

Analysis on Disaster Education Urgency of Improving Preparedness at Elementary Schools

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ABSTRACT

This research was conducted to analyze the urgency of disaster education in increasing preparedness in elementary schools in disaster-prone areas based on the three pillars of the Disaster Safe Education Unit (SPAB) Program, namely pillar 1. safe school facilities, pillar 2. disaster risk management in schools, and pillar 3. disaster prevention and risk reduction education. This research is a quantitative study using a questionnaire filled out online on the Google form. The Characteristics of the instrument are using 3 pillar indikator of the Disaster Safe Education Unit (SPAB). The research respondents were 264 elementary school teachers in Sleman Regency, Special Region of Yogyakarta. The results of validity test showed that all items in the questionnaire were declared valid with a value of more than 0.05 for each item. The results of reliability test showed that the research variable was declared reliable because it had a Cronbach's Alpha value of more than 0.60. The results showed that 86% of schools had not implemented disaster education. The urgency level of Pillar 1 is higher than Pillar 2 and Pillar 3 which is indicated by a mean value of 2,99 and a standard deviation of 1.312. The urgency of Pillar 2 is higher than Pillar 3. The first order of urgency in Pillars 1, 2, 3 is compliance with Building Safety Standards (SLF), formation of a Disaster Preparedness Team, and Integration of Disaster Risk Reduction in Elementary Schools. Implementation of disaster education in elementary schools will increase school preparedness if implementing pillars 1,2,3 in a sustainable manner. Pillars 1,2,3 are very important in developing student, teacher and school community preparedness. Multistakeholder cooperation in the implementation of disaster education can also be carried out so that disaster education can be carried out optimally and increase school preparedness.

Keywords:Urgency, Disaster Education, Elementary Schools, Disaster Prone, Preparedness.

INTRODUCTION

Indonesia is one of the most vulnerable countries to disasters and climate change (Djalante, 2018)risks and disasters on Indonesia, there has not yet been a systematic literature review (SLR. Disaster incidents that have increased over the last 10 years have had an impact on educational units (Seknas SPAB, 2020). Natural disasters had an impact on 568,000 students affected by the disaster in the 2016-2019 period in 5,680 educational units with a loss rate of over 1 trillion Rupiah (Seknas SPAB, 2020). Non-natural disasters, namely the COVID-19 pandemic, also had an impact on educational units. These impacts are (1). More than 60 million students have had to carry out online learning since March 2020 which has resulted in learning not being carried out optimally, (2). 9.2% of positive confirmed cases of COVID-19 are school-age children (Wulandari et al., 2020). It is in line withRahayu and Priyono (2020) describe that disasters do not only damage settlements, but productive land, important facilities, public facilities such as health, worship and education facilities. This facility is included in the classification of physical vulnerability as contained in Regulatory chief BNPB No. 2 of 2012 concerning General Guidelines for Disaster Risk Assessment.

The disasters that occurred in Sleman Regency as of January 2022 were 20 landslides, 5 earthquakes, 2 volcanic

eruptions, 43 strong winds, 1 forest and land fire, 14 residential fires and 1 Covid-19 event (BPBD, 2022). The number of incidents and disasters in Sleman Regency requires preparedness efforts, especially at the education unit level to be able to reduce the impact caused by disasters, especially for students, because students are included in a vulnerable group.

Law Number 24 of 2007 concerning Disaster Management states that there are groups that are vulnerable to disasters, one of which is children. Children are more vulnerable than adults (Nawangsih, 2016) (Pahlaviannur,

