







DISASTERRESILIENT

EDUCATION

"Establishing all Education Units to be Safe from Disasters in Indonesia"



NATIONAL SECRETARIAT OF DISASTER SAFE EDUCATION UNIT DIRECTORATE GENERAL OF SPECIAL EDUCATION AND SPECIAL SERVICES DIRECTORATE GENERAL OF PRIMARY AND SECONDARY EDUCATION MINISTRY OF EDUCATION AND CULTURE

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ABOUT THIS BOOK

This book discusses various achievements, challenges and opportunities related to Disaster Resilient Education or the Disaster-Safe Education Unit (SPAB) program. This book describes the concept of disaster resilient education, the history of the program and how it has developed, and the institutions involved. This book is an initiative of the National Secretariat of SPAB under the coordination of the Directorate General of Special Education and Special Services (PKLK) Ministry of Education and Culture, and in collaboration with National Disaster Management Authority, supported by Unicef, Foundation of Plan International Indonesia, and Sayangi Tunas Cilik Foundation. The materials in this book were gathered from various institutions, including ASB, BNPB, Box Breaker, Hope Worldwide Indonesia, IDEP, Ministry of Education and Culture, Consortium for Disaster Education (KPB), KYPA, LIPI, LPBI NU, MDMC, KerLiP, PMI, Risk Frontiers / Macquarie University, TDMRC-Unsyiah, UNDP, UNESCO, UNICEF, WVI, Yayasan Khadam Indonesia, Plan International Foundation of Indonesia and Sayangi Tunas Cilik Foundation.



DISASTER RESILIENT EDUCATION

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INTRODUCTION

First, let us praise to the Almighty God Allah SWT for His will and guidance for the publishing of Disaster Resilient Education "Establishing all education units to be safe from disasters" book. This book presents the development of disaster education, in particular, Disaster-Safe Education Unit (SPAB) in Indonesia. Since the launching of one million safe schools and hospitals campaigns, disaster resilient education programs in Indonesia have experienced an outstanding development. Along with the development of policies and strategies related to the issue, there has been a significant increase in number of institutions which integrate SPAB into their programs.

The awareness of the importance of disaster resilience at schools and religious schools (*madrasah*) has also shown an impressive improvement.

Many achievements have been made in promoting disaster resilient in education units. Currently, a disaster-safe school roadmap has been successfully developed, a national secretariat to coordinate the implementation of disaster resilient education programs has been established, as well as foundation of policies and guideline are available. The implementation has been done collaboratively by the government and various non-government institutions. It has also lead Indonesia to become one of the leaders in disaster-safe schools programs among 15 other countries in the world. This indicates that Indonesia is the champion country for disaster-safe schools developing innovative and strategic measures.

In order to develop SPAB optimally, there are several issues that still need to be strengthened, such as improving coordination and collaboration among stakeholders, optimizing the management of resource, implementing policies and strategies effectively, and monitoring and evaluation in an integrated, systematic, and periodic manner.

Hopefully, this book can be used as a reference for further studies about disaster for institutions promoting disaster resilient education, both in Indonesia and in other countries which in the end, will provide a significant contribution to disaster risk reduction

Jakarta, October 2017

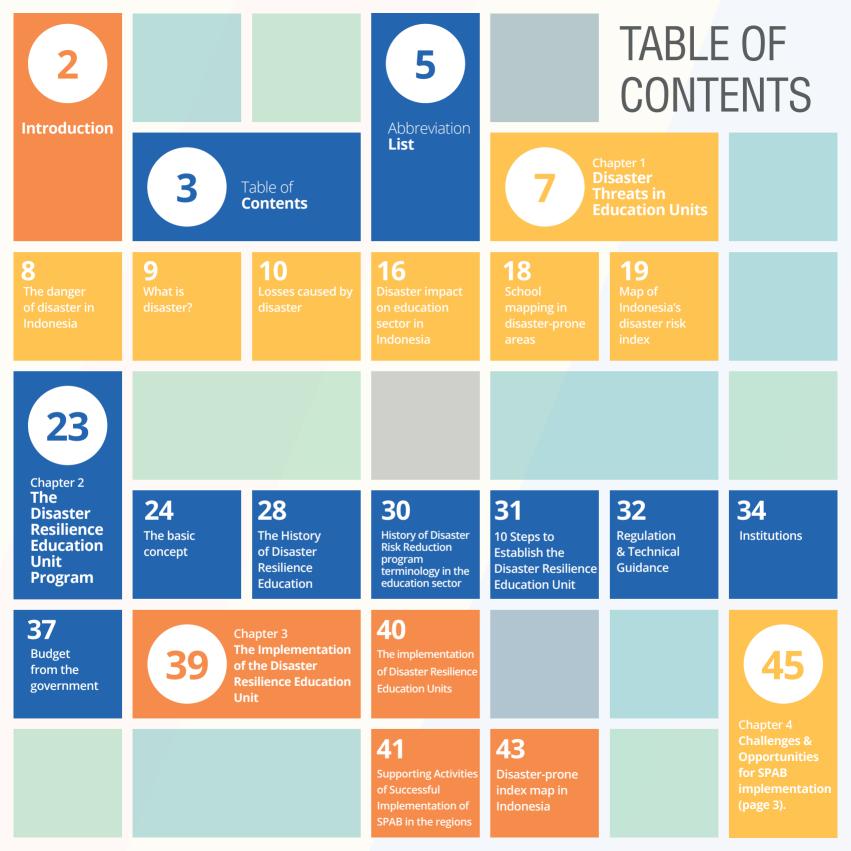


Head of National Disaster Management Authorities



Prof. Dr. Muhajir Effendy, M.A.P

Ministry of Education and Culture





LIST OF ABBREVIATIONS

AEPI: Australia's Education Partnership with Indonesia

ASB: Arbeiter-Samariter-Bund **APAR:** Light Fire Extinguishers

Bakornas PB: National Coordinating

Agency for Disaster Management

BOS: School Operational Assistance

BNPB: National Disaster management

Authorities

DAK: Special Allocation Fund

DAPODIK: Basic Education Data

Ditjen: General Directorate

Dikdasmen: Primary and Secondary

Education

EMIS: Education Management Information

System

GIS: Geographic Information System

HFI: Humanitarian Forum Indonesia

Juknis: Technical Guidance

Kemenag: Ministry of Religious Affairs **Kemendikbud:** Ministry of Education and

