

Transactional Communication of Garut People in Dealing with Potential Natural Disaster

Damayanti Wardyaningrum^{1,a)} Setio Budi Hendro Hutomo²⁾

¹Universitas Al-Azhar Indonesia, Indonesia

^{a)}Author correspondence: damayanti@uai.ac.id

²Universiti Sains Malaysia, Malaysia

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ABSTRACT

Villages in West Java are some of the most hydrometeorology disaster-prone areas. Giri Awes in Garut is one of the villages in West Java whose area is located on the hills of mountain slopes. Some areas have undergone transfer from the forest into the plantation, which caused a higher risk of flood and landslides. This research aimed to identify how the communication is carried out by villagers to mitigate the risk of disaster. This research uses the concept of a transactional communication model with a descriptive qualitative method by collecting data through interviews and field observation. The researchers found the transactional communication model as the effort for disaster risk mitigation has been conducted by the village apparatus toward society. However, some aspects of transactional communication have not been optimally done. It has not been conducted continually, and messages related to disaster experiences in the past have not been communicated to the whole society. There are some unused potentials of the people to support the sustainability of transactional communication by utilizing local culture and other social groups. Optimizing society's potential can support the negotiation of meaning between local government and society.

Keywords: Disaster Potential; The People of Giri Awes Village; Transactional Communication.

ABSTRAK

Desa-desanya di Jawa Barat, merupakan salah satu wilayah di Indonesia yang rawan bencana alam hidrometeorologi. Selain memiliki kontur tanah yang bergunung-gunung dan curah hujan yang tinggi, juga merupakan propinsi dengan jumlah penduduk terpadat. Desa Giri Awes Garut, Jawa Barat berada wilayah perbukitan di lereng gunung yang sebagian telah mengalami alih fungsi dari lahan hutan menjadi perkebunan. Fenomena tersebut memiliki dampak potensi bencana banjir dan longsor. Tujuan dari penelitian ini adalah mengidentifikasi bagaimana komunikasi yang berlangsung pada masyarakat di desa Giri Awes adalah mitigasi untuk menghadapi resiko bencana. Penelitian ini menggunakan konsep model komunikasi transaksional dengan metode deskriptif kualitatif yang menghimpun data wawancara didukung pengamatan lapangan. Hasil penelitian menemukan bentuk model komunikasi transaksional sebagai upaya pengurangan risiko bencana telah dilakukan oleh perangkat desa kepada masyarakat. Namun aspek-aspek komunikasi transaksional belum dilakukan secara optimal karena tidak dilakukan secara berkesinambungan dan pesan-pesan terkait pengalaman tentang peristiwa bencana dimasa lalu belum disampaikan kepada seluruh masyarakat. Disisi lain terdapat potensi masyarakat yang belum digunakan untuk mendukung kesinambungan komunikasi transaksional tercapai yaitu dengan memanfaatkan budaya lokal serta kelompok-kelompok masyarakat agar dapat tercipta negosiasi makna tentang kesiapsiagaan.

Kata Kunci: Resiko Bencana; Masyarakat Desa Giri Awes; Komunikasi Transaksional.

INTRODUCTION

The discussion about natural phenomena considered as disaster commonly happens during a disaster. Meanwhile, the natural phenomenon in Indonesia, especially hydrometeorology (flood and landslide), is a regular nature cycle; therefore, it should have been able to be predicted both its risk and mitigation. Even when a disaster has never occurred in that area, a natural disaster in other areas with a similar type of area could be a reference for people's alertness in handling disaster potential.

In disaster risk mitigation, people's resilience is a very important to prepare. There are some essential reasons as follows. First, it is in line with *Undang Undang Republik Indonesia* (Constitutional Law) No 24 of 2007 about Disaster Handling with the shift of paradigm from only responding to the situation when the disaster took place (emergency response) into the prevention aspect and the disaster risk mitigation. The Handling of Disaster is the disaster risk mitigation is the systematic effort to develop and apply the policy, strategy, and action to reduce the vulnerability and disaster risk faced by society, to avoid and limit the impact of the disaster.

Besides, the mission of the National System of Disaster Management (SN-PB) in Indonesia is to build a resilient nation towards disaster. That is in accordance with the Hyogo Framework for Action 2005-2015 that builds the Resilience of Nations and Communities to Disasters.

The explanation above shows that to shape a resilient society, disaster handling should not only focus on emergency response but also be cleared during the preparedness phase. As a country with disaster-prone areas and a long history of natural disasters, every natural phenomenon should have been better predicted and anticipated. Mitigation efforts are required in the preparedness phase, including the early warning method, to minimize the risk of casualty and property loss during a disaster (Agustina et al., 2020).