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2019). Children displaying the markers would report greater symptoms of posttraumatic stress disorder (PTSD) and depression than children without these markers. Social support was explored as an additional moderating variable. The metal allele (BDNF) may play a role in children's disaster reactions. Further research should consider the complex interplay between genes, stressors, support, and psychological outcomes over time (La Greca et al., 2013). In line with (Siregar & Wibowo, 2019) that children are considered vulnerable because they lack the ability to prepare themselves for disaster risks, children also still need adult assistance to obtain protection. Children easily experience trauma due to repeated memories of disaster events, experience insomnia, excessive anxiety to the loss of emotions that children should tend to be more cheerful (Rahman, 2018). Disasters do not only have an impact in certain locations, but can damage various public facilities where children as a vulnerable group are generally in these educational facilities (Priyono et al., 2020). Some of these statements identify that students are vulnerable groups who will experience the direct impact of disasters, so that preparedness in the face of disasters must be improved. Disaster events and their impacts can identify the need for disaster risk reduction efforts. Disaster Risk Reduction (DRR) is one of the important points to reduce victims in a disaster (Musliyadi et al., 2018). Schools have an important role in building disaster education preparedness. The relationship between communities and schools needs to be improved in the disaster education preparedness planning process. Disaster education innovation also requires local government activities and policies. (Shiwaku et al., 2016) and school plays a vital role in disaster issues, both in terms of preparedness and post-disaster recovery. An integrated resilience assessment called school disaster resilience assessment (SDRA). One of the ways to reduce disaster risk in elementary schools is by implementing disaster education.

Disaster education is one of the initiatives to prepare communities for unpredictable disasters and improve preparedness (Abas et al., 2020). Education improves abstract reasoning and anticipation skills such that the better educated undertake preventive measures without needing to first experience the harmful event and then learn later. In line with recent efforts of various UN agencies in promoting education for sustainable development, this study provides a solid empirical evidence showing positive externalities of education in disaster risk reduction (Hoffmann & Muttarak, 2017). Having a school adopting disaster risk reduction issues effectively enhanced knowledge, risk perception, critical awareness and attitude but limited in preparedness behavior. Efforts should be taken by policy makers, teachers, and other stakeholders to develop public education in schools focusing

on changes in preparedness behavior (Adiyoso & Kanegae, 2013). Preparedness can be implemented in schools by implementing disaster education on an ongoing basis.

The number of elementary schools in Sleman Regency in 2022 (Kemendikbud, 2022) indicates that there are 512 elementary schools spread across the Sleman Regency area. (Chen & Lee, 2012) argued that the number of elementary schools in disaster-prone areas resulted in a potential threat of disaster that met the vulnerability of children in educational facilities, it was necessary to implement disaster risk reduction in elementary schools. This effort can be carried out by implementing a Disaster Safe Education Unit (SPAB).

The Disaster Safe Education Unit (SPAB) Program is a means of realizing schools as places 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 schools that are safe from disasters. There are 3 pillars in SPAB: pillar 1 namely safe school facilities, then pillar 2 disaster management in schools, then pillar 3 Disaster Risk Reduction in education and mitigation (Amri Avianto, 2017).

Elementary schools in Sleman Regency are located in disaster-prone areas with disaster risks for students and school members. Not all elementary schools have been identified as having implemented the Disaster Safe Education Unit (SPAB) program, thus increasing the vulnerability of elementary schools and requiring efforts to reduce disaster risk by increasing capacity through elementary school preparedness. The limited SPAB program has resulted in not all elementary schools having disaster preparedness in accordance with priority disaster threats. Based on research results, 184 out of 264 schools had not yet implemented the SPAB/disaster education program in schools.

The ideal condition of schools located in disaster-prone areas should have safe school facilities, implement disaster management, and implement the integration of disaster risk prevention and reduction education. The reality based on the observation in 2022 shows that elementary schools that have implemented the Disaster Safe Education Unit (SPAB) Program are 70 schools out of a total of 550 elementary schools in Sleman Regency. This means that until 2022, only 5% of elementary schools in Sleman Regency have capacity in disaster management.

Novelty of the research is that there have been many studies on preparedness, but there has been no research on disaster education urgency of improving preparedness at elementary schools, especially in disaster-prone areas. Based on this background, this study aims to analyze the urgency of disaster education in increasing preparedness based on the 3 pillars of education units in elementary schools in disaster-prone areas.

Research Significance

The expected research findings are obtaining measurable data and information regarding the urgency of the 3 pillars of the Disaster Safe Education Unit (SPAB) Program in increasing the preparedness of elementary schools in disaster-prone areas. The data and information can be used as a guide for elementary schools in implementing disaster education to increase effective preparedness. The results of this study also encourage basic education units and school residents to increase the quantity and quality of preparedness through the 3 pillars of SPAB including 1) Safe School Facilities, 2) Disaster Management in Schools, and 3) Education on Disaster Prevention and Risk Reduction.

