominant natural disasters that occur in disaster-prone areas in Kulon Progo; secondly, how is the pattern of communication, natural disaster mitigation in natural disaster-prone communities in Kulon Progo Regency, Special Region of Yogyakarta?

Methods

Based on its objectives, this study uses a qualitative methodology to understand social phenomena by collecting complete and in-depth data (Fahlevi & Dewi, 2019). So get complete information. The information obtained and collected comes from interview transcripts, field notes, personal papers, memos, and other official records, not numbers (Silintowe & Pramudita, 2017). This study also uses an exploratory method that follows more of the phenomenological tradition (Pratiwi et al., 2022). This is the author's exploration to understand the phenomena that occur in a social change in disaster mitigation communication patterns in Kulon Progo Regency, Special Region of Yogyakarta. (Asfar Mutaaly Bareilly, Gustiana A Kambo, 2022). Therefore this study sees communication as "... sharing personal experiences through dialogue between two or more people" (Rizak, 2018). by tracking how it is understood by the actors involved in a situation. Even though there are eclectic nuances related to the traditions that are followed, several aspects such as openness, genuine cultural values, dialogue, negotiations, and shifts in cultural values are aspects that are examined in this research.

The unit of analysis was determined by purposive sampling to find sources as informants based on the possibility of providing comprehensive and in-depth

information on matters related to disaster mitigation activities in the two research locations (Nainggolan et al., 2018). The main informant who is the subject in this study were formal figures: Heads of related departments/agencies, village heads, hamlet heads, and community members who are in areas prone to natural disasters in the Kalirejo Village, Kulon Progo Regency. If it is felt that it is still lacking, then informants and further research subjects are selected based on the snowball sample principle until they reach theoretical saturation, that is, when the addition of data no longer contributes to discovering something new (Strauss, 1990).

Following the phenomenological tradition, especially the qualitative-interpretive method, this study used several data collection techniques at once, namely observation, in-depth interviews, focus-group discussions, and document studies. All of this was done to deepen the case studies discussed in this research. Observation is a way of collecting data that is characterized by the researcher being present and directly observing what is happening to the people being studied. For this, researchers mingle in the daily life of the people being studied as suggested by Lindlof (1995:134) and Weick (1985:569) "engages the phenomenon for a prolonged period of time", and "imparts attention to objects in ways that are in some sense standardized, yet individually trained (Sahlan, 2020). To complete the observation, the researcher conducted in-depth interviews (Rukajat, 2018).

To confirm the observation data and in-depth interviews, this study also used Focus Group Discussion (FGD) (Bisjoe, 2018). According to Mishra (2016) cited by Meisyanti and Khina Januar Rahmawati in their research, FGD is an in-depth interview of the group settings used to collect data, and during the group meeting, the quality listed in the proposal, as well as the size, composition, and interview method illustrates its characteristics (Meisyanti & Rahmawati, 2021). In collecting data, the questions focused on the issue of how the Kalurahan government, in this case, the Kalirejo Village and community members tend to respond to and anticipate natural disaster events, what kind of considerations underlie them, and their impact on the readiness of all parties in everyday life. This question is the object of this research which will be the topic of discussion.

Following the recommendations of Bogdan and Biklen (1982), data were analyzed in two stages. The first stage, by following the principle of triangulation while collecting data, the researcher conducted an induction analysis to find temporary answers which were then developed with new hypotheses. After that, further data collection is carried out to obtain answers and add new data as needed (Fadli, 2021). This is done continuously until data saturation occurs. The analysis is then continued with the second stage using the interactive model suggested by Miles and Huberman (1992) which includes three (3) components, namely data reduction, data display, and decision making (Ulum & Sinduwiatmo, 2016).

Result and Discussion

Geographical Location and Natural Resources

Kulon Progo is an area that has reserves of minerals minerals such as gold which have contributed to regional income and created jobs (Santoso, 2018). Mining management of these minerals, especially artisanal mining, is still very concerning because it pays little attention to environmental planning, resulting in

changes in the shape of the land and has the potential to cause negative impacts such as mass movement of soil and/or rock, soil and water pollution, especially the environment around the mining area.