The readiness and preparedness of every area in handling natural disasters would be different. Some areas changed drastically after a disaster, but some also created preventive actions. The delay in doing proactive actions in the prone disaster area would result in society who find it hard to survive during a disaster. Other than that, the development of communication systems, from the aspect of early warning systems, communication methods and techniques, and socialization to education, are crucial aspects in the event of disaster. In disaster communication, communication problems happen in every aspect. Researchers have shown those problems arise from the inner side, especially in the emergency response aspect, and the outer side between victims and the public on a broader scope (Moorthy et al., 2018).

Based on the experience of various disaster events, the aspect of group communication in society experienced drastic changes. People in one of the villages on the slopes of Merapi mountain, for example, after the big eruption in 2010, communicated their preparedness to face the disaster potential through the groups of society (Wardyaningrum, 2015) and the communication web of society by utilizing the social capital of locals or outside the village (Wardyaningrum, 2016). Besides that, communication in the context of the environment was also conducted by the people in Sinabung mountain, North Sumatera, which experienced eruption disaster for more than eight years (Lestari et al., 2016).

The dynamic of disaster communication in many places and institutions should be published to improve the people's capacity in other areas. One study about disaster communication conducted by Ministry of Energy and Mineral Resources found that to avoid disharmony in information reception, it is recommended to improve the frequencies of socialization and simulation of disaster directly to society on a lower level. The involvement of Merapi's key informant with special training about the technical term of disaster so that the key person (*juru kunci*) could be the social agent of change in society (Roskusumah, 2013). Aside from that, the effectiveness aspect of community preparedness could be seen from the emergency response activity until the rehabilitation activity post-disaster. At this point, the communication approach in disaster management is crucial in raising the awareness of the community in handling (Fauzi & Marhamah, 2020).

Information as the important aspect of a disaster is required by society as their first capital of alertness, especially in knowing the level of their area's vulnerability towards certain kinds of disaster. Various kinds of area vulnerability can be predicted, for example, from the repeated period of disaster (Cahyanti & Santikayasa, 2017). Information about people's vulnerability in the prone disaster area with the calculation of society index capacity (from the upper to lower threshold) and the vulnerability on the aspect of social economy including the preparedness of various elements of society like medical workers (Ashidiq & Puspita, 2019; Nurmasari et al., 2017; Wibisono & Asbi,

2020). The calculation of disaster vulnerability is required to minimize the risk potential. Therefore, socialization about integrated and continual information is also important so people would better understand how to reduce the disaster impact by having special training or simulation (Agustri & Asbi, 2020; Dewi et al., 2014). A study in the disaster area in Klaten found that most villagers are still holding on to the perception that the impact of the ongoing flood would be the same as the previous one. The perception of society toward disaster should be studied further because the situation of uncertainty in the event of a disaster could always change (Purworini et al., 2019).

In the field, an understanding of context and communication tradition is also required. For example, the study result from people in Majalaya, Bandung, recommended using mosque's sound speakers on various occasions, especially during disasters (Rochim et al., 2020). Another study about disaster communication in Banyumas West Java found that their people regularly conducted preventive efforts to face the disaster potential by using traditional communication media. People performing arts could be an effective platform to interact and inform about any updates towards each other in society (Istiyanto, 2011). Disaster communication through virtual-based learning is also utilized in explaining natural disaster vulnerability to students (Mantasia & Jaya, 2016). In the District of Purworejo, with the high vulnerability of tsunamis and earthquakes, the communication for people's alertness has been done by having training and education about the communication system of early warning (Saptadi & Djamal, 2012). Another preventive effort of disaster communication is conducted through programming by collecting various disasters in Indonesia. The use of dioramas of volcanoes, tsunamis, miniature disasters, interactive computers, and explanation of public relations of BNPB is an effort to educate people about the risk and potential of disaster in Indonesia (Utomo, 2019).

In accordance with the paradigm of disaster preparedness and previous studies about disaster communication, this study has chosen one of the areas in West Java with disaster potential of landslide and flood. The result of a study of disasters in 2018 has described five provinces with the highest level of disaster. They are Central Java (582 times), East Java (448 times), West Java (339 times), Aceh (160 times), and South Kalimantan (97 times). In 2018, there were 2,572 events of disasters and caused 4,814 casualties. Looking at the type of disaster, 96,8% of it is hydrometeorology. Hermon noted that a hydrometeorology disaster is the kind of disaster caused by a damaged system in the hydrology cycle; therefore, it affects the stability of climate conditions and water reservoirs on earth (Rosyida et al., 2019).