METHOD

Research Design

This research is a quantitative research using a descriptive design. This study describes the urgency of disaster preparedness education based on the pillars of safe school facilities, disaster management in schools, and disaster prevention and risk reduction education in elementary schools.

Data Collections

The data collection method used in this study was a questionnaire instrument. Retrieval of data with questionnaires is done online using the Google form application. The questionnaire instrument was compiled based on 3 pillars in the Disaster Safe Education Unit (SPAB) Program from the Ministry of Education and Culture in 2015. The research variables were measured with 5 Linkert scales. Pillar 1 regarding Safe School Facilities is measured by five questions. Pillar 2 on Disaster Management in Schools is measured by seven questions, and Pillar 3 on Disaster Risk Reduction and Prevention Education is measured by six questions.

The data collection process was carried out using an online google form distributed to teachers who teach in Sleman Regency Elementary Schools. The google form contains a questionnaire of the 3 pillars in the Disaster Safe Education Unit (SPAB) Program.

The validity and reliability of the data in this study were carried out on each research variable. Validity and reliability were carried out through statistical tests to estimate the validity and reliability values using the standard deviation, cronbach's alpha in SPSS v25 software and the Aiken V index. preparedness in elementary schools in disaster-prone areas according to the SPAB pillars indicators. Data analysis

was carried out by ranking the ordinal and classification of variables from their influence on the indicators of Pillars 1, 2 and 3.

The validity test was carried out using the Aiken Index Content Validity. The results showed that all items in the questionnaire were declared valid with a value of more than 0.05 for each item. Reliability test is done by looking at the value of Cronbach's Alpha. The results showed that the research variable was declared reliable because it had a Cronbach's Alpha value of more than 0.60. Cronbach's Alpha coefficient of pillar 1 indicator is 0.708, pillar 2 indicator value is 0.861, and pillar 3 indicator value is 0.733.

Population and Sample

This study uses the teacher's perspective to analyze the urgency of disaster education in elementary schools. The research sample is elementary school teachers in Sleman Regency. The sampling method used was purposive sampling. The teacher criteria used in determining the sample were elementary school teachers who had worked for more than 5 years from elementary schools in Sleman district. During the 3 months of research, 264 research respondents were obtained.

Data Analysis

The data analysis method used in this research is descriptive analysis. Descriptive analysis is used to describe the data statistically with the average, maximum, minimum and standard deviation values. Analysis was also carried out by describing the urgency of disaster education based on three pillars, namely safe school facilities, disaster management in schools, and disaster prevention and risk reduction education.

The urgency of disaster education in increasing preparedness in elementary schools in disaster-prone areas is calculated from the average value and standard deviation of the data on pillar 1, pillar 2 and pillar 3. The results of the calculated average and standard deviation are presented in Table (1). The urgency of the pillar with high criteria means that the Elementary School has good preparedness. Good preparedness is indicated by the continuity of disaster education carried out in elementary schools related to Safe School Facilities, Disaster Management in Schools, and Education on Disaster Prevention and Risk Reduction.

FINDINGS

The aim of the research is to find out the urgency of disaster education in increasing the preparedness of elementary schools in Disaster Prone Areas of Sleman Regency by discussing the mean and standard deviation of each question in each indicator Pillar 1, Pillar 2 and Pillar 3.

Table 1: Descriptive Statistics of Research Indicator Data

	<i>N</i>	<i>Min</i>	<i>Max</i>	<i>Means</i>	<i>Standard deviation</i>	<i>Rank</i>	<i>Classification</i>
Total P1	264	0	5	2.99	1.312	1	Medium
Total P2	264	0	7	2.74	2,473	2	Medium
Total P3	264	0	6	1.56	1,662	3	Medium

Table 2: Mean Value and Standard Deviation for Pillar 1

#	<i>Indicator</i>	<i>Means</i>	<i>Standard deviation</i>	<i>Rank</i>	<i>Classification</i>
P1.1	Building Permit	0.701	0.459	2	High
P1.2	Building safety standards (Certificate of Proper Function)	0.761	0.427	1	High
P1.3	Rescue and evacuation support facilities (evacuation signs, stretchers, standby bags)	0.542	0.499	4	Medium
P1.4	Security facilities (evacuation routes, fire extinguishers, assembly points)	0.648	0.479	3	Medium
P1.5	Facilities for persons with disabilities	0.337	0.474	5	Medium