One of the areas which is a mining locations is the Kalirejo Village, Kokap District, Kulon Progo Regency with an area of 12,951,500 ha, where in that area there is a smallholder gold mining site which is included in the People's Mining Area (WPR), which is still active today. (Santoso & Gomareuzzaman, 2022). The area includes Plampang 1 Hamlet, Plampang 2 Hamlet, and Papak Hamlet. But even so, based on data for 2021 poverty in Padukuhan Kalirejo is at 39%. Where this figure is ranked 87th out of 88 Padukuhan in Kulon Progo Regency. This also affects the existing Human Resources (HR) and makes an attitude of dependence on direct assistance. So there is a need for breakthroughs to improve human resources to be able to try to find solutions to existing problems without dependence on direct assistance (*Field Interview and Observation with Lurah in October 2021, n.d.*).

Culture and Tradition

Kalirejo has an area of 12,951,500 ha and a population of 5,639 with 90% of its area being mountains (Bekti, 2021). Most of the Kalurahan area is in the form of dry land which is used as yards, buildings, fields, and public facilities such as markets, cemeteries, and roads. Cultural traditions are still very attached, both from regional culture and traditional ceremonies. Existing regional cultures include Kuda Lumpung / Jathilan, Kethoprak, Karawitan, and Salawat while traditional ceremonies include Clean Village, Nyadran, Kepungan, Saparan, and also Kenduri. The togetherness and mutual cooperation of the community are still closely attached, as evidenced by the development of both facilities and infrastructure carried out by mutual cooperation.

Until now, these Javanese cultural traditions are still very much maintained and preserved, such as Ketoprak and Jatilan. Ketoprak activities are still routinely carried out every Saturday night. Almost all hamlets participated in the Ketoprak activities at Mr. Suparno's house in Sangon 1 Hamlet, but it was a shame that the youth around him did not participate in the Ketoprak activities. The equipment used has also been passed down from generation to generation and is still in Mr. Suparno's house. It is necessary to introduce the current generation of children or youth to this Javanese cultural tradition. Besides being able to take advantage of existing tools, this can also maintain traditions and culture from the ancestors.

Another unique culture, especially in Dukuh Kalibuko, is the hamlet clean culture. Clean hamlet is a traditional ritual or ceremony carried out in the area to rid it of supernatural beings that can bring chaos and suffering and to seek safety and peace of mind through various ceremonial processions (Dewi, 2019). At first, the procedures for cleaning the hamlet were carried out by cleaning the home environment and the hamlet environment which were continued in the nine recitations of Sunan Kalijaga. However, throughout the implementation of the hamlet clean-up in Kalibuko, there have been many changes. On certain days, village cleaning is still carried out (mutual cooperation) to maintain cleanliness and protect nature from disaster hazards.

The Dominant Disaster Occurs

Disasters can be grouped into several categories, including natural and non-natural disasters. There are several types of natural disasters, one of which you really need to watch out for is hydro-meteorological disasters which cause flash floods and landslides. Both need attention because they often come suddenly and are difficult to predict, thus threatening a lot of loss of life and property.

Landslides or often called ground movements which are the process of moving rock mass (soil) due to gravity (gravity) can occur if the strength of the soil structure is weakened due to rainfall or there is a change in the vegetation cover above it (Naryanto et al., 2019). Landslides are almost always accompanied by cracks in the ground or cliffs. Changes to the land are usually marked by a shift in the trees that grow on it. Flash floods occur because in the upstream area, there has been a massive conversion of forest land/forest cover, thereby eliminating the ecological function of the upstream area as rainwater catchment and rainwater storage. Ability to store water close to zero percent (0% subsurface run off and 100% subsurface run off). If there is rain with high rainfall in the upstream area, the rain will slide directly to the ground surface and enter the river at high speed towards the downstream area. This is often the cause of flash floods.

To deal with flash floods and landslides the only way is prevention and recovery activities. Prevention means maintaining areas with woody vegetation and forest cover. Recovery means revegetating with fast-growing, deep-rooted and broadleaf types of wood (Susetyo, 2021). In addition, it is also necessary to understand the threat of flooding and landslides, including knowing the location of the area where the natural disaster occurred (Suharini et al., 2015).