Giri Awas Village is one area in West Java with the risk of hydrometeorology disaster. Some of the hilltops and mountain slopes in this area have shifted their function from forest land into plantations. This village is located on the slope of the west part of Cikuray Mountain at 1200 meters above sea level. Most of the plantation area is located on the mountain slope with an inclination between 0°-18°. The biggest area is the tea plantation belonging to PTPN VIII Cisaruni.

The shift of function in the upstream areas of the hill as the water reservoir is not at its maximum level because some of the upstream areas were damaged. The soil is drifted away by the water stream, and the soil becomes sediment on the river. This has caused the river to become shallow. There are three rivers and sewers in this area with various scales: small, medium, and big. They are Cigentur, Cikuray, and Ciparay rivers. Other than that, some water springs were the source of clean water, farming, and tourism are Cisiuk, Situ Saladah, and Situwangi springs.

On the other side, even if it is related to the potential of hydrometeorology disaster with the shift of forest area in the hills, villagers have experienced drought during the dry season. On the record of history, this area has never experienced natural disasters, but the disaster potential that occurred right now is flood and landslide. It was found that the spaces of the hills no longer have trees to keep the soils together. Some of the lands on the slopes of hills are prepared for vegetables. Almost all villagers, with 7,000 persons, depend their economy on tea, coffee, and various vegetables like carrots and potatoes and dairy farms.

By learning about society's effort in dealing with natural disasters, a communication model is required to study the problem of natural disasters in this area. One of the communication models considered suitable by the researchers to use in this research is the study analysis by the transactional communication model. Barnlund expresses this model in West and Turner by highlighting the delivery and reception process that continually happens in the episode of cooperative communication (West & Turner, 2010). The sender and receiver of messages are equally responsible for the impact and effectiveness of communication took place. In linear communication, the meaning is sent by one person to another. Then, in the interactional model of communication, the meaning is reached through

feedback from the sender to the receiver. Meanwhile, in the transactional model, the highlight was the part in which people build the commonly shared meaning. Whatever is said during a transaction in communication heavily relies on the experience. One message is built by a previous message. There is codependency between each communication component. The changes in one component will change the other. In other words, communicators are the one who negotiates the meaning. The transactional model brings meaning one step further compared to the interactional model. This model assumes reciprocity or the shared meaning.

From a number of studies about transactional communication, therefore, the focus of the communication process is a good response from the sender. The receiver is expecting a response from the sender towards something, and the response they receive will be continued to the next level of communication. Implementing the collegiate curriculum, namely planning, implementation, learning, and learning outcomes, effectively uses transactional communication (Sihotang & Siahaan, 2021). Transactional communication has also become the chosen way for teachers to learn about their students' culture. The researchers see it through informants' experience that transactional communication is required by the teacher to close the gap of difference between teachers and students (Pribadi, 2015). To another study, the use of transactional communication is useful in the education process and socialization about the benefits of mothers' breastmilk (Susilaningrum et al., 2017)

From the previous studies, the researcher concludes that the study about transactional focuses more on the process between communicator and receiver to achieve the goals set by the receiver. Meanwhile, in this research, transactional communication is used to analyze the communication process by implementing transactional elements through the continuous process and experience of the communication participant. The use of both elements of continuity and experience between communicator and receiver is the novelty of this research.

In previous studies, the relations between communication participants occurred in the short term. Meanwhile, in this research, the communication participants have a long and close relationship as they live in the same area and do the same activities together. Therefore, the condition to bring transactional communication into reality has a big potential to come to reality.

In the transactional communication model, as it is in the interactional communication, there is an aspect of experience and intersection. The important stress is on the context in which the communication takes place. Not only that participants in communication always influence each other, but they are also influenced by the context in which the communicator interacts. Communication from the transactional perspective will provide a more inherent understanding of communication complexity and improve insights into the variety of communication exchanges.

This disaster communication research uses a transactional communication model approach that will be studied by the assumption in the transactional model. They are: first, the sending and receiving of messages happen continually. One episode of communication mentioned that transactional communication means that the process is cooperative. The sender and receiver of the message both are responsible for the impact and effectiveness of communication. Secondly, in transactional communication, people build common meaning, and communication transaction is very much influenced by experience in the past.

Based on the explanation above, the researcher has formulated the purpose of this research to identify the people's readiness to face the potential of disaster vulnerability in Giri Awaw village by reviewing the elements of transactional communication.