Table 3: Mean Value and Standard Deviation for Pillar 2

#	<i>Indicator</i>	<i>Means</i>	<i>Standard deviation</i>	<i>Rank</i>	<i>Classification</i>
P2.1	Implementing regulations/policies	0.523	0.500	2	Medium
P2.2	Participatory disaster risk assessment	0.390	0.489	3	Medium
P2.3	Emergency Handling Fixed Procedures	0.383	0.487	4	Medium
P2.4	Disaster Preparedness Team	0.538	0.500	1	Medium
P2.5	Disaster Simulation	0.322	0.468	6	Low
P2.6	School Activity Plan and Budget	0.360	0.481	5	Medium
P2.7	Education Continuity Plan	0.223	0.417	7	Low

Table 4: Mean Value and Standard Deviation for Pillar 3

#	<i>Indicat or</i>	<i>Means</i>	<i>Standard deviation</i>	<i>Rank</i>	<i>Classification</i>
P3.1	The Education Unit receives SPAB training	0.129	0.336	6	Low
P3.2	SPAB socialization including SOP	0.167	0.373	4	Low
P3.3	SAB Training	0.159	0.366	5	Low
P3.4	Integration of DRR Materials	0.455	0.499	1	Medium
P3.5	Intracurricular and/or extracurricular activities	0.352	0.479	2	Medium
P3.6	Communication materials, information and education related to disaster	0.303	0.460	3	Low

Pillar 1. Safe School Facilities

The first research question related to Pillar 1 indicators of Safe School Facilities seeks to what extent the building permit variables, building safety standards (Certificate of Proper Function), rescue and evacuation support facilities, security facilities, and facilities for persons with disabilities are fulfilled. Table (2) shows that the Safe School Facilities indicator occupies the first urgency with an average (2.99)

and standard deviation (1.312) with an urgency classification of 'Medium'. The questions in Pillar 1 show the average mean value in the range (0.337-0.761) with 'Medium' to 'High' urgency classifications.

In the second point, the Pillar 1 indicator related to the availability of proper functioning certificates has an average value (0.761) and a standard deviation (0.427) ranks first in urgency. The second urgency is related to the building permit

average value (0.701) and standard deviation (0.459), The third urgency is regarding security facilities (evacuation routes, fire extinguishers, assembly points) the average value (0.648) and standard deviation (0.479), The fourth urgency is regarding rescue and evacuation support facilities (evacuation signs, stretchers, standby bags) the average value (0.542) and standard deviation (0.499), and the fifth lowest score or urgency for Pekar 1, namely convenience for persons with disabilities with an average (0.337) and a standard deviation (0.474).

Pillar 2. Disaster Management in Schools

The second research question related to the indicators of Pillar 2 of Disaster Management in Schools seeks to what extent the implementation regulations/policies, participatory disaster risk assessment, Standard Emergency Handling Procedures, Disaster Preparedness Team, Disaster Simulation, Activity Plan and School Budget, and Continuity Plan have been fulfilled. Education. Table (3) shows that the Disaster Management indicator in Schools ranks second with an average (2.74) and a standard deviation (2.473) with an 'Medium' urgency classification. Question items in Pillar 2 show an average mean value in the range (0.223-0.538) with 'Low' to 'Medium' urgency classification.

In the fourth point, the Pillar 2 indicator related to the Disaster Preparedness Team has an average value (0.538) and a standard deviation (0.500) ranks first with a 'medium' level of urgency. The second urgency is related to Disaster Management Regulations/policies the average value (0.523) and standard deviation (0.500), The third urgency regarding participatory disaster risk assessment average value (0.390) and standard deviation (0.489), The fourth urgency regarding Standing Procedures for Emergency Handling the average value (0.383) and standard deviation (0.487), The fifth urgency is regarding the School Activity Plan and Budget the average value (0.360) and standard deviation (0.481), The sixth urgency regarding Disaster Simulation average value (0.322) and standard deviation (0.468), and the lowest score for the urgency of Pillar 2, namely in the seventh point related to the Education Continuity Plan with an average (0.223) and standard deviation (0.417) and a 'low' level of urgency.