Based on data findings and interviews in the field, the understanding of natural disaster mitigation in the Kalirejo Village community is still fragmentary and needs to be further improved. Mitigation of natural disasters is often only understood as the risk of disasters, both human and infrastructure. Indeed several informants understand that natural disaster mitigation is a form of early potential anticipation of disasters including increasing the ability to deal with natural disasters. A thorough understanding of disaster mitigation for the community still needs to be carried out and synergized with all existing stakeholders.

From the explanations of several community leaders and residents, the natural disasters that often occur in Kalirejo are landslides and floods. In addition, potential disasters such as drought, fallen trees, fires, and even earthquakes are also worrying residents. The main factors that cause disaster vulnerability are the hilly, mountainous, and unstable soil conditions so that when it rains with high intensity the potential for landslides is very high. However, it is not only caused by these factors, the vulnerability to disasters is also influenced by human negligence in protecting the environment.

Handling and Anticipation

To anticipate and make efforts to deal with it, many parties are involved in handling natural disasters, including the community who participate as citizens and volunteers. Some join and enter into non-structural or structural institutions, government, and community organizations, or are involved in membership in

government agencies or certain agencies that handle disasters such as Disaster Preparedness Cadets (Tagana), Community Protection (Linmas), Multipurpose Ansor Front (Banser), Karang Taruna, village officials, Local Radio Community (Orari), etc.

All the involvement of these various parties is strengthened by outreach and education on safeguards, attention and intensive coordination so that involvement in handling natural disasters is maintained. To be able to run effectively these human resources must still be supported by many factors such as natural disaster mitigation facilities such as Handy Talkie (HT) communication tools and tools, social media, early warning or Early Warning System (EWS). All of that is really needed and helps the community to be responsive and minimize the risks of natural disasters.

In addition to communication tools and communication education for disaster mitigation in anticipating disaster risks, the community is also supported by the participation of physical and non-physical assistance, including disaster equipment and operations. The innovations that emerge from the community are the process of mutual cooperation, construction of taluts, cleaning of drainage, community service, then frequent communication between communities, both with existing media and meeting face to face in a meeting.

Coordination and also synergy between the Social Service, Regional Disaster Management Agency (BPBD), Disaster Preparedness Cadets (Tagana), Disaster Risk Reduction Forum (FPRB), Community Protection Division (Linmas) Village and Kapanewon, volunteers, and community leaders are urgently needed in the process of synergy and education to the community. Things that need to be continued and are also interesting to study are how to install an Early Warning System (EWS) in the form of sirens, including their use. How then will FPRB and Kalirejo Disaster Preparedness volunteers (SiBejo) carry out their programs and activities in the community as a form of preparation for disaster mitigation or education about disaster mitigation. All of these activities have triggered an increase in public awareness of natural disaster mitigation. The maintenance of a culture of Gotong Royong, Arisan activities, Selapanan, and self-help donations is a very beneficial social capital. Even so, there are still a small number of residents who have a lack of awareness regarding disasters.

Budgeting for natural disaster mitigation in the Kalirejo Village has so far been in the form of direct or indirect assistance from residents, Kalirejo residents abroad, and community members outside the Kalirejo Village. Even though it has been budgeted through the Regional Revenue and Expenditure Budget (APBD) of the agencies at the Regency, Province and Village levels, when a large enough disaster occurs, funding from these sources is felt to be unable to overcome the after-effects of the disaster that occurred.

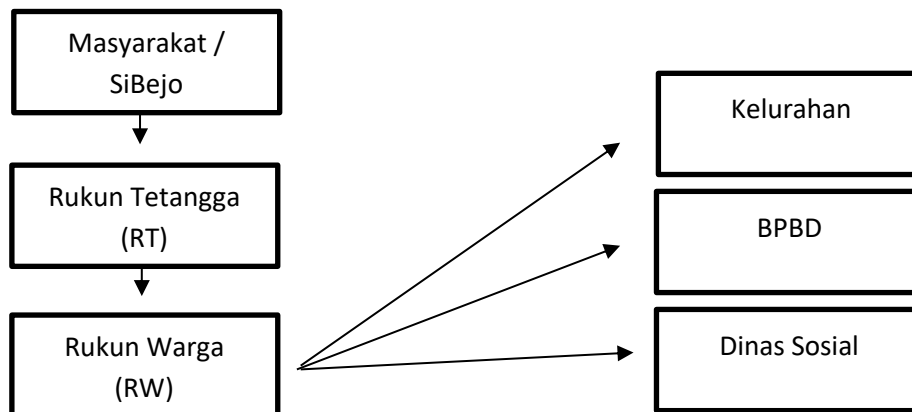
Communication that occurs in the environment in relation to the anticipation and handling of natural disasters in Kalirejo can generally be said to be good. Periodically, community members remind each other through meetings in the Neighborhood Association (RT/RW/Padukuhan) as well as social media and other communication tools such as handie talkies. However, there is a small section that says that communication difficulties do occur, which is what is interesting for

