Capacity Building of Candipuro State Senior High School in Mitigation of Mountain Semeru Eruption, Lumajang District

Adela Oktavia Islami\textsuperscript{1)*}, Pujo Widodo\textsuperscript{2)}, Ernalem Bangun\textsuperscript{3)}, Herlina Juni Risma Saragih\textsuperscript{4)}

\textsuperscript{1,2,3,4)Disaster Management, National Security, Indonesia Defense University}

*Corresponding Author
Email : adelaislami8@gmail.com

Abstract
Lumajang Regency has many educational units located in the Semeru eruption disaster risk area. Candipuro High School is a school located in the area of disaster risk III for the eruption of Mount Semeru. Candipuro District does not yet have a disaster-safe education unit. Disaster education in educational units is important to do to improve the capabilities of educational units. This study aims to analyze the implementation of disaster safety education and capacity building at Candipuro High School in mitigating the Mount Semeru eruption disaster. This research method uses quasi-qualitative. Data collection is done by way of interviews, observation and documentation. The results of the study showed that: (1) The implementation of disaster-safe education at Candipuro High School has fulfilled the existing pillars such as safe school facilities, school disaster management, disaster prevention and risk reduction education, but there are still some deficiencies in school disaster management, (2) School capacity building is carried out through several programs such as the implementation of disaster-safe education units and participation in disaster response student organizations. The conclusion of this study is that the implementation of disaster-safe education is embodied in disaster safe education unit. In its implementation there are still some shortcomings such as school disaster management that is not good. For capacity building of the five stages, only four stages have been properly fulfilled. In the fifth stage, the evaluation is not yet running. Several dimensions of capacity have emerged such as human resource management, fair participation, program sustainability, partnerships, learning organizations. If the five stages of capacity building and all capacity dimensions appear, then the capacity building at Candipuro High School can run well.

Keywords: Capacity Building, Disaster Safety Education, Mitigation

INTRODUCTION
The development of the concept of national security expands how to see threats that exist in national security. Threats are no longer only in the form of military threats with a perspective on state security but have a perspective on human security. There are various types of non-military threats. Such as acts of terrorism, radicalism, separatism and armed rebellion, natural disasters, climate change, disease outbreaks, food security, energy and water (BPPI, 2015). One example of a non-military threat in Indonesia is a disaster. According to Law Number 24 of 2007 concerning disaster management, a disaster is defined as an event or series of events that disturbs and threatens people's lives and livelihoods caused by natural factors and non-natural factors as well as human factors resulting in casualties, environmental damage, losses property and psychological impact. Disasters have the potential to cause chaos, even to devastate and devastate an area if the community does not have the capacity to deal with the disaster.

Among the series of disaster events that occurred in Indonesia, volcanic eruptions are one of the most intense besides earthquakes. A lot of information and literature can be extracted about this disaster, even Indonesia itself has a study agency that specifically studies and monitors the movement of volcanoes. One of the volcanic eruptions that occurred at the end of 2021 was the eruption of Mount Semeru, to be precise, on December 4, 2021. This eruption of Mount Semeru shocked the surrounding community because of the sudden incident.
Even though previously the BPBD of Lumajang Regency had issued an appeal to the public not to carry out activities along the watersheds around the mountain slopes (KOMPAS, 2021).

![Figure 1. Map of the 2021 Southeast Sector Semeru Volcano Hazardous Areas](source: PVMBG, 2021)

The Mount Semeru disaster-prone area is divided into three areas. The disaster-prone area III is an area that has the potential to be hit by hot clouds, lava flows, and rockfalls. In the disaster-prone area III, it is very risky for settlements and residents' activities because it has the potential to cause casualties, damage and losses. The image above shows a map of the disaster-prone areas of Mount Semeru in the southeastern sector during the December 2021 eruption. The yellow areas indicate disaster-prone areas I, then light pink indicates disaster-prone areas II, and dark pink indicates disaster-prone areas III.

There are several factors that can cause victims when a disaster occurs such as a lack of understanding of the disaster being faced, decreased quality of resources, lack of information or early warning, and inability to deal with existing threats (BAKORNAS, 2007). Government Regulation No. 21 of 2008 states that disaster management can be implemented through education and training. The intended education and training is to increase the awareness, concern, ability and preparedness of the community in dealing with disasters. In President Jokowi's directives at the National Coordination Meeting on Disaster Management on 2 February 2019, one of them is that disaster education must begin. Especially in disaster-prone areas to schools through teachers. Disaster risk reduction can be through education in order to achieve broader goals by integrating disaster risk reduction education into the school curriculum as well as into extracurricular activities.