Culture

Kepmendikbud: The Stipulation of the

Ministry of Education and Culture

Kemenkes: Ministry of Health

Kemenristekdikti: Ministry of Research,

Technology, and Higher Education

Kemensos: Ministry of Social Affairs

KRB: Disaster Risk Assessment **KerLiP:** Family Care for Education

CDE: Disaster Education Consortium

KYPA: Yogyakarta Committee for Aceh

Recovery

LIPI: Indonesian Institute of Sciences

LPBI NU: Indonesia's Disaster

Management and Climate Change

Authorities NahdhatulUlama

LSM: Non-Governmental Organization

MA: Madrasah Aliyah

MDMC: Muhammadiyah Disaster

Management Center

MI: Madrasah Ibtidaiyah

MTs: Madrasah Tsanawiyah

Monev: Monitoring and Evaluation **MoU:** Memorandum of Understanding

PAUD: Early Childhood Education

Perbup: Regent Regulation
Pergub: Governor Regulation

Perka: Head Regulation

Permendikbud: Regulation of the Minister

of Education and Culture

Permendiknas: Regulation of the Minister

of National Education

Perpres: Presidential Regulation

PG: Playgroup

PKLK: Special Education and Special

Services

PP: Government Regulation

DRR: Disaster Risk Reduction

RKAS: Activity Plan and School Budget

Satgas: Task Force

SD: Elementary School

SE: Circular Letter

Sekjen: General Secretary **Seknas:** National Secretariat

SK: The Decree

SNI: Indonesian National Standard

SMA: High School

SMAB: Disaster-Safe School / Madrasah

SMP: Junior High School

SMK: Vocational and Pre-professional High

School

SPAB: Disaster Resilience Education Unit

SSB: Disaster-Alert School

TK: Kindergarten

UNDP: United Nations Development

Program

UNESCO: United Nations Educational,

Scientific and Cultural Organization

UNICEF: United Nations Children's Fund **UN OCHA:** United Nations Office for the

Coordination of Humanitarian Affairs

UU: Law

VISUS: Visual Inspection for defining the

Safety Upgrading Strategies
WVI: Wahana Visi Indonesia
VKRI: Kausa Resiliensi Indonesia

Foundation

YSTC: Save the Children Foundation



S044831 Primary School Gung Pinto Village, Naman Teran District, Karo, North Sumatera, Tuesday (18/7/2017).
© TRIBUN MEDAN/RISKI CAHYADI (TRIBUN MEDAN/Riski Cahyadi)



DISASTER THREATS IN EDUCATIONAL UNITS

DISASTER RISK IN INDONESIA

Indonesia is a country that has the most active volcanoes in the world, 127 in total, some of which have generated the most powerful volcanic eruptions ever recorded in the world's history.

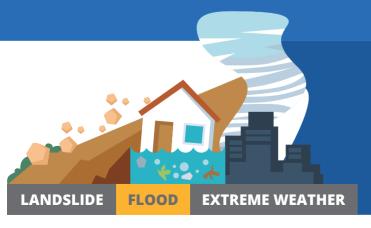
A 127 Active Volcano



Indonesia is also prone to earthquakes as it is located in a joint of 3 tectonic plates, namely: Indo-Australian Plate, Eurasian Plate, and Pacific Plate.

Indonesia has the longest coastline in the world which also resulted in **high exposure** to tsunami risk along the coast.





Furthermore, Indonesia's tropical climate makes it susceptible to flood, landslide, extreme weather, drought, and forest fire as well as abrasion and extreme wave in many areas in Indonesia. The rapid development and population growth could lead to Indonesia's potential risks of could industrial accidents and disease outbreaks.



WHAT DISASTER?

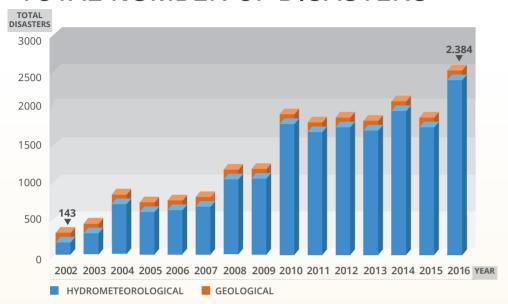
Disaster is an event or a series of events that causes a large number of deaths or significant losses in which the community needs outside help.

Disaster is an event or series of events that threaten and disrupt people's lives and livelihoods caused by both natural and/or non-natural factors and human factors resulting in the occurrence of human casualties, environmental damage, property loss, and psychological impact (Indonesia's Disaster Management Law no: 24/2007).

A disaster can be triggered by natural events, human actions or combination of both

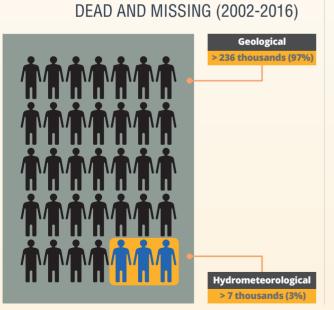


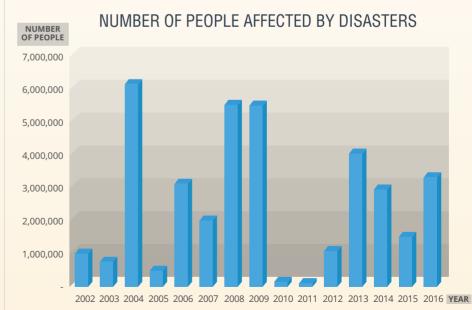
TOTAL NUMBER OF DISASTERS



Data from the National Disaster Management Authority (2017) in the last 15 years (2002 - 2016) shows that the number of disasters that struck Indonesia have been escalating for more than 20 times. In general, these disasters can be categorized into two which are hydrometeorological (i.e. floods, landslides, tidal waves/abrasion, forest and land fires, drought, and tornado) and geological (i.e. earthquakes, tsunamis, and volcanic eruptions).

More than 90% of disaster events in Indonesia caused by floods and landslides, where more than 28 million of people were badly affected in between 2002-2016. However, based on the number of fatalities, geologically related disasters are the deadliest types of disaster, causing more than 90% of deaths and missing people as the result of earthquakes and tsunamis.