Pillar 3 Education on Disaster Risk Reduction and Prevention

The third research question related to the indicators of Pillar 3 of Education on Disaster Risk Prevention and Reduction seeks to what extent the Education Unit variables receive SPAB training, SPAB Socialization including SOP, SPAB Training, Integration of DRR Materials, Intracurricular and/or extracurricular activities, Related communication, information and educational materials disaster.

Table (4) shows that the Pillar 3 indicator ranks third with an average (1.56) and a standard deviation (1.662) with a 'Low' urgency classification. Question items in Pillar 3 show an average mean value in the range (0.129-0.455) with 'Low' to 'Medium' urgency classification.

The fourth point of Pillar 3 indicators related to the Integration of DRR Materials has an average value (0.455) and a standard deviation (0.499) ranks first with a 'medium' level of urgency. The second urgency is related to the average value of intracurricular and/or extracurricular activities (0.352) and standard deviation (0.479), The third urgency is regarding communication, information and educational materials related to disaster average value (0.303) and standard deviation (0.460), The fourth urgency regarding SPAB Socialization includes the SOP of the average value (0.167) and standard deviation (0.373), The fifth urgency regarding SPAB training average value (0.159) and standard deviation (0.366), and the last urgency in Pillar 3, namely in the sixth item related to the Education Unit Obtaining SPAB Training with an average (0.129) and standard deviation (0.336) and a 'Low' level of urgency.

DISCUSSION

The Urgency of Disaster Education in Elementary School Disaster Preparedness related to Pillar 1. Safe School Facilities

Pillar 1 relates to safe school facilities. Safe school facilities relate to building permits, building safety standards (certificate of proper function), rescue and evacuation support facilities, security facilities, and facilities for persons with disabilities. Fulfillment of Pillar 1 in good condition will affect elementary school preparedness. This is because if Pillar 1 is in good condition or fulfilled then the Elementary School can guarantee students, teachers and school members in a safe condition when a disaster occurs. Building safety certificate is the first urgency because all buildings including school buildings are required to have a building safety certificate. A building safety certificate is important because a building that has a certificate means it is standard and safe, especially for teaching and learning activities. In fact, most schools do not have building safety standards. Schools need to pay attention to building safety standards so that school residents can safely carry out learning activities.

Building permits also have a high classification. This shows that building permits are considered important in increasing school preparedness. Elementary Schools in Sleman Regency Some do not yet have or are still in the process of obtaining a building permit. The reason is that the school building was built on village treasury land or ownership does not belong to the school, so that the school experiences difficulties in the process of obtaining a building permit.

A comprehensive approach to school safety is emphasized, including the safety of the learning environment, disaster management and disaster education (Aiko Sakurai & Sato, 2016). Elementary schools that have supporting facilities can be supported in terms of disaster funding. The thing that needs to be considered is that the facilities are checked periodically, because the supporting facilities are not only “there” but also functional and in good condition. School preparedness can be viewed from the readiness of supporting facilities because schools that have good preparedness will always prepare supporting facilities and ensure that the facilities can be used in the event of a disaster.

Ease for persons with disabilities is the 5th ordinal of urgency with moderate classification. This is because not all elementary schools in Sleman Regency are inclusive or implement facilities for persons with disabilities. Of the 512 elementary schools in Sleman Regency, only 32 elementary schools or 6.25% (Nawang Sari, 2018). Elementary schools should still consider convenience for persons with disabilities, because schools with good preparedness will prepare their schools to become inclusive schools.

The Urgency of Disaster Education in Elementary School Disaster Preparedness is linked to Pillar 2. Disaster Management in Schools

Pillar 2 relates to Disaster Management in Schools. Disaster management in schools can be reviewed from implementing regulations/policies, participatory disaster risk assessments, Emergency Handling Standard Procedures, Disaster Preparedness Teams, Disaster Simulations, School Activities and Budget Plans, and Education Continuity Plans. School preparedness is supported by good school management. Schools that have good disaster management will directly increase the preparedness of school members in dealing with disasters.