Quoted from CNN Indonesia, during the 2021 Mount Semeru eruption, at least 28 schools were affected, spread across Pronojiwo District and Candipuro District. There are 6 schools in Candipuro, 22 schools in Pronojiwo. Which are spread across various levels of education such as 13 pre-schools, 9 elementary schools, 5 junior high schools, 1 vocational school. Candipuro sub-district is one of the sub-districts in disaster risk area III. Disaster risk reduction should have been integrated with education units. The importance of implementing disaster-safe education units is one of the efforts in disaster risk reduction. During the 2021 Mount Semeru eruption, Candipuro High School is one of the schools that has become an evacuation site for affected communities. The affected communities were initially at the KPRI Dwija Raharja evacuation post, but were then transferred to Candipuro High School with the consideration that refugees would receive more adequate facilities (BPBD, 2021). In addition, Candipuro High School is also used as a place for teaching and learning activities. Candipuro High School is a school in disaster risk area III which was not damaged. In Candipuro sub-district, a disaster-safe education unit has not yet been formed (Amni, 2022). Even though...
Educational units located in disaster risk areas should have the ability or capacity for their school members to deal with disasters (Haikal, 2021).

In Haikal’s research (2021) states that the implementation of a disaster-safe education unit to find out what handling must be done when a disaster occurs through the dissemination stage which consists of outreach, visualization and also disaster simulation. Arini (2021) states that the implementation of a disaster-safe education unit is carried out in several stages such as the formation of a standby team, an independent assessment of the 3 pillars of an education unit which are disasters and outreach. Then in Oktari’s research (2015) it was stated that a survey that had been conducted on schools showed 3 schools had a high level of preparedness for policy parameters and directives. Meanwhile, for the 3 parameters of the emergency response plan, early warning and the capacity to mobilize resources, no more than 9 schools have high preparedness. This study discusses how to increase the capacity of Candipuro High School in mitigating the Mount Semeru eruption seen from the stages in capacity building and what dimensions of capacity have emerged.

**RESEARCH METHODS**

This study uses a quasi-qualitative research method. With research subjects such as East Java Regional Disaster Management Agency, Lumajang Regional Disaster Management Agency, Lumajang District Education Authorities, East Java Education Authorities Lumajang Region, Disaster Safe School Volunteers, Candipuro High School Education Staff, Candipuro High School Students. Data collection techniques are carried out by observation, interviews, documentation. Data analysis techniques in this study used an interactive model developed by Miles, Huberman, and Saldana. Where activities in qualitative data analysis are carried out interactively and continue continuously until complete, so that the data is saturated (Miles, 2014).

**RESULT AND DISCUSSION**

**Disaster Safe Education at Candipuro High School**

The implementation of disaster-safe education at Candipuro High School is manifested in the implementation of the disaster-safe education unit (SPAB) program by the East Java Regional Disaster Management Agency. Implementation of the disaster-safe education unit program is intended so that educational units can improve disaster preparedness and mitigation to provide protection and safety to school members, both students, educators, and education staff. In the implementation of disaster-safe education units there are several aspects which are divided into several pillars such as safe school facilities, school disaster management and disaster prevention and risk reduction education.

In the safe school facility pillar, Candipuro High School is a senior high school in Candipuro sub-district, which is one of the sub-districts in the Mount Semeru disaster risk area. Have affordable access to vital objects such as health centers and hospitals and if in an emergency, rescue or evacuation can be carried out. The classroom has two doors that open to the outside, so that when in an emergency it makes it easier for rescue access. Evacuation signs have been posted on the walls along the class corridors which make it easier for residents to see. However, access or facilities for school members who have special needs are not yet available.

In the school disaster management pillar, schools do not yet have policies related to school disaster management. Such as the absence of an MoU, program, activity plan

documents both structurally and non-structurally that support efforts to reduce disaster risk in schools. The school itself has never held an integrated simulation or training attended by school members such as students, teachers and education staff. In contrast to research conducted by Arini (2021) which states that the implementation of management is carried out starting from the formation of a disaster task force in schools in the form of establishing decrees that work in accordance with the principal and respective functions related to disaster risk, emergency and recovery.

In the education pillar of disaster prevention and risk reduction, students get from geography subject matter which in certain chapters discuss potential disasters, life resources in relation to disasters. Apart from intracurricular activities, students also gain knowledge about disasters from extracurricular activities at school such as scouting. In scouting students are given insight into basic disaster knowledge, disaster preparedness. Collaboration with scouting is one of the strategic steps to support disaster education to become massive and fast to implement (Anisah, et al., 2019). Then the Youth Red Cross (PMR) extracurricular includes material such as first aid. Because one of the objectives of implementing a disaster-safe education unit is to instill character values in educational units such as (1) integrated into all subjects, (2) developing school culture, (3) implementing extracurricular activities, (4) habituating behavior (Sudiarta, et al., 2019).