POTENTIAL EXPOSURES AND DAMAGE LOSSES FROM DISASTER IMPACT

	36	ŤŤŦ	n 111 J	Rp	
Types of Disaster	Area of Hazard (Ha)	P e o p l e Exposed	Physical (Rp billion)	Economic (Rp billion)	Environment (Ha)
Flood	39.371.167	100.814.666	176.329.821	140.520.440	12.135.975
Flash Flood	2.733.966	8.637.161	44.679.539	15.358.006	1.055.365
Extreme Weather	106.582.476	244.295.774	11.972.702	3.088.869	0
Extreme Waves and Abrasion	1.888.085	4.917.327	22.042.350	1.290.842	460.252
Earthquakes	52.374.614	86.247.258	466.689.834	182.185.171	0
Forest & Land Fire	86.457.259	0	0	59.036.830	41.855.289
Drought	163.101.784	228.163.266	0	192.737.143	63.781.004
Volcano Eruption	394.324	749.126	2.695.427	12.613	139.676
Landslide	57.418.460	14.131.542	78.279.825	75.870.343	41.337.707
Tsunami	961.133	3.702.702	71.494.821	7.976.358	119.688

Sources: BNPB, 2017

THE IMPACT OF DISASTER ON EDUCATION SECTOR IN INDONESIA

In the last 15 years, there have been 46,648 schools affected by disasters. This data was recorded from medium and large-scale disasters that delivered a significant impact on Indonesia's education sector.

2004 Earthquake and Tsunami Aceh and North Sumatera 2.000 schools	
2006 Earthquake Yogyakarta 2.900 schools	
2007 Flood Jakarta 251 schools	
2009 Earthquake West Sumatera and Jambi 2.800 schools	
2010 Earthquake and Tsunami Mentawai 7 schools	
2009 Earthquake and Tsunami West Java 2.091 schools	
2013 Earthquake Aceh Tengah and Bener Meriah 514 schools	
2014 Flood Manado 55 schools	
2015 Forest & land fire Sumatera and Kalimantan 21.005 schools	
2016 Earthquake Pidie Jaya, Pidie and Bireun 268 schools	

VOLCANO ERUPTION IN SINABUNG

THE IMPACT OF VOLCANO ERUPTION IN SINABUNG

Km radius of danger zone

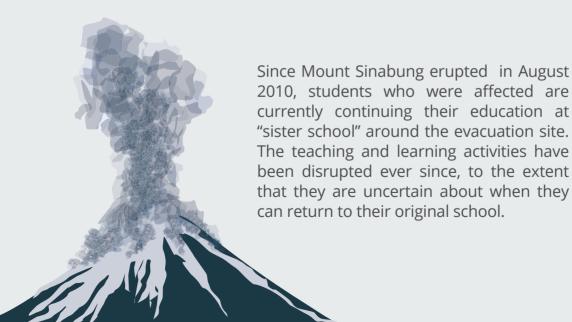
Trillion losses and damage

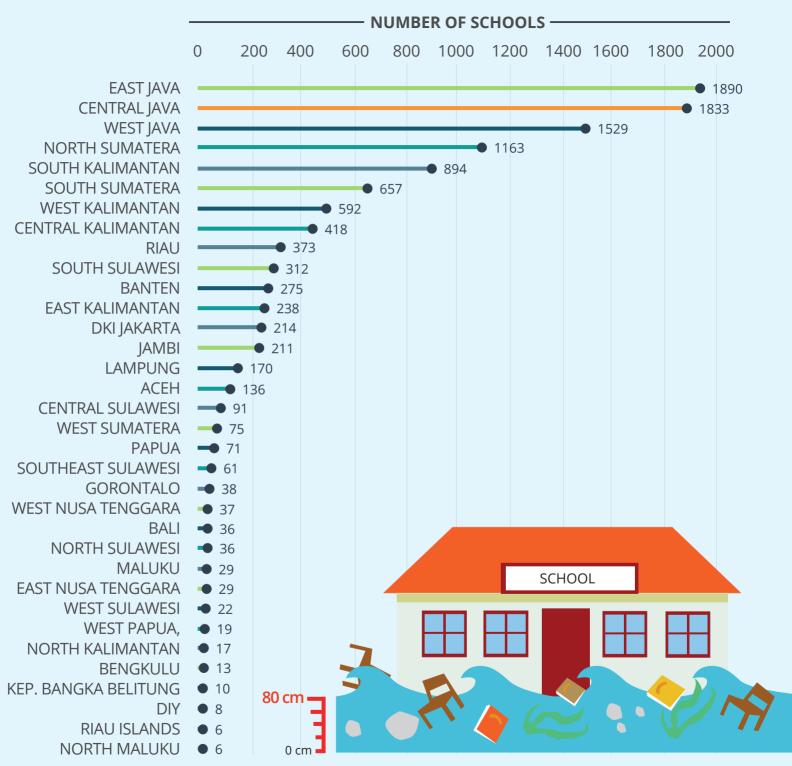
Schools damaged

6.179
Casualties displaced

2.856
Students
evacuated

© ANTARA NEWS 2014



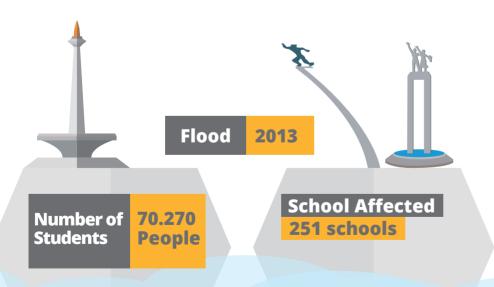


Sources: Ministry of Education and Culture, 2017

The total number of schools in high risk areas (>80cm) prone to flood.

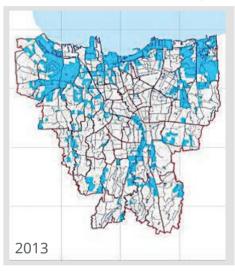
Many areas in Jakarta are prone to flood and exacerbated by high urbanization and rapid land use changes.