METHODS

This research uses a qualitative descriptive method with data collection from the natural background to explain the phenomenon that happened. The researcher is the key instrument in this study. The collection of samples of the data source is conducted by purposive or snowball sampling. The collection technique is conducted by triangulation (joined), with inductive data analysis or qualitative. Therefore, qualitative research results stress the meaning rather than generalization (Anggito & Setiawan, 2018).

The research with a qualitative approach has several purposes: describing reality as it is contextually, telling things as they are, exploring, obtaining meaning, finding in-depth understanding about something, and understanding theory. Besides, in qualitative research, the result does not come from statistical procedures or other quantification methods (Yusuf, 2017). This research started with observing the mountain slope's surroundings, and the people rely a lot on its plantation. Once a drought in the past years occurred. This research was done more comprehensively by focusing on the

risk of disaster-prone-area from the perspective of communication disaster. The level of data collection was made more structured by compiling the research instrument to gather the data on the field to get a complete picture.

The interview is conducted with five persons. They are the vice of the head of the village, the head of the village, the committee of PKK, and ordinary villagers. The observation was conducted on the people's daily lives as tea plantation workers or coffee organizers at a factory. Also, the observation was done on people's activity in the vegetable field, surrounding environment, and some areas that have experienced the shift of land function like hills and conservation forests as well as building for a piping project for water management and community activities (PKK).

Data gathered in the mid of 2019 was the interview with the head of villages, community organizers, and regular villagers that belong to the Y and Z generation and older generation. The interview approach from various groups is useful for obtaining a comprehensive description of the research and confirming the informant's answer. The result of interview and observation are expected to be able to see and convey the real condition of society by finding the meaning of disaster communication. The data triangulation was done using interview data, field observation, and demography documents.

RESULT AND DISCUSSION

Result

In this research, the transactional communication process that has been done by the local leaders with the people of Giri Awas village in relation to hydrometeorology disaster mitigation effort will be studied using two aspects included in the transactional communication model: continuous communication and message about past experience.

Local leaders like "lurah" and villagers' officials have conducted the disaster mitigation effort by developing a piping project and making an artesian well. The development project is being supported by the local government to manage the use of water collected from the hillside. The purpose is to arrange water distribution to plantations and evenly fulfill people's daily needs, especially during the drought season. People with water difficulty during the dry season in which vegetable production as the leading economic sector dropped drastically. This infrastructure also manages the rain on the mountain slope so that it does not flow uncontrollably but flows first to the area of people's plantation evenly. The drought that happened to Giri Awas village in the past year indicates that the capacity of vegetation of the mountain in the village has dropped drastically until the soil can no longer keep the water together.

The village apparatus has communicated to some people about this infrastructure project. At the beginning of the transactional communication process, everything runs smoothly because it can accommodate people's expectations to solve the water scarcity during the dry season. The following communication process has arranged about which area should become the main priority for water distribution. However, the next step to operating that infrastructure requires people to do the job. Apparently, people were reluctant to take that responsibility due to their busy work at the plantation and considered that water management was not their duty.

Without proper infrastructure management, physical disaster mitigation like piping or making an artesian well and other infrastructure would not run efficiently. Below is the statement from one of the people, as quoted by the head of the village:

"....There is no time to manage the water because people are busy the whole day at their field. Everybody has to work in their field. Actually we have created a schedule for everyone. There is also fee. But nobody wants to do this. So, in the end, this is the condition. Some of the pipes are leaking. This can be seen by the water running everywhere. Finally, the water never reaches people's houses. These pipes should be changed yearly. Nobody wants to handle this. While in fact during dry season everyone is having water crisis, all vegetables die.."

On the other side, people are also reluctant to pay for water maintenance operational costs, such as the periodical change of pipes and the maintenance of water building. In this case, the researcher assumed that communication is continuously required to conduct the water management to handle drought. The government has provided the facility. It would be so unfortunate to waste this opportunity.



Figure 1. Water Building of PAMSIMAS (Water Management Community Base)

The village officials have done a communication process about natural disaster mitigation, but it has not resulted in sufficient action from the people. They have not realized that disasters like floods and landslides can happen anytime due to environmental damage because of the shift of forest land into the plantation on the slope of the mountain and the hills that no longer can keep the water.

The sustainability of plantations and livestock requires much water, especially certain kinds of vegetables. The farmer and breeder sell their product to the nearest city. Mostly these farmers and breeders are the primary breadwinners in the family. The draught was not merely the problem of lack of water stock but also a signal of disaster potentials like flood and landslide.