Based on the implementation of the pillars in the disaster-safe education unit, Candipuro High School has been able to fulfill all of the pillars mentioned. But there are some drawbacks of each of the existing pillars. This is because the implementation of a disaster-safe education unit Candipuro High School is a program on disaster risk reduction and prevention that is being implemented for the first time. So that schools still need related parties to support what is lacking in the pillars of the existing disaster-safe education unit (SPAB). Such as from the local government and from within the school itself.

**Capacity Building at Candipuro State Senior High School**

Then if we look at the stages of capacity building according to CADRi (2015) there are at least five stages such as stakeholder engagement, capacity and needs assessment, determination of capacity building responses, implementation of capacity building responses and evaluation. At the stakeholder engagement stage, Candipuro High School has not made use of human resources or school members independently. The existing school development team has not functioned optimally, the organizational structure of the existing school development team only meets the specified regulations. According to the theory of Chaumba and Geene (2003) in Wira (2021) that human resource management is carried out to use the abilities or skills they have. The involvement of stakeholders is carried out from outside the school, namely by the Lumajang Regional Disaster Management Agency and the East Java Regional Disaster Management Agency which is manifested in the formation of a school disaster preparedness team in the implementation of a disaster safe education unit. Good understanding and coordination is needed between the stakeholders involved with what they need, such as resources, information and expertise (CADRI, 2015). If the school is able to involve stakeholders within the school as well as related outside stakeholders. Then capacity building can run well.

Then on the capacity owned and the needs of the school it was found that the location of the school which has a large open area. Candipuro High School is an educational unit located in a disaster risk area with a real threat, namely the eruption of Mount Semeru. Most of the students are scattered and come from disaster risk areas. Besides that, training or simulation has never been done so far. Procurement of training and simulations needs to be carried out to provide an understanding of knowledge on disaster preparedness (Hayudityas, 2020).

With the existing capacity and needs. Then the Lumajang Regional Disaster
Management Agency appointed and determined Candipuro High School as a disaster-safe education unit (SPAB) in Lumajang Regency based on a letter of notification of the implementation of the 2022 year 2022 disaster-safe education unit (SPAB) activity issued by the East Java Regional Disaster Management Agency. Apart from that, there is a program from Lumajang Regional Disaster Management Agency, namely the Disaster Response Student Organization (OSTB) which focuses on students. This stage is carried out at groups, communities, organizations, regional or national levels (CADRI, 2015). The dimension of partnership capacity has emerged with the implementation of capacity building programs from related parties.

Meanwhile, the application of the response determined is by forming a disaster task force or school disaster preparedness team through the implementation of a disaster-safe education unit (SPAB). Then in terms of preparedness in schools, signs for evacuation routes and evacuation assembly points have been installed. Then by participating in the disaster response student organization program (OSTB). In this case the dimension of human resource management capacity has emerged. At the same time this emerging capacity has been used to enhance knowledge and skills possessed (Cahumba and Geene, 2003). Candipuro High School has the potential to develop programs regarding disaster in schools through the independent curriculum used. By imparting disaster response knowledge. However, this has not been implemented for now. In accordance with the stages of implementing capacity building by CADRi (2015) that the best step is to use an existing program rather than forming a new program.

Evaluation for the implementation of the disaster-safe education unit (SPAB) program by the East Java Regional Disaster Management Agency has not yet been carried out. Lumajang Regional Disaster Management Agency has not yet carried out an evaluation at this time. However, because it has been declared that the school will become a disaster buffer school, an evaluation will be carried out by looking at what the school needs in the future. To ensure that the implemented program can increase capacity, an evaluation must be carried out to measure the results (CADRI, 2015). But so far Candipuro High School itself has only implemented the program that has been given and has not yet carried out an evaluation.

**CONCLUSION**

The implementation of disaster-safe schools at Candipuro High School is realized in the disaster-safe education unit program (SPAB). In its implementation, Candipuro High School still has some shortcomings from each of these pillars, one of which is the school disaster management which is not yet good. Because the disaster-safe education unit (SPAB) is one of the programs that has just been implemented. However, for the most part in its implementation, Candipuro High School has fulfilled several priority pillars in the disaster-safe education unit (SPAB).

Capacity building at Candipuro High School can be seen from several stages. Of the five stages, only four stages have been fulfilled properly. However, in the fifth stage, the evaluation has not been carried out and carried out. In capacity building several dimensions of capacity have emerged such as human resource management, fair participation, program sustainability, partnerships, learning organizations. If the five stages of capacity building and all dimensions of capacity have emerged, then the capacity building at Candipuro High School can run well.
REFERENCES