The flood that hit in 2013 in Jakarta was one of the largest floods in 15 years period. There were at least 251 schools affected. As a result, 70,270 students cannot access education for more than 2 weeks. This flood caused considerable material losses including damages and/or missing important documents related to education. As a result of DKI Jakarta Provincial Government and community involvement in flood prevention and mitigation program, the flood-affected areas in Jakarta had decreased significantly in 2017.



JAKARTA FLOODS

DKI Jakarta Flooded Area Map





Source: BPBD DKI Jakarta, 2013, 2017



© ANTARA 2004

© YUSRA TEBE 2004



220
Thousands
Thousands
Thousands
Thousands

The Aceh Tsunami in December 2004 was the most catastrophic disaster ever hit Indonesia in the current generation. Approximately, 220 thousands of people died (including missing people) and 2000 schools were destroyed. The damage of the tsunami was so great

that it took a long period of time to rebuild damaged schools and children had to study in make-shift schools.



that has ever happened in Indonesia in the current generation.





YOGYAKARTA EARTHQUAKE, 2006



57

SECONDS



6.000

PEOPLE DIED



ON THE RICHTER SCALE



SCHOOLS



A picture of earthquake in Yogyakarta © Yusra Tebe 2006

The earthquake in Yogyakarta occurred on May 27, 2006, at 05:55:03 pm. The powerful tectonic earthquake that shook the Special Region of Yogyakarta and Central Java Provinces lasted for approximately 57 seconds with 5.9 on the Richter scale magnitude recorded. In addition to the casualties, the earthquake also damaged 2,900 school buildings.

Although nearly 6,000 people had lost their lives, many argued that the impacts of the earthquake could have been much worse. This is because the earthquake took place in early morning while children were not in school yet. Had the earthquake occurred during school hours, the death toll was likely to be much greater.

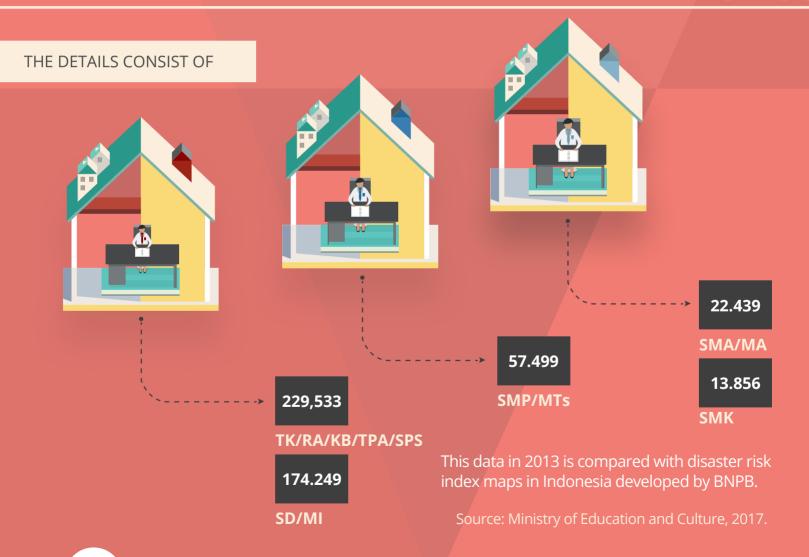


SCHOOL MAPPING IN THE **DISASTER AREA**

- > THERE ARE 497.576 AND SPREAD OVER IN 34

PROVINCES

EDUCATION UNITS IN INDONESIA





Currently, the school mapping process located in disaster prone areas is being undertaken by the Ministry of Education and Culture in cooperation with BNPB. Mapping results can be viewed on the website: smab.kemdikbud.go.id

250.000

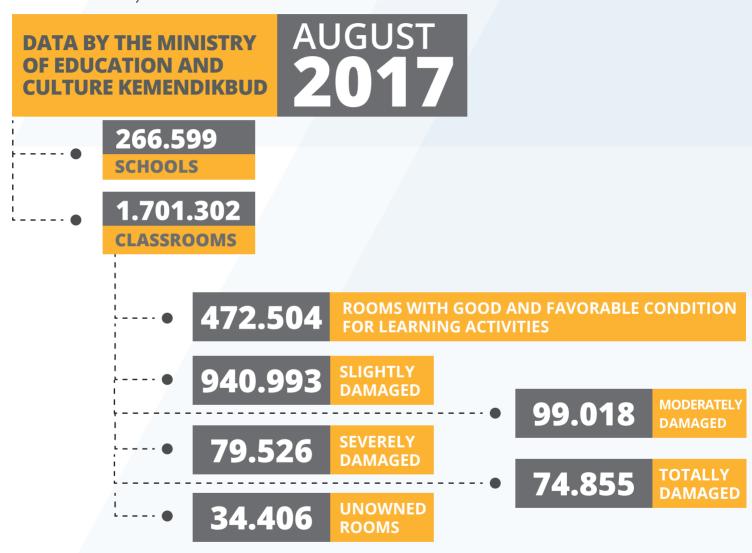
SCHOOLS OF SD / MI, SMP / MTS, SMA / MA AND SMK THAT ARE IN DISASTER PRONE LOCATIONS Schools in the areas that are prone to medium and high risk of disaster

75% OF ALL THE SCHOOLS IN INDONESIA

Source: Worldbank, 2014

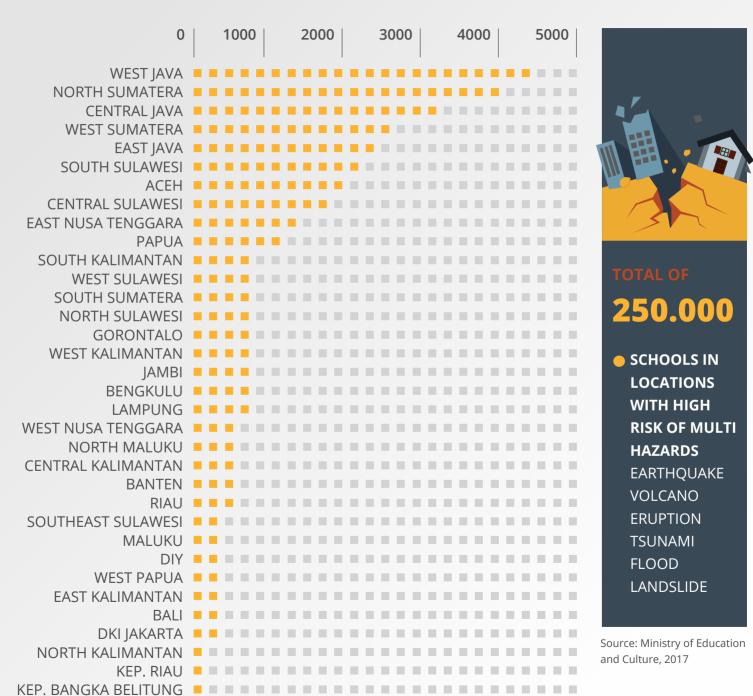


NUMBER OF SCHOOLS AND CLASSROOMS THAT ARE SEVERELY DAMAGED, MODERATELY DAMAGED, SLIGHTLY DAMAGED



This large number is certainly very alarming considering that the disaster hazards could happen in a form of earthquake, landslide, and flood. The affected classes can certainly harm the students and teachers in it.

