Socialization of Mount Merapi Disaster Management at Muhammadiyah Vocational School Cangkringan Yogyakarta

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ABSTRACT

Geographically, Argomulyo Village is near an active volcano, namely Mount Merapi. With these geographical conditions, the possibility of natural disasters occurring is very possible, starting from volcanic natural disasters and cold lava floods in the area. With the frequent occurrence of disasters, it is necessary to increase preparedness in dealing with disasters in the Argpmulyo Village community, so it is very necessary to carry out outreach to provide insight and knowledge to the community. The method used is conducting direct outreach in the school hall and simulations in the field. The target for this disaster response socialization activity is students of Muhammadiyah Cangkringan Vocational School. To improve disaster response and be smart in absorbing information for vocational school students as an initial step. The aim of this activity is for the community to have knowledge regarding disaster management and always be prepared when a disaster occurs at any time, so that they can create a strong personality and respond to disasters.

KEYWORDS
Socialization;
Disaster management;
Cangkringan Muhammadiyah Vocational School

1. Introduction

Argomulyo Village is a village located in Cangkringan District, Sleman Regency, Yogyakarta. The Argomulyo area itself is a village that is located quite close to Mount Merapi, which is administratively located in the Sleman Regency area. Due to the geographical conditions of Argomulyo Village, which contains the still active Mount Merapi, natural disasters may occur at any time. Natural disasters are events or series of events that threaten and disrupt people's lives and livelihoods caused by natural factors that result in human casualties, environmental damage, property loss and psychological impacts. A natural disaster is a natural event that occurs suddenly, causing a devastating negative impact on the continuity of life [1]–[3]. In this event, the elements directly related or affected must respond by taking extraordinary actions to adjust and restore conditions to normal or better conditions [4].

Disasters are events that threaten and disrupt people's lives caused by natural and human factors, causing loss of life, environmental damage and other psychological impacts [5]–[7]. Natural disasters that may occur in Argomulyo District are volcanic eruptions and cold lava floods [8]–[10]. Volcano or volcano in general is a term that is defined as a rock in liquid or lava form that extends from below the earth's surface to the earth's surface [11][12][13]. A volcano is a mountain that is still active and releases material within it [14][15][16]. Volcanoes that are still active, such as Mount Merapi, are very likely to become inactive or die [17][18][19]. Mount Merapi will die out in approximately 610 years before finally becoming active again [20][21][22]. With information like that, it is very difficult for people to determine whether a mountain is dead or still active [23][24][25]. If Mount Merapi erupts, the magma under the volcano will come out as lava, which is very hot and dangerous for living things, besides that there will also be flows of mud, ash and poisonous gas [26][27][28]. Apart from that, the volcanic eruption also caused earthquakes and floods of cold lava that passed along the Argomulyo river [29][30][31]. Basic knowledge about the status of Mount Merapi will certainly be useful for the local community to know

the condition of Mount Merapi, so that later they can identify the status of the mountain and understand the impact afterwards [32][33][34].

Disaster mitigation is a series of efforts to reduce disaster risk, both through physical development and awareness and increasing capacity to face disaster threats [35]–[37] To carry out disaster mitigation efforts, the first step that must be taken is to conduct a study of disaster risk [38]– [40] Disaster risk is the potential loss arising from a disaster in an area and a certain period of time which can be in the form of death, injury, illness, life at risk, loss of sense of security, displacement, damage or loss of property, and disruption of community activities [41]– [43] Basic education can build a culture of safety and resilience, especially for children as young generation candidates, which can be used as provisions if a natural disaster occurs [10], [44]–[47]. Due to the large number of natural disasters that occur, socialization and simulation of disaster response is very necessary which includes the right way to save yourself when a disaster occurs and can avoid accidents that should not occur in everyday life [35], [48] –[50].

Every person has the right to social protection and a sense of security, especially for disaster-prone community groups and every community is obliged to maintain a harmonious social life in society, maintaining balance, harmony, conformity and preservation of environmental functions. So, as a form of community service and to overcome the limited knowledge of the community about disasters, it is necessary to carry out outreach to the community to create a disaster response village, which aims to increase the community's knowledge in the field of natural disasters.