researchers to see. The community also does not rule out local beliefs and knowledge. The rituals of Rejecting Custody, Cutting the Kendit Goat, Offerings, Saparan, Suran show this. Likewise in the Islamic religious tradition there are Tahlilan, Baridan, and Mujahadahan which are still ongoing today. The preservation of the nuances of tradition and religion in disaster mitigation efforts is interesting to study further how communication patterns relate to mitigation efforts so that they can be well received by the community.

Disaster Mitigation Communication Patterns

After collecting data in a case study on communities vulnerable to natural disasters in Kulon Progo, several communication patterns occur within the Kalirejo community, but the most dominant is from the bottom up, as explained in chart 1. Communication Patterns taking place at the initiative of residents in the Neighborhood Association (RT), forwarded to the Citizens Association (RW), through the Hamlet, to the Village, and the Regional Disaster Management Agency (BPBD), the Social Service and so on. In terms of outreach and education to members of the public, it is necessary to adjust the language in conveying important and urgent information. This must be done because often many people may not understand what disaster mitigation means. That's why language becomes very important when communicating to the public by adjusting their culture and educational background. A language that is light and easy to understand will be quickly captured by the public. Furthermore, the community will be happy to take steps in disaster mitigation

Chart 1. Communication Patterns That Occur in the Kalirejo community



Source: Field Observation and Interview with Lurah

Referring to the communication categories according to Jhon R. Wenburg and William W. Wilmot as well as K. Sereno and Edwerd M. Bodaken (Deddy Mulyana, 2010), that society uses almost all of these categorizations. First, communication as a one-way action. The community does this to provide information to other people, both relatives and the wider community regarding disaster mitigation. Furthermore, communication as interaction is also carried out by the community. With this interaction, the community will take action or reaction,

for example by protecting the surrounding environment or anticipating a disaster. Then, because there is communication in the community, there will be a personal understanding through a personal process. These patterns will form effective communication from various levels of society, of course with the help of various lines to be able to provide understanding, in this case, namely disaster mitigation. When there is one perception or understanding, it will be easy in the disaster mitigation process in Kalirejo Village.

In addition, efforts to exchange experience and coordination are also important notes. This is where the role of the Kalirejo Disaster Preparedness Communication Forum (SiBejo) in conveying its programs must go through a responsive communication process without neglecting the details of a report based on direct checks. Another thing that is no less important is whether or not there is a disaster-prone map in each Padukuhan, this requires a response and direct checks every time there is an incident, and evaluates whether the report is running fast or slow.

The community does not only need dominant education, but it turns out that there are small points that are sometimes overlooked, namely support and concern. Including the recruitment of volunteer cadres which must continue to be carried out without interruption. The communication process includes recovery, repair and also post-disaster reconstruction. There is a need for an understanding approach to society, both moral and material capital, as well as trauma healing in the communication process that is carried out on how to heal certain fears or traumas. Relocation and then making evacuation routes is important. In general, community leaders and religious leaders are urgently needed who are able to convey stories or religious matters related to disaster mitigation, joint efforts to maintain local wisdom so as to increase public awareness of natural disaster mitigation.

In controlling the trauma healing, the news circulating and entering the community also needs to be filtered. Because the existence of news that scares and the truth is not clear will actually increase people's fears of natural disasters. Both before and after the natural disaster occurred. Thus, it is the major task of the media in presenting news, because in a situation of uncertainty the media can actually unsettle and frighten the public if the information presented is excessive and inaccurate. Even though according to Nazaruddin (2007) in Christiani Juditha's research said that in the important principles of disaster journalism one of them is accuracy where the media are required to be careful and thorough and precise in providing information through the news presented. (Juditha, 2014).