DISTRIBUTION OF SCHOOLS IN HIGH RISK AREAS





KYPA Documentation, 2014

DISASTER SAFETY EDUCATION UNIT PROGRAM

A. BASIC CONCEPT

Achieving a resilient education requires comprehensive, child-centered efforts.

Child-centered

refers to efforts made by recognizing that children have specific needs in facing disaster hazards and all efforts should be made to encourage children to participate actively according to their capacities and interests.



DISASTER RESILIENT EDUCATION EFFORTS ARE CATEGORISED INTO THREE COMPONENTS

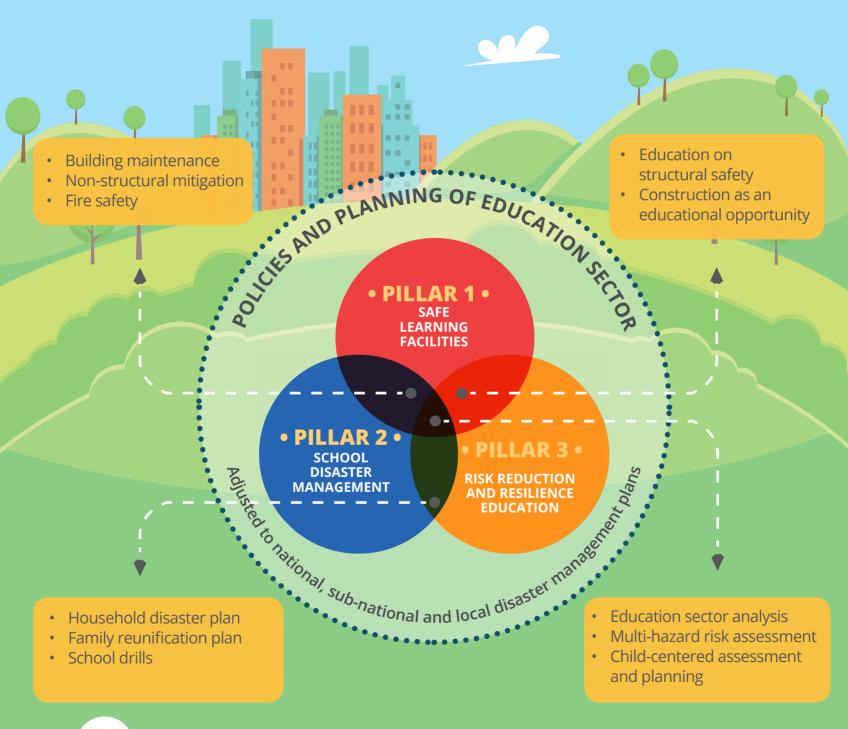


ALL OF THESE EFFORTS SHALL BE ESTABLISHED WITH THE SUPPORT OF

Education sector policies and plan

Local disaster management plan

COMPREHENSIVE SCHOOL SAFETY APPROACH



Activities that can be done by schools in the implementation of SPAB:

• PILLAR 1 •

SAFE LERANING FACILITIES

▼ The activities include:

Safe-site selection

 Design and construction of school buildings that comply with building codes

- Rehabilitation and reconstruction of school buildings and facilities in postdisaster areas
- Retrofitting of school buildings to ensure safety from disaster hazards
- Conducting maintenance of educational facilities and infrastructure
- Arranging layout of classroom to be ensure safety when disaster hits
- Provision of supporting facilities such as emergency kits in every classroom, fire extinguisher, first aid box and also evacuation alarms
- Regular monitoring on school building safety by relevant agencies
- Education on disaster-safe buildings

• PILLAR 2 • SCHOOL

DISASTER MANAGEMENT

• PILLAR 3 •

RISK REDUCTION AND RESILIENCE EDUCATION

The activities include:

- The establishment of disaster preparedness teams in schools
- Development of SPAB policies in schools/madrasahs
- Disaster preparedness planning in schools in the form of standard procedures and contingency plan
- Development of teaching and learning strategy during emergencies
- Development of action plans to support SPAB
- Development of family reunification plan in case of disaster

▼ The activities cover:

- Capacity building for school stakeholders (principals, teachers, committees, students and other education personnel) as well as school supervisor
- Practicing self-evacuation simulation on an ongoing basis
- Integration of DRR education in various subjects and extracurricular activities (eg scouts, little doctors, youth red cross)
- Routine campaign on practical key safety messages

B. HISTORY OF DISASTER RESILIENT EDUCATION IN INDONESIA



•	•	2011	Adoption of Minimum Standards of Education in Emergencies within Child-Friendly Schools concept
•	•—	2011	National Movement on Completion of School Rehabilitation was launched
•	•	2011	Special Allocation Fund (DAK) began to be used for school rehabilitation and reconstruction
	•	2011	Pilot testing on the implementation of Safe Schools / Madrasahs from Disasters (SMAB)
•	•	2012	Perka BNPB no. 4/2012 on Guidelines for the Implementation of Safe Schools / Madrasahs from Disaster
	•	2012	SMAB Piloting in 210 schools in five provinces
•	•	2012	The implementation of SMAB in the rehabilitation and reconstruction of madrasah
	•	2013	Education in Emergencies is officially part of Special Service Education (Permendikbud no.72 / 2013)
	•	2013	Integration of disaster-safe schools with Healthy Schools, Adiwiyata Schools, and Child-Friendly Schools
	•	2013	SMAB Directory was developed. More than 25,000 schools have been exposed to SMAB-related programs
	•	2014	Integration of earthquake resistant buildings into technical guideline of DAK SMP
	•	2014	The Ministry of Education and Culture coordinate the National Secretariat of Safe School from BNPB
	•	2014	Disaster-Safe School / Madrasah become part of Child-Friendly School (Permeneg PPPA No. 8/2014)
•	•	2015	The development of safe school roadmap
•	•	2017	SPAB National Secretariat formed through the decree of Ministry of Education and Culture
•	•	2017	The process of drafting the Permendikbud on Disaster Safe Education Unit begins
•	•	2017	The Magelang Declaration was adopted after the National Conference on Disaster Education