The School Disaster Preparedness Team ranks first in the urgency of Pillar 2 because in Elementary School preparedness a team or person is responsible for disaster management in schools. The disaster preparedness team works during pre-disaster, emergency response, and post-disaster times to be able to manage disaster risk by minimizing the impact caused by the disaster. The school disaster preparedness team consists of the person in charge represented by the school principal, head of the Disaster Preparedness Team, section/field coordinator and members of each section/field of hazard warning, health, emergency school, psychosocial, school asset rescue, security, and equipment logistics team. The disaster preparedness team requires teamwork abilities, critical thinking skills, management abilities in disasters (Wenji et al., 2015). The fields in the disaster preparedness team can be adjusted according to the needs of each school. The school

disaster preparedness team can carry out activities during the pre-disaster period including school disaster risk assessment activities, preparation of school action plans related to disaster management, planning of early warning systems and evacuation plans, regular disaster emergency response procedures, disaster simulations, and continuous disaster education plans. The disaster preparedness team is important because preparedness in elementary schools can be carried out on an ongoing basis if a disaster preparedness team has been formed and actively implements a school action plan that has been designed to be implemented as a form of disaster management. The second urgency is regarding regulations/policies for disaster management in elementary schools. Efforts should be taken by policy makers, teachers, and other stakeholders to develop public education in schools focusing on changes in preparedness behavior (Adiyoso & Kanegae, 2013). Disaster management regulations/policies are the second urgency because elementary schools should have regulations related to disaster management, so that school members can apply preparedness with support from existing regulations or policies. With the existence of regulations regarding policies on disaster management, elementary schools can more freely manage preparedness independently in schools.

The second urgency is regarding regulations/policies for disaster management in elementary schools. Efforts should be taken by policy makers, teachers, and other stakeholders to develop public education in schools focusing on changes in preparedness behavior (Adiyoso & Kanegae, 2013). Disaster management regulations/policies are the second urgency because elementary schools should have regulations related to disaster management, so that school members can apply preparedness with support from existing regulations or policies. With the existence of regulations regarding policies on disaster management, elementary schools can more freely manage preparedness independently in schools.

The third to sixth urgency regarding participatory disaster risk assessment, Emergency Handling Procedures, School Activity and Budget Plans, and Disaster Simulation can be carried out sequentially according to the ordinal of urgency. Participatory disaster risk assessment is carried out by elementary schools to be able to identify threats, vulnerabilities, capacities and risks that exist in elementary schools. Disaster risk assessment in schools can be conducted with the aim of (1) identifying disaster management in schools, (2) identifying disaster management activities for schools, (3) identifying problems and challenges and issues of disaster management in schools, and (4) developing and implementing training program evaluation (Shiwaku & Shaw, 2018) Miyagi Prefecture which is one of the worst-affected

areas. It is required to improvement of teacher training programs for future disaster risk reduction, considering the current situations in the recovery process since the teachers' roles are important. This chapter suggests the concept of teacher training in the disaster-affected areas with the purposes: (1. Participatory disaster risk assessment in schools can be carried out by developing a DRR integration plan that can be implemented by teachers, staff and students in relation to pre-disaster, during-disaster and post-disaster planning (Mutch, 2014). Then it can carry out studies on disaster emergency response procedures and disaster simulations in accordance with priority disaster threats. School preparedness can be activated by conducting preparedness activities in schools and requesting policy support from local governments to ensure the implementation of disaster preparedness in schools. An important thing that can be implemented is to plan school activities that include simulation activities at least once a year with the school budget (A. Sakurai et al., 2017)Indonesia, in terms of safety of school location, disaster management and disaster education. The findings indicate that 56% of public elementary schools in Banda Aceh City are exposed to high tsunami risk, and most externally driven school disaster preparedness activities were not continued by the schools due to lack of ownership, institutional arrangement and funding. The study proposes the minimum essentials to reactivate school disaster preparedness activities and strongly recommends the local government's policy support for ensuring a city-wide, all-schools implementation. These essentials should include an annual school plan that involves conducting a tsunami evacuation drill at least once per year and a school budget for conducting disaster preparedness activities. To ensure smooth implementation, the Education Agency Circular Letter should provide justification for all headmasters to include these components in the schools' annual plans. It also recommends that external parties who donate or provide physical equipment (e.g., tsunami evacuation routes or maps. Disaster risk assessment, emergency handling procedures, and implementation of disaster simulations in schools are very important activities in disaster management. The implementation of these activities can provide more detailed information about the school's disaster risk and what should be done when a disaster occurs. This will make school preparedness better because it can reduce the impact of disasters that occur in the future.