Social media also has a significant impact on controlling trauma healing. Information obtained from social media must be managed properly, especially for Generation Z, who are born between 1995 and 2012 and are under the age of 27. Generation Z, which incidentally is fluent with technology and spends an average of 9 hours playing cell phones, must be able to become a filter of information that cannot be accounted for so that it will harm many people (Indrajaya & Lukitawati, 2019).

In relation to natural disaster management in the Kalirejo Village, the role of Sibejo, which is a Kalirejo disaster preparedness community assembled from volunteers from Kalirejo and its surroundings, cannot be ignored. Si Bejo not only

educates but also helps out during disasters in Kalirejo and its surroundings and even self-help for disaster mitigation such as buying handie talkies, procuring early warning systems installed on the top of Kukusan Mountain, procuring maintenance operational funds, social fund contributions and even buying uniform shirts used when helping out in the field. This shows that the people of Kalirejo are highly concerned about disaster mitigation. Even this Sibejo volunteer needs to be filled with Generation Z youth who can provide valid directions and information from various sources, including social media. Because apart from anticipating and mitigating disasters, these youths will have a role in trauma healing in society.

Conclusion

Kulon Progo is one of the disaster-prone districts, especially in the Kalirejo subdistrict where disasters such as landslides, floods, and fallen trees often occur. This is caused by the topography which causes unstable soil conditions so that it easily causes landslides when rainfall is high. So it is necessary to have a disaster mitigation communication pattern to handle when a disaster occurs. Various lines must be able to work together in carrying out disaster mitigation communication patterns. Starting from government agencies and outside government agencies. This synergy can synergize and can plan disaster mitigation communication patterns.

The dominant pattern of communication in terms of natural disaster management/mitigation carried out by Government and non-Government Agencies in dealing with disaster mitigation that occurred in Kalirejo Village is bottom-up, namely from the community to the Village, Kapanewon, and Regency governments as well as the Regional Disaster Management Agency (BPBD). Apart from all that, ritual communication patterns, both based on tradition and local wisdom as well as those with nuances of religious teachings are still sustainable and continue to this day such as the rituals of Rejecting Balak, Cutting the Kendit Goat, Sesaji, Saparan, Suran. Likewise in the Islamic religious tradition, there are Tahlilan, Baridan, and Mujadahahan which are still ongoing today.

Other efforts were also made in the pattern of disaster mitigation communication at Padukuhan Kajirejo, namely exchanging experiences and coordination, which is also an important note. This is where the role of the Kalirejo Disaster Preparedness Communication Forum (SiBejo) in conveying its programs must go through a responsive communication process without neglecting the details of a report based on direct checks. Another thing that is no less important is whether or not there is a disaster-prone map in each hamlet. It is necessary to respond and check directly every time there is an incident, and evaluate whether the report is running fast or slow.

Equally important is handling after natural disasters. The community will certainly feel traumatized or trauma healing after experiencing the disaster. So, in addition to the efforts mentioned above, the role of the Kalirejo Disaster Preparedness Communication Forum (SiBejo) is also needed to overcome this. Moreover, youth who fall into the Generation Z category who are considered to understand current developments can participate in filtering information on social

media. The concern is that the information circulating will create panic and trauma in the community and make conditions not conducive.