C. HISTORY OF TERMINOLOGIES ON DISASTER RISK REDUCTION PROGRAM IN THE EDUCATION SECTOR

The Disaster Risk Reduction program in the education sector has been running for more than a decade. In its journey, there are several terms used by various institutions (government and non-governmental). Despite having a different name, the purpose of the programs remain the same: to save the lives of school community, especially children, from the threat of disaster. Some terms that are used include:



Some terms are still used in relation to the agency's commitment to the ongoing program implementation.

However, the current official term used is the **Disaster-Safe Education Unit (or SPAB in Bahasa acronym)**, which demonstrates the full commitment of the Government of Indonesia, under the coordination of the Ministry of Education and Culture to realize all educational facilities and its community to be safe from the threats of disaster, including PAUD, PG, TK, SD / MI, SMP / MTS, SMA / SMK / MA, and other educational facilities. In this book, there are several old terms which in essence are the same as SPAB.

D.10 STEPS IN REALIZING DISASTER-SAFE EDUCATION UNIT

To build a culture of disaster-prepared, safe and reducing disaster risk at schools is the goal of a disaster-safe school program. In its implementation, disaster-safe school program can be integrated with various sectors engaged in education and disaster management. The following is the scope of the implementation of disaster-safe schools which include ten activities:



E. REGULATION & TECHNICAL GUIDANCE

The legal basis for the implementation of SPAB, in general, has been accommodated in existing policies and regulations, such as:

1 Law no. 20/2003

on National Education System article 32, paragraph 2 on special service education

2 Law no. 24/2007

on Disaster Management article 26, 35, 43 and 47

3

Law no. 23/2002 which is updated to Law no. 35/2014

on Child Protection

4 Law no. 8/2016 Person with Disabilities Chapter Sixteen of Article 20

on the Right to be Protected from Disasters and Article 109 on Public Service Protection from Disasters

5

Government Regulation no. 17/2010

on the Implementation of Education

6

Government Regulation no. 32/2013

on National Education Standards as the second amendment of Government Regulations no. 19/2005 7

Regulation of the Ministry of National Education no. 24/2007

on Standard of Facilities and Infrastructure for Elementary School / Madrasah Ibtidaiyah (SD / MI), Junior High School / Madrasah Tsanawiyah (SMP / MTs), and Senior High School / Madrasah Aliyah (SMA / MA);

8

Circular Letter of Ministry of National Education no. 70a / MPN / SE / 2010

on Mainstreaming Disaster Risk Reduction in Schools

9

BNPB Chief Regulatory no. 4/2012

on Guidelines for the Implementation of Disaster-Safe School / Madrasah

10

Regulation of the Ministry of Education and Culture No.72/2013

on Special Service Education

11

The Decree of the General Secretary of Ministry of Education and Culture no. 8953 / A.A2.1 / KP / 2014

on the Secretariat for Disaster Management of the Ministry of Education and Culture

12

Regulation of Ministry of Education and Culture no. 40 / P / 2017 which was renewed with no. 110 / P / 2017

on National Secretariat of Disaster-Safe Education Unit of Ministry of Education and Culture

F. INSTITUTIONS

• National Secretariat of Disaster-Safe Education Unit based on the Minister of Education and Culture's Decree

The National Secretariat of the Disaster-Safe School was established on August 25, 2011, which was originally aimed at achieving the Safe, Healthy, Green, Inclusive and Child-Friendly movement at schools and madrasah involving the participation of stakeholders, education unit administrators, non-governmental organizations, families, businesses, and mass media. The secretariat was also formed by various government and non-government agencies.

Since June 20, 2013, based on the coordination between BNPB, Ministry of Religious Affairs, Ministry of Internal Affairs and Ministry of Public Works and Ministry of Health, it is agreed that the management of SMAB Secretariat is transferred to BNPB with Directorate of Disaster Risk Reduction as the lead. However, on the DRR commemoration month in 2014, the lead is handed over to the Ministry of Education and Culture.

Since 2016, the National Secretariat of SMAB has been managed by the Directorate of Special Education and Special Services (Directorate of PPKLK) in compliance with the Regulation of Ministry of Education and Culture number 11/2015 regarding Organization and Working procedures of the Ministry of Education and Culture on Education of Special Services, or in this case, education in areas prone to natural and social disasters. Then, on May 19, 2017, the National Secretariat was established through Decision Letter Number 40 / P / 2017 regarding the National Secretariat of the Disaster-Safe Education Unit (National Secretariat of SPAB).

National Secretariat of SPAB is an ad-hoc, teamwork-oriented, dynamic, flexible organization which also holds the mandate for the implementation of disaster-safe school/madrasah policy. National Secretariat of SPAB consists of cross-sectoral members (ministries / institutions / agencies) and directly or indirectly involves them both in the capacity of their position or in other inherent function, in order to promote the program and implement every policy to make sure that all schools and madrasahs are safe from disaster. The National Secretariat of SPAB was established based on the principles of basic implementation of disaster.

In particular, the National Secretariat is using three main principles, as follows:

Rights-Based. The implementation of disastersafe schools/madrasah should be based on the fulfillment of children's right to education; Interdisciplinary and Comprehensive. The implementation of disaster-safe schools/madrasah is integrated into minimum education service standards and implemented in an integrated manner to achieve the national education standards;

Intercultural Approach. The approach of implementing disastersafe school/madrasah should prioritize interpersonal communication with different cultural backgrounds (race, ethnicity, or socioeconomic) in accordance with national identity and noble values of humanity.