The piping project has been running for almost a year, but the draught has not been solved yet. The head of the village and the officials were still trying to empower the people to manage the water to meet all people’s needs. Draught took place due to mountains that could no longer keep the water. It happened due to a massive change in certain kinds of vegetables. The village apparatus has put some effort into building the water absorption (in the form of wells) in some locations. However, this effort has not been made optimally because of financial issues. The village officials have communicated to the people to ensure the water reservoir project would be fully implemented.

Furthermore, the researcher found some potential to support the optimization of transactional communication. Some of the communication contexts in Giri Awes village are the traditional aspect and groups in society.

Related to the communication on the context of traditional culture in Giri Awes, a few years back, an art show took place monthly with the support of PTPN VIII. Below is the script of an interview from the village apparatus (vice of the head village).

“...There was a time when we had performing art. It could last from morning until night. All people could gather here (a wide space in between tea plantations). It is quite a good place for people to hang out. Head of the village with their apparatus would always come and join the festivities with people. All of the charges are managed by PTPN. There was Sundanese entertainment until late at night. However, now we have no more of such event...”

From the field observation, when the researcher went to the location, the description of this event can be utilized to tell the message about the importance of environment maintenance and messages related to disaster mitigation. The people performed various traditional arts as a routine activity conducted every other month. This activity was sponsored by the plantation company (PTPN) that earlier belonged to the Dutch.

Unfortunately, such events have not been done in the past ten years. The financial condition of PTPN experienced the decrease in production capacity made it hard to support people with performing arts. Because the disaster message in this area has not been appropriately managed, the researcher considers it essential to keep exploring other traditional communication that local people embrace. Any kind of local transition still exists and is adopted by people related to the effort to maintain nature, including water resources.

The next aspect is found in the individual’s attachment to their group. As in other villagers’ typical characteristics, the people of Giri Awes village are very much attached to their group. When individuals are in a group and do many activities together, things would be more effective. One

supporting aspect of group interaction among villagers is that they love the same area and have relatively a lot of time to meet one another. In the afternoon, at about 05.00 pm, almost all people's activities at the plantation and farm are stopped and they all return home. There are more praying activities at night time several times a week. Therefore, there are still many opportunities for group communication in relation to disaster mitigation topics. The proximity of villagers' houses is a plus point for this communication plan.

In the transactional process, the receiver groups in society. In Giri Awas village, there are various groups of society: PKK or family welfare development community, Posyandu or integrated services post, Quran study group, coffee and tea planters, and all groups of society, both lower and middle class. To date, however, a message on nature and environment that focuses on the potential of floods and landslides has not been delivered.

The committee of the PKK organization expressed that in this area, the women have never formally been informed about the mitigation of landslide and drought disasters. Meanwhile, the group of PKK women in this area is very much affluent in contributing to people's alertness to mitigate the disaster risk. The main potential here is that the PKK group has a certain time to meet and has high enthusiasm to improve their village. They also very much rely on nature as the source of income. It means they should be the ones who are aware of the importance of taking good care of nature, including getting sufficient information about disaster potential in their surroundings. Below is the excerpt of the answer from the PKK committee about the socialization of disaster preparedness,

"...no... we have not heard nor being someone to listen to the risk of drought, moreover landslide..."

The routine schedule of the PKK committee every month seems like have never been optimized to communicate about the potential natural disaster in the area. PKK activities were only around routine information like fund collection, physical exercise, the sales of farm production, the new business opportunity, information on ailing persons, and others. The related matters of the environment were never mentioned on the agenda. Thus, the aspect of sustainability in transactional communication about natural disaster potential in this area has never come into reality.

On the piping project for water distribution, the women-only PKK community has never been asked to join. The discussion about water distribution was only conducted by village apparatus to men or heads of household. Meanwhile, the drought problem also burdens women as they collect water to meet the water supply for household demands and vegetable plantations.

In this area, the management of vegetable plantations has included housewives as a workforce from the process of planting to harvesting. The women explained that the water supply-demand is quite high for people's daily needs and vegetables as they have become people's main income so far. The housewives who manage the household and vegetable plantation at home experience draught the most. From the researchers' observation, every house's yard was planted with many kinds of productive vegetables such as tomatoes, potatoes, scallions, and coffee. During the harvest, housewives help each other manage their yields and pack and sell them to the nearest town. On several occasions, the women of PKK also attended the local government's socialization on food security for the family. However, the message on the importance of preserving nature to support food security in the long run has never been on the agenda.

In the group with higher knowledge, there are groups of students and teachers at schools from various levels. They relatively have much better access and analytical skills because of their education and work. A more complex message about the potential of natural disasters could be transferred to these groups of people. The more complex message includes the aspect of the area's vulnerability, the capacity of people, and the risk that probably comes. The head of villages can utilize the aspect of culture, and a variety of groups can be utilized by the head of villages to conduct communication continuously. At the group of PKK committee and education group, and village officials, there is a warm situation and openness in accepting new information. Therefore, through this group of people, a message can be transferred to lower groups, such as the working group, schools, to the smallest social group, the family.