Furthermore, regarding the School Activity Plan and Budget which should be integrated with disaster management, so that activities carried out by schools can accommodate the preparedness of students and school members. As for the points of the Education Continuity Plan as the last sequence, they are associated with efforts that can be made after all stages

have been carried out. The Education Continuity Plan is to maintain the continuity of the entire disaster management process in schools. The last sequence and has a 'low' level of urgency, indicates that the implementation is carried out at the final stage after the other stages in pillar 2 have been properly implemented.

The Urgency of Disaster Education in Elementary School Disaster Preparedness is related to Pillar 3. Education on Disaster Prevention and Risk Reduction

Pillar 3 Education on Disaster Risk Prevention and Reduction related to SPAB training, SPAB Socialization including SOP, SPAB Training, Integration of DRR Materials, Intracurricular and/or extracurricular activities, Communication materials, information and education related to disaster. Elementary schools that can implement disaster prevention and risk reduction education in a sustainable manner can be indicated as having preparedness, because disaster education that is carried out on an ongoing basis will create a culture of disaster awareness that is beneficial to each school member, especially students who will later become agents in disaster preparedness.

DRR education in Elementary Schools in Indonesia was carried out through the integration of DRR materials into the curriculum, the integration of DRR materials into local content, and the integration of DRR materials into self-development (Septikasari et al., 2022). The integration of disaster education into the curriculum is the first urgency, because the integration of disaster education can be carried out in a sustainable manner if it is actually applied to teaching and learning activities. Teaching learners about hazards and disasters is vital and must be expanded (Rambau et al., 2012). Integration can be carried out with the curriculum, which can be started by selecting Basic Competencies that will be integrated with Disaster Management, then integrated into the syllabus, lesson plans, and during teaching and learning activities. The strategy to the development of Disaster Preparedness Schools would be successful under the following conditions insertion curriculum of disaster mitigation education into several subjects (Kurniadi & Bahar, 2020)the government started developing a pilot project by combining the curriculum disaster education to the curriculum of Disaster Preparedness School (DPS. The teacher's ability to be able to innovate in the integration of disaster management learning is very important, so that students can know disaster contextually. Students will be motivated and have a culture of disaster awareness, so they will increase their knowledge and skills related to preparedness. The media that can be used in the integration of disaster education can also vary according

to the updates of the times, for example currently teachers can use various kinds of interactive media that can make students see directly about disasters through videos, animations, illustrated stories, fairy tales, and pictures.

Efforts made with the integration of disaster education into the curriculum are still insufficient in increasing preparedness. Having a school adopting disaster risk reduction issues effectively enhances knowledge, risk perception, critical awareness and attitude but limited in preparedness behavior (Adiyoso & Kanegae, 2013). To further improve preparedness, the Education Office, Principals, Teachers and other stakeholders must develop integrated disaster education in schools that focus on changing the culture of preparedness.

The second urgency is about the integration of disaster education with extracurriculars. Integration of disaster preparedness messaging into other children's programs (A. Johnson et al., 2014), into extracurricular activities that exist in schools (Kurniadi & Bahar, 2020). Teachers can integrate disaster education through self-development. Self-development can be used as a flexible tool because teachers can choose the type of self-development. An example of self-development that can be integrated with disaster management is the Scout extracurricular. At present, Indonesia already has technical guidelines for disaster education on alert scouts, raisers and enforcers. Elementary school students can use standby technical instructions. The integration of disaster education into extracurriculars can make students understand more deeply about preparedness in terms of knowledge and skills that will become provisions in the future.

