

## **Disaster Safe Education Unit Program As An Effort To Reduce Disaster Risk In School**

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### **Abstract**

*Various sectors experienced losses as a result of the disaster. Education is one sector that is badly affected by disasters, especially when disasters occur during school hours. Students, who are the country's future assets, are the biggest victims. In addition, accidents can cause damage to the learning process, school documents, and school facilities. For this reason, disaster risk reduction management must be in place. One way to do this is by providing education about disaster risk reduction. This research uses a qualitative approach, which means describing and explaining what schools are doing to reduce disaster risk by implementing a disaster-safe education unit program. Steps to describe and explain data by referring to expert opinions. This study shows that the Disaster Safe Education Unit (SPAB) program is very important to implement in schools because it can increase the school community's understanding of matters related to disasters. It is hoped that the implementation of the SPAB program will enable schools to remain safe and comfortable and increase students' understanding of how to deal with disasters.*

**Keywords:** *Disaster Management, Disaster Risk Reduction, Disaster Safe Education Unit*

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## **INTRODUCTION**

Indonesia is the largest archipelagic country in the world which geographically allows Indonesia to have variety of diverse natural resources and cultures. This condition raises the risk of disasters ranging from natural disasters, volcanic eruptions, floods, landslides, and earthquakes, to health problems. The various disasters that occur, in the long term, can slow down the achievement of the 2015 Millennium Development Goals (MDGs), which will ultimately affect the achievement of the eight MDGs indicators as a benchmark for the level of prosperity of a nation. Indonesia is in an earthquake-prone area because it is located between three active plates in the world, namely the Eurasian, Indo-Australian, and Pacific plates.

The Indonesian government has issued Law No. 24 of 2007 concerning "Disaster Management" which regulates the stages of a disaster including pre-disaster, during-disaster emergency response, and post-disaster. The existence of this Law is also a basis establishment of BNPB (National Disaster Management Agency) and BPBD (Regional Disaster Management Agency) in all districts in Indonesia. In addition, the Indonesian government compiled The National Action Plan for Disaster Risk Reduction (RAN PRB) is evaluated periodically and adopts, implements, and develops global agreements into local contexts. Efforts to increase public knowledge, skills, and awareness in terms of disaster mitigation have become the attention of the government at every level, which is carried out through various activities such as training, counseling, simulations, seminars, program development in a community, as well as strengthening the quality of Government institutions in the field of disaster, including BNPB (National Disaster Management Agency). Regional Regulation (Perda) Number 8 of 2010 concerning Disaster Management has mandated in article 8 paragraph B that, "every person has the right to receive education, training, and skills in implementing Disaster Management".

In general, there are 3 main factors that cause disasters in Indonesia, first is a natural factor (natural disaster) that occurs due to a natural phenomenon that does not exist human

intervention in it, the second is non-natural factors (non-natural disasters) that occurs not because of natural phenomena and is also not the result of human actions, the third is a social/human factor (man-made disaster) which is purely the result of human actions (Nurjanah, 2012).

Information obtained from the Indonesian Disaster Data Geoportal, as of May 2024, has seen 783 natural disasters. Of this number, hydrometeorological disasters are 98.85% and geological disasters are 1.15%. By details of 523 flood events, 143 extreme weather events, 164 landslides, 40 forest and land fires, 7 earthquakes, 3 tidal waves and abrasion, 2 volcanic eruptions, and 1 drought. These various disaster events also resulted in 413 educational units being damaged (Indonesian Disaster Data Geoportal, 2024).

Indonesian Disaster Education Consortium (2011) explained that the school is the second place for students to seek and obtain knowledge after returning home, especially in studying potential disasters that could occur the environment where they live. Students who have knowledge as well By understanding disasters correctly, students will be ready and alert when facing a disaster. Student preparedness is an important key in the Indonesian Disaster Education Consortium (2011) explained that the school is the second place for students to seek and obtain knowledge after returning home, especially in studying potential disasters that could occur the environment where they live. Students who have knowledge as well By understanding disasters correctly, students will be ready and alert when facing a disaster. Student preparedness is an important key in developing strategies when facing disasters because there are still disasters that are not can be predicted when it will happen.

Disaster incidents which have increased over the last 10 years have had an impact on educational units. The impacts of disasters on educational units include death, serious disability/injury, schools cannot be used for learning, because schools are used as shelters (temporary shelter), schools are difficult to reach, children's play areas are no longer available, facilities and infrastructure are damaged, teachers do not can carry out learning, and psychosocial disorders (Kemendikbud, 2015).