People in this area are not fully aware of the importance of the forest ecosystem to keep the water, mostly because people do not even know the function of conservation forests around their area. For the current generation, conservation forest has also been neglected from the point of historical ecosystem experience. Below is the excerpt of an interview with the head of the village about the current situation of the forest.

“..... back then when I was little until I was teenager in the year of 70s, there was a forest police who help to protect and supervise the forest. Their main job was to shoo away people who would damage the forest. Have you ever heard of it, ma’am? But from time to time, the police is no longer firm to the people, they became more permissive and even today there is no such forest police anymore..”

People also still have a minimum understanding that forests should be defended because of the hydrology function of keeping the water on the surface, saving the rainwater, and keeping the weather humidity. The aspect of past experience is the possibility of no precedent disaster. Thus people do not have experience of how natural disasters could happen. On one side, with the low level of people’s education from one generation to generation, people lack knowledge from the information in the form of writing. Information on media about other areas experiencing natural disasters like floods and landslides could have been a good reference. In many places in Indonesia, the beginning of the rain season in the past years is usually followed by floods, landslides, and flash floods. These disasters happened because of deforested hills and the land function shift that kept going on for years.

The next excerpt is from an interview with one senior citizen who has experience with disaster preparedness in his village around Garut Regency.

“As far as I remember....around Garut Regency in the year 1973 there was landslide in Maktal Village..there was a bit of landslide that has become object of spectacle of people for days.. then I remember people were making public kitchen. But other than that I did not remember anything else..

For the disaster mitigation, maybe this..parents back then like to tell their kids not to cut big trees with no explanation, but there was a myth, maybe because people in the past they believed more about mystical things rather than natural disasters

That time, it was related to the mystical story that the big trees are place for gods to rest, or usually called “Para Kahyangan” maybe it was because back then, Islam religion has not come yet to the country. The term god and goddess refers more to Hindi culture.”

The transactional communication model demands us to be aware of the influence of one message on another. Then, one message is being built from an earlier message. Therefore, there is interdependency between each communication component. The changes from one component will change another. Thus, once messages regarding past experience about preparedness in handling disaster potential were not transferred to the next generation, then the interdependency between the communication component, in this case about the message and people’s relations, did not happen.

With regard to the abovementioned, there would happen based on the message from past experience. Some people who have experience with the effort to maintain nature with the existence of forest police and the prohibition of cutting big trees are the effort to be understood with modern knowledge that the forest’s function is to reserve the water and avoid landslides. This experience is being rebuilt to create people’s dependence on the message sender (society leader or people from the previous generation) in relation to the effort for nature and environment maintenance has been constructed since long ago.

People’s past experiences are also related to the source of income that heavily relies on nature. This tradition makes most people not have any previous experience looking for an alternative of stable income other than merely exploring nature. Below are quotes from one of the people in relation to villagers’ income.

“ yes, during a dry season like this, many people go to the cities, work at building construction and work at manufacturers, well, what else can we do? We can not plant vegetables, coffee or tea plantation still manageable during dry season, but vegetables that one can not. Later when dry season ends, they will come back home to plant vegetables again..look at the bald spot there, we intended to plant vegetables there but then dry season comes ...”

From the explanation of informants, there was a description that the area of Garut Regency for an extended period has not experienced any natural disaster that becomes people’s collective memory. People of Giri Awas do not consider that the current situation is different from the past. Currently, the population is increasing, and more land is being shifted into housing and plantation.

People’s economic dependence on nature is not compensated with the effort to keep the function of forests and lands on the mountain slope as the water reservoir area. From the researcher’s observation, the bald area of mountain slopes has not been optimized for the afforestation program. Population in the village is also getting bigger (three kids per family), and it requires more spaces for housing and public facilities like schools, health centers, worship places, city halls, and so on. Some

people should build their houses on slanted land, with a short distance between houses with no more water absorption area. There is a school building on the side of the river, and part of its land started to slide because of river erosion. No experience of disaster and limited information regarding hydrometeorology natural disasters in other places have constructed people's attitudes about environmental maintenance and the risk of natural disaster.



Figure 2. Tea Plantation with A Group of Tea Planter Women

In the process of transactional communication, the emphasis is on the importance of each sender to understand the receiver's experience. In this case, the receiver is the current generation who has never experienced, seen directly, or read information about the event of a natural disaster. Therefore, it would be hard for them to receive the message about the example of external experiences, such as the area that experienced a disaster with the same level of vulnerability, the loss of life, and financials in the event of flood and landslide on other areas.