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Reference

- Asfar Mutaaly Bareilly, Gustiana A Kambo, M. (2022). Reproduksi Kuasa: Politik Etnis Tionghoa dalam Kontestasi Pemilihan Legislatif Kota Makassar. *Journal of Governance and Local Politics (JGLP)*, 4(1), 12–21.
- Astuti, S. D., & Idola Perdini Putri., D. S. F. A. (2020). Strategi Komunikasi Program Internet Sehat Dan Aman Kementerian Komunikasi Dan Informatika Republik Indonesia (Studi Kasus Evaluasi Program Incakap Tahun 2015). *Jurnal Komunikasi*, 8(1), 27.
- Bekti, W. A. D. (2021). Analisis Pemahaman Pemilik Bangunan Terhadap identifikasi Bangunan Sesuai Dengan Aplikasi Asesmen Cepat Bangunan (ACEBS) Pada Daerah Kalirejo Kabupaten Kulon Progo. In *Institusi Teknologi Nasional Yogyakarta.*, 1-98
- Bisjoe, A. R. H. (2018). Menjaring Data dan informasi penelitian melalui Focus Group Discussion(FGD): Belajar dari Praktek Lapangan. *Info Teknis EBONI*, 15(1), <http://ejournal.forda-mof.org/ejournal-litbang/index.php/buleboni/article/view/5117>, 17–28.
- Darmawan, R. A. (2020). Analisis Spasial Tingkat Kerawanan Longsorlahan Di Kabupaten Kulonprogo Daerah Istimewa Yogyakarta. In *Fakultas Geografi. Universitas Muhammadiyah Surakarta.*
- Deddy Mulyana. (2010). *Ilmu Komunikasi: Suatu Pengantar* (cet. 14). PT Remaja Rosdakarya, 2-19.
- Dewi, I. P. (2019). Kelurahan Macanan , Kecamatan Kebakkramat ., *Jurnal Pengkajian Dan Penciptaan Musik*, 12(2), 93–104.
- Fadli, M. R. (2021). Memahami desain metode penelitian kualitatif. *Humanika*, 21(1), <https://doi.org/10.21831/hum.v21i1.38075>, 33–54.
- Fahlevi, P., & Dewi, A. O. P. (2019). Analisis Aplikasi Ijateng Dengan Menggunakan Teori Technology Acceptance Model (TAM). *Jurnal Ilmu Perpustakaan*, 8(2), 104.
- Field Interview and Observation with Lurah in October 2021.* (n.d.).
- Fitrianingrum, M. E. (2018). Zonasi Rawan Longsor Di Desa Pagerharjo Kecamatan Samigaluh Kabupaten Kulonprogo Yogyakarta. *Jurnal Geografi Gea*, 18(2), <https://doi.org/10.17509/gea.v18i2.8481>, 181.

- Abdul Rozak, Mochammad Mahfudz, Mochammad Sinung Restendy, Mukhammad Sahlan, Achmad Zaky Faiz, Lukman Hakim:
 Disaster Mitigation Communication Patterns: Case Studies in Natural Disaster Vulnerable Communities in Kulon Progo Regency
 Pola Komunikasi Mitigasi Bencana: Studi Kasus pada Masyarakat Rentan Bencana Alam di Kabupaten Kulon Progo
- Hardiyanto, S., & Pulungan, D. (2019). Komunikasi Efektif Sebagai Upaya Penanggulangan Bencana Alam di Kota Padangsidempuan. *Jurnal Interaksi: Jurnal Ilmu Komunikasi*, 3(1), <https://doi.org/10.30596/interaksi.v3i1.2694>, 30–39.
- Iiona, F. A., & Radtke, K. (2023). *WorldRiskReport 2023*, 54-57
- Indrajaya, S. E., & Lukitawati, L. (2019). Tingkat Kepercayaan Generasi Z terhadap Berita Infografis dan Berita Ringkas di Media Sosial. *Jurnal Komunikasi*, 11(2), <https://doi.org/10.24912/jk.v11i2.5045>, 171.
- Juditha, C. (2014). 11.4 Etika jurnalisme bencana dalam berita televisi (Bencana gunung berapi Sinabung di TV one). *Jurnal Komunikasi Universitas Tarumanagara*, VI(1), <https://journal.untar.ac.id/index.php/komunikasi/article/view/22>, 27.
- Meisyanti, M., & Rahmawati, K. J. (2021). Environmental Communication Strategy in Overcoming Cisadane River Water Pollution. *Jurnal Komunikasi*, 13(1), <https://doi.org/10.24912/jk.v13i1.9307>, 69.
- Nainggolan, V., Randonuwu, S. A., & Waleleng, G. J. (2018). Peranan Media Sosial Instagram dalam Interaksi Sosial Antar Mahasiswa Fakultas Ilmu Sosial dan Politik Unsrat Manado. *Jurnal Acta Diurna*, 7(4), <https://ejournal.unsrat.ac.id/index.php/actadiurnakomunikasi/article/view/22022>, 10.
- Naryanto, H. S., Soewandita, H., Ganesha, D., Prawiradisastra, F., & Kristijono, A. (2019). Analisis Penyebab Kejadian dan Evaluasi Bencana Tanah Longsor di Desa Banaran, Kecamatan Pulung, Kabupaten Ponorogo, Provinsi Jawa Timur Tanggal 1 April 2017. *Jurnal Ilmu Lingkungan*, 17(2), <https://doi.org/10.14710/jil.17.2.272-282>, 272.
- Pramono, R. (2016). Perspektif Sosiologis dalam Penanggulangan Bencana. *Jurnal Masyarakat & Budaya*, 18(1), 81–90.
- Pratiwi, E. D., Rulyansah, A., Mariati, P., & Widiana, D. (2022). Analisis Penerapan Metode Eksploratif pada Pembelajaran Seni Tari untuk Meningkatkan Kreativitas Siswa Kelas 2 di SDN Made 1 Surabaya. *Media Penelitian Pendidikan: Jurnal Penelitian Dalam Bidang Pendidikan Dan Pengajaran*, 16(2), 146.
- Rizak, M. (2018). Peran Pola Komunikasi Antarbudaya Dalam Mencegah Konflik Antar Kelompok Agama. *Islamic Communication Journal*, 3(1), <https://doi.org/10.21580/icj.2018.3.1.2680>, 88.
- Rudianto. (2015). Komunikasi dalam Penanggulangan Bencana. *Jurnal Simbolika*, 1(1), 51–55.
- Rukajat, A. (2018). *Pendekatan Penelitian Kualitatif (Qualitative Research Approach)*. CV. Budi Utama, 24.
- Sahlan, M. (2020). *Dampak Kultur Terhadap Pola Pencarian Informasi Masyarakat Kecamatan Juawana Kabupaten Pati dan Masyarakat Kecamatan Kalibeper Kabupaten Wonosobo Jawa Tengah*. 1–17.
- Santoso, D. H. (2018). Evaluasi Kelayakan Teknis Penambangan Rakyat Batugamping Desa Sendangsari, Kecamatan Pengasih, Kabupaten Kulon Progo. *Jurnal Mineral, Energi Dan Lingkungan*, 2(1), <https://doi.org/10.31315/jmel.v2i1.2178>, 13–14.