THE DUTIES OF NATIONAL SECRETARIAT OF SPAB ARE:

Mapping disaster safe school programs in the absence of disasters, responding to emergency and conducting post-disaster reconstruction and rehabilitation, which is the responsibility of the main unit of the Ministry of Education and Culture as well as external institutions.

Coordinating the **implementation of the disaster-safe school program action** plan 2015 - 2019.

Coordinating matters related to disaster-safe school programs and school activities between the main units of Ministry of Education and Culture and external institutions, among others, other ministries and national/international non-governmental organizations in before, during, and after disaster events.

Providing technical assistance for the implementation of disastersafe schools to multi-stakeholders in the form of socialization, training, preparation of technical guidance and so forth

Collecting, managing and disseminating good practices, knowledge resources and communication media information and education related disaster-safe schools in Indonesia.

Evaluating the implementation of disaster risk reduction, emergency response and post-disaster programs in the education sector.

Preparing progress reports on the implementation of disaster-safe schools.

STRATEGY OF NATIONAL SECRETARIAT OF SPAB:



To provide the availability and integration of data, information related to disaster resilience for all education units.



To provide the availability of access to qualified information.

To strengthen and empower the school community in the implementation of a sustainable disaster-safe education program



Cooperation with Non-Government Institutions

Education Task Force (Satgas)

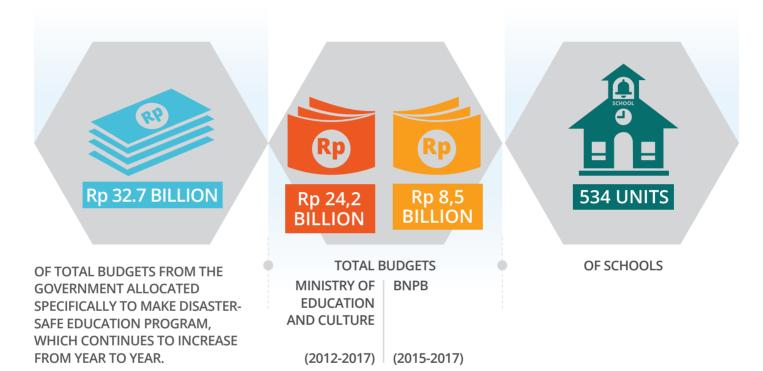
Education Task Force is established to support the government in carrying out activities related to education in emergencies, including strengthening preparedness and coordination for technical capacity building, in the emergency response period. The Education Task Force in Indonesia is chaired by the Ministry of Education and Culture (Kemendikbud), with the support from Unicef. At international level, this task force is better known as the education cluster, which is co-chaired by Unicef and Save the Children.

Overview of Consortium for Disaster Education (KPB)

The Indonesian Consortium for Disaster Education (KPB) was established in October 2006 as a follow-up to the 2006 International Disaster Risk Reduction Day (2006) with the theme of "DRR begins at school". In October 2017, KPB consists of 35 institutions both nationally and internationally. In realizing SPAB's commitment in Indonesia, it should go in line with the implementation of the Sendai Framework for disaster risk reduction in 2015-2030. To do this, the KPB continues to support the development of Disaster Risk Reduction education policies and practices at local, national and international levels that are sustainable both formal, non-formal as well as informal, through the improvement of capacity, coordination, and synergy among stakeholders committed to disaster risk reduction education.

G. THE GOVERNMENT BUDGET

Until now, the government funding commitments, especially from the Ministry of Education and Culture and BNPB for SPAB activities for the period of 2012-2017 are:





Schools that have taken part in SPAB programs across Indonesia, supported by government and nongovernment agencies. (Source: BNPB, 2013)

This amount is very small (<5%) compared to the total number of schools in Indonesia. Therefore, it is necessary to involve and cooperate with various parties to ensure that all schools in Indonesia can be safe from disaster risk.

This data is sourced from the data of National Secretariat of SPAB that was obtained from various information. There are also possible contributions from other Ministries or agencies in supporting SPAB program which are not recorded by the National Secretariat and due to the limited time of writing this book, the available data does not include the contribution of non-governmental organizations.



Documentation of Khadam Foundation of Indonesia, 2013



YSTC Documentation, 2017



IMPLEMENTATION OF

DISASTER-SAFE

EDUCATION UNIT



The implementation of SPAB focuses on the implementation of the three pillars/components of disastersafe education units. To support the successful implementation of SPAB, SPAB national secretariat is working in partnership with institutions that promotes DRR in implementing the SPAB program. The main principles that should be applied when implementing the SPAB program are:

Child-centered, where children are involved according to their capacities and interests and all actions are based on the child's specific needs

Activities begins with a participatory risk assessment involving all school stakeholders, including children.

Align with education sector policies and plans as well a disaster management plans at the local level.

ACTIVITIES SUPPORTING THE SUCCESSFUL IMPLEMENTATION OF SPAB IN VARIOUS AREAS

Clear policy and regulation implementation at the national, provincial and district/city levels.

The establishment of SPAB National Secretariat at the sub-national level to enhance collaboration and partnership between the parties (government, NGO, academia/university, the private sector, and community).

Strong cooperation between local education offices and local disaster management authorities.

Provision of facilitators for SPAB for training, campaign, and monitoring.

Development of data and information related to risk assessment in schools

Regular campaign activities for awareness and campaigns such as competitions, school drills, seminars, conferences and exhibitions, especially in the activities of the Disaster Risk Reduction Month (every October), National Disaster Preparedness Day (every April 26), National Children's Day (every July 23), World Disability Day (every 3 December), World Tsunami Awareness Day (every 5 November).

Monitoring and evaluation of SPAB implementation with all implementing partners through regular coordination and monitoring visits.

Facilitating research related to SPAB

ACHIEVEMENTS

The development of standard safety messages at school

Standardized DRR messages are aimed at delivering consistent messages to schools related to DRR as well as to avoid confusion in their implementation. Safety messages are delivered in various forms of information, education, and communication media (e.g. posters, modules, films and other props).

The existence of commitment of school and government institutions

The government's role in monitoring the implementation of DRR related policies is very important. Capacity building in the education sector, both for schools and government are needed to monitor SPAB implementation at the local level. This commitment is in the form of programs, budgets, and allocation of human resources.