The previous generation's experience in this area also has the aspect of closeness to support the understanding of the message of the disaster. Message can be conveyed by using examples of disaster events with relatively the same level of vulnerability. Another example of a similar disaster event would be the one that takes a long time to recover. Through the message of experience, then negotiation of meaning can happen. In the context of places and societies that have never been in disaster, it required a long time to construct a new mindset, perspective, and belief continuously towards the idea of disaster vulnerability.

The people's activity has brought many potentials and opportunities to convey disaster mitigation messages. However, this has not been taken seriously. The information dissemination program should be conducted among various community groups of various ages. More importantly, the message on disaster risk should be conveyed according to the level of the group's knowledge. To date, there has not been a program to clean the village or tree plantation on a massive scale.

From the researcher's observation of the surrounding plantation, several other things that support the result of the interviews are found. For instance, in the mountain area where the tea plantation exists, people's garbage is found. This should describe the awareness level of people in the area about preserving the environment. Nevertheless, that particular area was the people's main source of their living. The garbage has caused the river's flow to be clogged, whereas water resource is the main need of plantation and livestock.

Other than that, there were some locations on the slope of the bare hills. There has not been a program of replantation in the near future. This should be an important note on how people of Giri Awas village do not have either short or long-term plans to anticipate the risk of landslides that can happen at any time.

Discussion

The most suitable context in transactional communication from the view of the researchers is the cultural aspect. The condition of people in Giri Awes village is in accordance with one study about disaster communication through the local culture approach. Communication in a disaster is not only required during emergency response conditions but also crucial during pre-disaster. Preparing people in the disaster-prone area should be done continuously. Other than sufficient information about the potential disaster in one area, the training and internalization of habits in dealing with disaster situations should be done sustainably. The way of conveying information should be done correctly. Otherwise, it would worsen the situation. The approach of cultural and cross-cultural communication is really required (Rudianto, 2015).

In relation to the cultural context, there were several studies with similar cultures to the people of Giri Awes village. The similarity was in the sense of tradition of gathering by watching the traditional art performance. In that study, the traditional art performance was already utilized by the local government for educating disaster communication.

For example, another study about traditional communication in Banyumas in handling disaster threats shows the use of the sign from traditional media, "*kenthongan*" or "*bedug*" in mosques as well as art media (Istiyanto, 2013). In this regard, people performing arts are suitable media as the messages are easily adopted. This art can be a place to interact and get the newest information among people. The use of local language by inserting a message on disaster is also easier to understand by the audience. As the easy media to use by everybody, the sounds of these two tools effectively convey the information about safety situations in their area. For messages like the history of a disaster on the area and the impact, the performing art tools like "*wayang*" (puppet show) are also used to communicate with the people.

On the other side, one recent study in disaster communication found that new media and social media have consequences on people's lives. In general, its presence shifts the role of traditional media. The development of new media in the early 2000s influenced how disaster information was collected and distributed (Widyastuti, 2021).

In the case of Merapi mountain, a disaster communication study in the context of group communication is conducted in the disaster-prone area of Merapi. Group communication of villagers at the slope of Merapi can be an excellent example of preparedness in facing the threat of Merapi mountain eruption as a collective experience. The head of the village can sustainably do communication through various activities in groups in society, namely Posyandu and Qur'an Reciting Program (all ages). Given that, all groups in the village can get information routinely about activity in Merapi mountain and know what to do when an eruption happens (Wardyaningrum, 2015).

Based on the explanation above, the researchers describe that transactional communication has not been done sustainably. Based on the transactional communication model, the researchers' critique is that natural disaster alertness should be done based on the frequency and intensity of communication. There should be more face-to-face communication sessions between the head of the village as the sender and people as the receiver. If one of them only appears once in a while and there is no follow-up afterward, then the transactional communication would not be able to happen.

The physical proximity would strengthen the relationship between the sender and receiver and, in the end, would be more convincing to the receiver about the importance of the message. The relationship built because of the high frequency would feel more sustainable and contribute significantly to building meaningful negotiation.

On the next aspect of the transactional communication model, it was noted that every individual communicates to build common ground on the same meaning. The transactional communication model demands us to be aware of the influence of one message on another. One message is built from the previous message. Thus, there is interdependency between each communication component. A change in one component would change the rest.