- Santoso, D. H., & Gomareuzzaman, M. (2022). KELAYAKAN TEKNIK PENAMBANGAN EMAS PADA WILAYAH PERTAMBANGAN RAKYAT Studi Kasus: Desa Kalirejo, Kecamatan Kokap, Kabupaten Kulon Progo. *Science Tech: Jurnal Ilmu Pengetahuan Dan Teknologi*, 4(1), <https://doi.org/10.30738/jst.v4i1.2480>, 19–20.
- Silintowe, yunita budi rahayu, & Pramudita, margareta cahya christy. (2017). Komunikasi Bisnis Lintas Budaya Sekretaris Pada Atasan (Studi Pada Alila Hotel Solo). *Jurnal Komunikasi*, 8(2), <https://journal.untar.ac.id/index.php/komunikasi/article/view/67>, 152.
- Strauss, A. L. (1990). *Qualitative Analysis for Social Scientists*. Cambridge Univ. Press, 99-128.
- Suharini, E., Setyowati, D. L., & Kurniawan, E. (2015). Pembelajaran Kebencanaan Bagi Masyarakat Di Daerah Rawan Bencana Banjir Das Beringin Kota Semarang. *Forum Ilmu Sosial*, 42(2), http://journal.unnes.ac.id/nju/index.php/FIS_JURNAL, 184–195.
- Susetyo, P. D. (2021). *Bencana Hidrometeorologi*. Kompas. <https://www.kompas.id/baca/opini/2021/10/06/bencana-hidrometeorologi>
- Ulum, U., & Sinduwiatmo, K. (2016). *Komunikasi Komunitas Skinhead Sidoarjo dalam Proses Pengambilan Keputusan Kelompok*. 5(1), 54–55.
- Wulansari, D., Darumurti, A., & Eldo, D. H. A. P. (2017). Pengembangan Sumber Daya Manusia dalam Manajemen Bencana. *Journal of Governance And Public Policy*, 4(3), <https://doi.org/10.24256/kelola.v1i1.433>, 407–421.