Natural disasters impacted 568,000 students affected by disasters in the 2016-2019 period in 5,680 educational units with losses of more than 1 trillion Rupiah (Kemendikbud, 2020). Non-natural disasters, namely the COVID-19 pandemic, also have an impact on educational units. The impact is that more than 60 million students have had to carry out online learning since March 2020, which has resulted in learning not being able to be carried out optimally. 9.2% of positive confirmed cases of COVID-19 are school-aged children (Wulandari, et al., 2020).

The impact of disasters on educational units require disaster risk reduction efforts. Disaster risk reduction in educational units has been going on for more than a decade. This program was first initiated by the Ministry of Education and Culture (Kemendikbud) through the Directorate General of Primary and Secondary Education (Ditjen Dikdasmen). This program has several terms or abbreviations used by various government and non-government institutions or agencies, namely School-Based Disaster Risk Reduction (PRBBS), Disaster Preparedness School (SSB), Disaster Safe School (SAB), Disaster Safe Madrasah School (SMAB ), then in 2017 it changed to the Disaster Safe Education Unit (SPAB) (Amri, 2017).

SPAB is a way to make schools a place where the atmosphere is comfortable, safe to live in, the environment is healthy and clean, inclusive and fun, this is a form of child-friendly school that is safe from disasters. There are 3 pillars in SPAB: pillar 1 is safe school facilities, then pillar 2 is disaster management in schools, then pillar 3 is DRR in education and mitigation (Amri, 2017) Schools should teach education about disasters, what students should do and teachers when a disaster occurs. Preparedness activities can be carried out by carrying out disaster education that is integrated into the curriculum and carrying out good practices in the form of simulations on a regular basis. Preparedness activities carried out in a sustainable manner

will increase the capacity of the school community and reduce the impact of disasters (Wang 2016).

Research that has been carried out by Akhmad Ervin F, Apik Budi Santoso & Juhadi (2017) about disaster preparedness programs in junior high schools in disaster-prone areas contains the distribution of questionnaires for calculating the level of disaster knowledge among school residents. The second the study which was carried out by Cindrawaty Lesmana & Nurul Purborini about preparedness school communities in dealing with disasters in Magelang Regency, that implementation of disaster preparedness schools is implementing socialization guess it's with school standby disaster. the third, Zulfianti Rosyida Zahro, et al about disaster preparedness schools as a preparedness evaluative study, the school faces a disaster, which discusses efforts to mobilize resources in anticipatory preparation Disasters include efforts prevention and curative efforts in schools.

The research carried out by this researcher is a concept disaster risk reduction in terms of disaster mitigation through School programs Disaster Safe Education (SPAB) For giving the idea is the importance of disaster mitigation education in schools considering that students are vulnerable groups who become victims when disasters occur.

## **RESEARCH METHODS**

This research uses a qualitative approach, which means describing and outlining the steps taken to reduce disaster risk in schools through implementing a disaster-safe education unit program. Steps to describe and explain data by taking the opinions of several experts. It is hoped that this qualitative method will provide comprehensive information about how to reduce disaster risk in schools by implementing disaster-safe education unit programs in schools. In this research, the data collection method used was a literature study. According to Creswell, John. W.(2014; 40) states that a literature study is a written summary of an article from journals, books, and other documents that describe theories and information from the past or present period and then organized into the topics and documents required. The type of data used by the author in this research is data obtained from literature study. Literature study is a way used to collect data or sources related to the topic discussed in a study. The data that has been obtained then analyzed using descriptive analytical method. The descriptive analysis method was carried out by describing the facts then followed by analysis, not only elaborating, but also providing enough explanation. According to Rosyidhana (2014: 3) in (Rusmawan 2019:104) study Literature is a method of collecting data by searching and read existing written sources such as books or literature explains the theoretical basis. It's the same with data collection and information by exploring knowledge or knowledge from many sources such as books, papers, and several other existing sources relationship with the research object. The author has analyzed relevant books and journals to obtain data in this research. In this research, expert opinions about ways to reduce disaster risk in schools through implementing disaster unit programs in schools were collected through qualitative data analysis. This data is used as a basis to support the author's argument about ways to reduce disaster risk in schools.