Other than that, there were messages from earlier generations about the prohibition of cutting the big trees communicated through mystical stories. This could be translated as the form of alertness effort to face the natural disaster from an ancestor. The ancestors' beliefs were being conveyed orally to the next generation. From the record of disaster history, this appears because a specific area natural disaster happened.

The local people's limitation in understanding natural phenomena makes them easily believe the mystical and myths things. However, generally people back then followed the rules of their ancestors

dutifully. The scientific explanation of the natural phenomenon is not as popular nowadays. However, the use of mystical and myths was so effective because it was proven that still being communicated from one generation to the next generation and remembered well by the younger generation. Some people's beliefs in relation to alertness toward natural disasters exist in some places in Indonesia, like Java and Sumatera (Gunawan et al., 2014; Hairumini et al., 2017; Kusuma et al., 2020; Maharani et al., 2019; Pahrudin, 2012; Permana et al., 2011; Resha & Ernawati, 2019; Runtiko et al., 2018; Thene, 2016; Wahyudiono, 2015). Messages of local wisdom from the previous generation about nature aim for people to respect nature because it has given so many blessings in life. The messages are for humans to always keep nature in good shape. The ancestor tells the message orally through tales and performing arts for the next generation so that they can avoid natural disasters. From this belief, people are reminded to always ask for God's protection from the force of nature beyond human control.

Nevertheless, the people of the current generation seems not to understand the function of conserving forest in the continuously decreased area. Forests should be kept because of their hydrology function to keep the water on the surface, save the rainwater, and keep the humidity level. The critical land should be planted with various plants with ecological functions. Plants with deep roots and bushy headers can keep the soil intact, especially during the rainy season. People also seem to have never been taught to read about early warning systems from the body of Meteorology, Climatology, and Geophysics about extreme weather in West Java.

CONCLUSION

There is a number of disaster mitigation efforts conducted by the transactional communication model by village apparatus towards society. However, transactional communication has been done sustainably and comprehensively to all elements of society. One example is the lack of message transfer in relation to the development and maintenance of the piping project to flow the water to the plantation. Other than that, there is a lack of stories or messages about the disaster experiences that happened in the past and pearls of wisdom from the earlier generation about nature preservation. On the other side, local culture's potential to be explored further as one of the communication media in conveying a message about the prevention of natural disasters. Another unexplored potential is the group communication among various groups about their flood and landslide-prone areas. The involvement of society can be developed to provide sufficient information for all. Thus, the transactional communication between local government and people has not created meaningful negotiation about their preparedness in dealing with disaster potential

Recommendation from this research is that first, the transactional communication model by village apparatus can be better executed by communication sustainably through the use of local culture and the existing group of society. This communication process would support or help the head of the village and people to analyze the background of the problem, the reason for natural disaster potential, and the impact of the disaster. Head village should always be alert to the existence of all resources and what can be utilized to minimize disaster potential.

Second, through transactional communication, the alertness in handling disasters can be obtained by the roles played by each group like the PKK group, coffee farmer, tea and vegetable farmer, students, and other groups. In this case, the understanding process should be actively done by the groups with better understanding, like the school principals, teachers, religious leaders, PKK committees, and the management of PTPN that operates in Giri Awas village.

Third, the message in transactional communication is not only about the technical aspect but also puts more focus on social aspects that people can understand so that people would have more responsibility to preserve their environment. From this point, the external experience from other places who have experienced a natural disaster with the same level of vulnerability or traditional experience of local people from the past about the importance of environmental preservation. Transactional communication in a sustainable manner can be done by the head of the village to get their people to get accustomed to the activities of disaster mitigation indirectly. This can start with simple things such as not littering on the river and the plantation area that blocks the water flow. The messages on the risk and people's action to shift the function of forest land at the top and slope of the mountain can be conveyed through the example of floods, landslides, and flash floods that take lives in Indonesia. They could learn from the disasters like the ones that hit Bogor and Lebak in early 2020

and one that hit Kalimantan because of deforestation. People need to know that floods and landslides happen because of the shift of land function at the mountain slope, and the triggering factor is the rain that could happen anytime. The Head of the village should educate the people as early as possible.

Thereby transactional communication could run more effectively in anticipating the potential of natural disasters. The village leaders and their people can think more comprehensively, not merely identifying the risk and challenges but also predicting when the natural disaster potentially comes and how to anticipate it. If transactional communication is applied on a routine basis, the head of the village and people no longer need to analyze all aspects of natural disasters from zero.

Transactional communication can prepare people's alertness in the prone-disaster area. The people's alertness to mitigate the loss because of disaster can be done by building awareness about the level of vulnerability in their respective areas. Therefore, the risk of disaster should be able to consider and mitigate as early as possible.

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