2. Method

The method used in this service activity consists of four stages, namely; surveys, observations, socialization activities, and evaluations are shown in Figure 1. Field observation activities were carried out on Thursday, September 26 2022. This activity was carried out by observing at the Cangkringan Muhammadiyah Vocational School. Then, holding discussions with the school principal and curriculum staff related to optimizing countermeasures. disasters in Argomulyo Subdistrict were then discussed regarding the activity targets, implementation locations, and activity implementation times. The socialization activity was held on Wednesday, January 6 2023 at the Muhammadiyah Cangkringan Vocational School Hall. This activity was attended by the Village Head, Field Supervisor, School Principal, and students of Muhammadiyah Cangkringan Vocational School. The resource persons in this socialization activity were from the DIY Regional Disaster Management Agency (BPBD). The resource persons we invited were three people, namely, Endro Sambodo, Fikar Yunizar, and Supriyono. In this activity, KKN students become facilitators in this activity. The socialization activity starts at 09.00 until 14.30, starting with the delivery of material from the resource person, then followed by a discussion and question and answer session with the participants who attended the socialization. Then proceed with simulations carried out in the field.

Fig. 1. Methods for implementing disaster mitigation

2.1. Results and Discussion

Argomulyo Village is very close to Mount Merapi which is still active. So the possibility of natural disasters like volcanic eruptions and cold lava floods is very possible. Carrying out socialization and simulations regarding disaster response is very possible to carry out, considering the situation and geographical location. Disaster prevention is a series of activities carried out to reduce or eliminate the risk of disasters, either through reducing the threat of disasters or the vulnerability of parties threatened by disasters. The threat that we will convey during the socialization is regarding the threat of the spread of hoax news which is currently widely circulating and is detrimental to other people. For this reason, it is hoped that preventing public literacy, especially for Cangkringan Muhammadiyah Vocational School students, can be a prevention to reduce public panic when they receive news circulating as shown in Figure 1.

Fig. 2. Preparation and handling when a disaster occurs

Disaster mitigation is a series of efforts to reduce disaster risks, both through physical development and awareness and increasing capacity to face disaster threats [51]–[53]. To carry out disaster mitigation efforts, the first step that must be taken is to conduct a study of disaster risk [54]–[56]. In this case, what will be raised during the socialization is the preparations that must be made [57]–[59].

Community Preparedness is a series of activities carried out to anticipate disasters through organization and through appropriate and effective steps [60]–[62]. In this socialization, of course, media is needed as a tool to communicate messages to Muhammadiyah Cangkringan Vocational School students. The socialization activity began with remarks from the campus, representing the Chair of the KKN program, followed by remarks from the school principal, Field Supervisor (DPL), and the Village Head. The resource person continued with the material presented in the form of continuing from the school's disaster response documents and carrying out disaster simulations and first aid. When carrying out the simulation, it was carried out in the school field using several tools such as sirens, toa, stretchers and safety helmets as shown in Figure 2. This figure shows that in the simulation activity the resource person also involved KKN students and students from Muhammadiyah Cangkringan Vocational School. The resource person also gave the audience the opportunity to conduct a question and answer session regarding the material. The entire audience was very enthusiastic about asking questions to the resource person.

Fig. 3. Simulation activities carried out in the field

4. Conclusion

The conclusion in implementing the Disaster Response Socialization program is to get positive support from the school and all students involved in it. The activities in this service include several stages that run smoothly and according to expectations. Even though there are several obstacles that occur, the activities that have been carried out can increase community participation in dealing with disasters that occur, provide a positive impact for students and students of the Cangkringan Muhammadiyah Vocational School, and school staff through the work program implemented so as to create a disaster resilient school. , Helping students apply the knowledge they have directly to the students of Cangkringan Muhammadiyah Vocational School, the community, and all Argomulyo Village officials, and the community has preparedness skills when a disaster occurs.

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Author Contribution

The activity plan in order to implement the solutions offered that there are five series of activities, namely coordination, logo design, socialization of covid, marketing, and marketing education.

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Conflict of Interest

The authors declare no conflict of interest.

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