## **RESULT AND DISCUSSION**

Children are one of the most vulnerable groups at risk affected by disasters (PP No. 21, 2008). Vulnerable children face disasters triggered by factors that limit their understanding of the risks around them, which results in a lack of preparedness to deal with their disaster. Based

on data on disaster events in several areas, there were many victims of the impact of disasters on students, both at school and outside of school. This shows how important knowledge about disasters is in early disaster risk reduction to provide understanding and direction steps on what to do when a threat occurs that exists in surrounding areas to reduce the risk of disasters (Sunarto, 2012)

School has a very important role in disaster management because schools can increase knowledge and students' skills in facing disaster. Schools as educational units have the responsibility to provide education, especially regarding preparedness for disaster. Disaster education must start from an early age. This is based every year it is estimated that around 66 million children worldwide are affected by disaster (Herdwiyanti & Sudaryono, 2013)

The May 12, 2008 earthquake in Sichuan, China, provided an example of great impact when a disaster occurs during the hour of school. The earthquake had a magnitude of 7.9 and killed 87,000 people with at least 5,335 students. This means that around 6% of the victims killed were students. Based on state media reports in China, more than 7,000 school buildings collapsed and hit the students and teachers.

Then in 2009, an earthquake hit the city of Padang which caused 241 schools to be destroyed and 60 students to die. The experience of the earthquake showed how big the impact was damaged to schools, especially classrooms, as a result of the process of teaching and learning activities normally stopping. Therefore preparedness of teachers and students in facing earthquake and tsunami disasters is very important to prevent loss of life (LIPI-UNESCO, 2006).

Disaster management carried out in schools as The implementation of the disaster safety education unit has several activity stages starting from planning, organizing, implementing and monitoring by utilizing all available resources in the educational unit and is based on disaster management according to Law No. 24 In 2007, the implementation of disaster management was carried out starting from the formation of a disaster task force in schools in the form of a decision letter that worked in accordance with their respective main tasks and functions related to risk disaster, emergency and recovery. The committee formed is stated in the working Disaster Preparedness Team based on emergency tasks and procedures. Types Activities carried out include preparing instruments for the 3 pillars of safe schools such as safe school facilities, policy management and preparing disaster risk reduction (PRB) action activities. Other activities that can be carried out during implementation Disaster management is carrying out simulations disasters, which are related to disaster simulations such as earthquake simulations. This is taken as a step and school effort in the process of getting used to facing various the possibility of a disaster occurring. Dissemination about disasters can be done with various media, such as using promotional media in the form of billboards, banners, etc use electronic media on their respective social media so that The spread of disaster management in schools can be carried out on a massive scale Anisah, (2010).

The next , the monitoring and evaluation process by the principal as the highest leader in the school is carried out, to ensure that the implementation of activities is carried out smoothly planned, integrated, coordinated, and comprehensive. Know progress and also the achievements of the activities that have been carried out and to find out obstacles and challenges encountered during the implementation of the activities guided by the principles of efficiency, effectiveness, benefits, impacts, and principles of sustainability (Rizki & Pujiyanto, 2010). The disaster preparedness team is a collection of school communities who have the ability to help and helping school residents before (pre-disaster), when it occurs and after a disaster (post-disaster) consisting of educators, teaching staff, student representatives and representatives of community elements (committees). For Anticipate possible disasters to avoid falls casualties, loss of property and changes in living arrangements society needs preparedness. Preparedness efforts carried out when a disaster is identified as likely to occur.

Preparedness is a series of actions taken to anticipate disasters through organization and through appropriate steps and efficiency (Tingkat, 2020). The formation of a disaster preparedness team in a school can utilize and also involve internal resources within the school which not only come from teachers, but also from students. This can be a separate lesson for students so they can be directly involved in handling it disaster.

Lastly, it is important to pay attention to the availability of the 3 Pillars of Disaster Safe Schools. The first pillar , regarding safe school facilities, pays attention to safe school locations and implementing disaster resilience planning and construction is to make each new school into a new school safe. Implement priority and retrofitting schemes and location changes. schools including relocating less safe schools and minimize structural, non-structural and infrastructure risks to create buildings and facilities for self-rescue and evacuation. The second pillar, disaster management in schools is an assessment process then followed by planning for physical protection, planning capacity development in carrying out emergency response, and education continuity planning. Disaster management in schools

aims to maintain a safe learning environment and plan continuity of good education in times when there is no disaster or when a disaster occurs. The third pillar , DRR education is a process interactive joint learning in the community and existing institutions. Use of traditional wisdom and local knowledge for protection against natural disasters (Ministry of Education and Culture).

## CONCLUSION

Natural disaster mitigation activities in the Disaster Safe Education Unit (SPAB) provide a new color in handling disasters around us. In disaster mitigation at SPAB there are several stages that must be implemented, namely the first is dissemination which includes socialization, visualization, and simulation. Second, namely monitoring or supervision and the third is evaluation. In the end, SPAB has the aim of protecting lives or saving more lives and human safety. On the other hand, to create a culture of preparedness, a sense of security, and reduction of disaster risks both in the home, work, school and disaster-prone areas, SPAB also has a mission to disseminate disaster information or knowledge to the community.

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