The third urgency concerns communication, information and education materials related to disaster. Teachers together with students can create media for communication, information and education about disasters. Even though a disaster may be small and may not cause physical damage, we still need to provide immediate disaster education to children and teens if they are surprised and afraid of future disasters (Yeon et al., 2020). The media that has been made can be implemented in learning or posted so that it becomes a reminder that disaster management and preparedness are important things to implement in elementary schools.

Education Unit Points Obtain SPAB Socialization and Training in last place, because after an introduction and planting of understanding related to prevention and DRR in schools, then at the end of the stage it is followed up with practical training. This is to complement efforts to implement DRR in basic education units in the Sleman Regency area, so that all school members do not only understand the SPAB program but also understand the role and efforts of emergency response in schools. Socialization and training can also be developed using technological innovations to

make it more interesting and fun. In addition, teachers can also carry out integration through other programs in schools, and schools can carry out ongoing evaluations of the disaster education integration curriculum. A. Johnson et al., (2014) recommendations are provided for increasing use of the resource including use of web-based technology for teacher training and ongoing evaluation and curriculum requirements. The existence of disaster education training will encourage school collaboration with external parties in accordance with the training material. For example, emergency first aid materials can be collaborated with the Indonesian Red Cross (PMI), fire fighting materials with the Fire Department, logistics fulfillment materials and psychosocial assistance with the Social Service and there are many other non-governmental institutions/agencies that are able to provide training. for school.

The integration of disaster education conducted by elementary schools in disaster-prone areas will increase the knowledge and skills of school members in dealing with disasters, thereby increasing preparedness. Disaster education integration strategies implemented could improve students' disaster knowledge and skills in coping with disasters to be transferred to families, thus maximizing the community's resilience in the face of disasters (Septikasari & Ayriza, 2018). The integration of disaster education which is carried out in a sustainable manner will create a culture of disaster awareness in schools. This will increase the preparedness efforts of every school member in disaster management.

CONCLUSION

The urgency of disaster education in increasing the preparedness of elementary schools in disaster-prone areas can be identified from the 3 Pillars of the Disaster Safe Education Unit, Pillar 1. Safe School Facilities, Pillar 2. Disaster Risk Management in Schools, and Pillar 3. Prevention Education and Disaster Risk Reduction. The urgency of pillar 1 with the highest qualification is related to building permits. Building permits are very important because preparedness can be measured from the ownership of a building permit. Elementary schools that have building permits mean safe schools that can be used in the process of learning activities. Pillar 2 of urgency is about the school disaster preparedness team. The school disaster preparedness team is very important because preparedness efforts can be carried out in schools if the school already has a Disaster Preparedness Team that can work during pre-disaster, emergency response and post-disaster situations. Meanwhile, the urgency of Pillar 3 concerns the integration of disaster risk reduction into the school curriculum. This becomes very important in increasing preparedness because by integrating

disaster risk reduction, teachers will teach preparedness on an ongoing basis. The main goal is a disaster awareness culture in schools, especially for students. The implementation of pillars 1, 2 and 3 in a sustainable manner will make students have a culture of disaster awareness, so that they strive to become preparedness agents in their families and communities. Good preparedness of students, schools, families, and community will reduce the impact of disasters.

Implementation of the 3 pillars of SPAB in increasing preparedness in elementary schools requires coordination and consolidation from internal and external school parties. School internal parties can start with socialization and training related to disaster management in schools, followed by the formation of a School Disaster Preparedness Team, School Action Plans, Emergency Response Procedures for Disaster, Simulation, and Integration of Disaster Risk Reduction. Safe school facilities can be implemented concurrently with Pillars 2 and 3 activities or implemented with reference to the School Action Plan that has been designed for disaster management in schools. Cooperation and support from other parties such as the Education Office, school committees, residents around the school, others stakeholders to help sustain the preparedness process in elementary schools, it is hoped that school members will have good preparedness and capacity dealing with disasters.

LIMITATIONS

The limitations of this research also include the fact that this research only assesses the urgency of disaster education based on the indicators of Pillar 1,2,3 of the Disaster Safe Education Unit (SPAB) Program in increasing the preparedness of elementary schools in disaster-prone areas. It is hoped that further research will be carried out with more specifics regarding the urgency of each Pillar for the preparedness of students and school members.

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