There is synergy between the school's DRR practices with community-based DRR

Disasters affect schools and communities at the same time, not separately. Dissemination of information and DRR practices at schools can be transferred to community levels in which school committee representatives can participate in. This has supported the community-based DRR initiatives in the environment surrounding the schools.

Inclusive DRR program in schools

Inclusive DRR does not focus on the labeling/classification of children and instead on the needs and capacities of children. Schools can adapt to different students' learning abilities and capacities in absorbing DRR knowledge and practices. Therefore, the information provided can be accepted to perform an action.

Development of a practical and realistic DRR Strategy.

SPAB implementation at schools and relevant activity planning in the education sector takes place at the local level to maintain the sustainability of the program.

DISASTER-PRONE INDEX MAP IN INDONESIA

PILLAR 1.

SAFE
LEARNING
FACILITIES

POLICATION
SAFE
LEARNING
FACILITIES





- Non-structural mitigation
- Fire Safety

- Education on structural safety
- · Construction as an educational opportunity



PILLAR 3

- · Household disaster plan
- Family reunification plan
- School drills

- Education sector analysis
- Multi-hazard risk assessment
- · Child-centered assessment and planning





Kerlip Documenatation, 2016

CHALLENGES & OPPORTUNITIES OF SPAB IMPLEMENTATION

Disaster-related education programs in Indonesia have been growing significantly since 2005. Many initiatives have been implemented and various strategies have been applied. The following are some of the challenges that could hinder the implementation of the SPAB program, based on information provided by implementing institutions.

01



There are not many people in the education sector who are aware of SPAB program and are informed about how to implement it. The guidelines for implementing the new SPAB have been prepared and endorsed by the relevant ministries in the last three years and the socialization is only limited to a few regions. Meanwhile, the community, especially in the education sector can receive benefits if they are informed about the guide. This guide can be downloaded on the SPAB website (www. smab.kemdikbud.go.id).

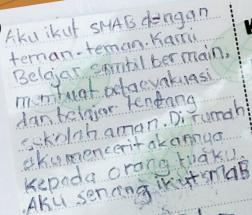
02

There is limited support at the local level, on SPAB implementation, which is initiated by BNPB, BPBD or other stakeholders.

To date, district/ municipalities/ provinces that have high commitments for the implementation of SPAB can still be counted with fingers.

This is reflected by the lack of specific policies that support SPAB program at local level. Below are some district/ municipalities/ provinces that already show strong commitment to the implementation of SPAB:

- 01 DI Yogyakarta, (through Local Regulation number 8/2010 on Disaster Management)
- O2 Sikka District, NTT (through The Decree of the Sikka Regent number 536 / HK / 2013 on Standards of Infrastructure Facility and Educational Implementation of Disaster Risk Reduction at school)
- Rembang District, Central Java (through Head of District Regulation number 44/2014 on Disaster Risk Reduction Education at School)
- 04 Klaten District (through Head of District Regulation number 6/2016 on learning disasters in Klaten D
- DKI Jakarta Province (through Governor Regulation number 187/2016 on the Disaster-Safe School / Madrasah)
- Pidie Jaya District, NAD (through Head of District Regulation number 11/2017 on the Disaster-Safe School / Madrasah)



Perang KARTU POS Kepada: Kepala BNPB ni Jakarta Pengirim: Putri Zuliana Kelas : Iv cEmpat? SON Ende 1 Ende, Flores, NTT Kegiatan Penerapan Sekolah I Madrasah Aman Bencana - 2016

Documented by Mariana Pardede, 2016

TO: Bupati Minahasa Utara aman bencana, se dari BNPB.

Nama: Amelia hernowo.

Nama Saya amelia hernowo kelas VIII Sekolah kami mendapat Program Sekolah madrasah

Bythom, Saya merasa Senang mengikuti Smab, banyak pengalaman yang Saya dapat. Saya berterima kasih kepada pemerintah yang Sudah membuat program ini, untuk Sekolah Saya SMP ER yobel. Saya juga merasa bangga bisa mengikuti SMAB, karna hanya orang tertentu Saga yang dipilih. Banyak perubahan yang tergadi Selama mengikuti program SMAB Sekarang Saya Sudah tidak takut lagi karna Sudah tau cara-caranya.

I bulan yang lalu ada gempa saat itu saya keluar ruangan & mencari tempat terbuka. Saya guga berharap Semoga kedepannya program dapat dilakukan disekolah lain Supaya anak-anak yang lain bisa tau apa yang dilakukan saat ada bencana. Demikianlah Surat dari Saya. Terima kasih. Senin, os desember 2016





There is still low public awareness about SPAB. This is also because many parents have not realized that the location of their child's school is prone to disasters.

Ministry of Education and Culture and BNPB are currently making a breakthrough using mapping technology with the integration of Basic Education Data (DAPODIK) and disaster risk maps across Indonesia. Through the website (smab.kemdikbud.go.id), anyone can be informed about the danger of any disaster hazard that threatens any schools in Indonesia.

The available information will be further developed whereby all schools will assess their school buildings and facilities safety against disaster threats so that everyone is aware of what are the risks and the recommendations can be made at each school to ensure the school is safe from disaster.

The implementation of the SPAB program is still not being effectively coordinated and its monitoring is still being undertaken ad-hoc by government and non-government agencies.

PREPAREDNESS THE REPORT OF STATUS REPORT **ALERT STATUS** SCHOOL B SCHOOL A Since 2017, the government has begun to pioneer every school to report the status of CONTROL school preparedness to disaster **SYSTEM** on a regular basis through an integrated monitoring system **EDUCATION** THE REPORT OF **PREPAREDNESS INFORMATION** with the education information **ALERT STATUS** STATUS REPORT SCHOOL C SCHOOL D **MANAGEMENT** management system. **SYSTEM**

The related data is monitored regularly such as how often schools conduct drills, procurement of school safety support facilities (eg fire extinguishers and first aid kits), and the presence of school procedures in times of emergency. These matters are important for relevant stakeholders to provide interventions in accordance with school conditions.

Limited training for teachers, principals, and other education personnel to understand and implement the SPAB program at their schools.

Currently, training and capacity building programs still rely on funds owned by the government and non-government agencies, and the amount of these funds is very limited. Meanwhile, Indonesia is a country with the largest teacher-student ratio in the world, with more than 360,000 teachers.

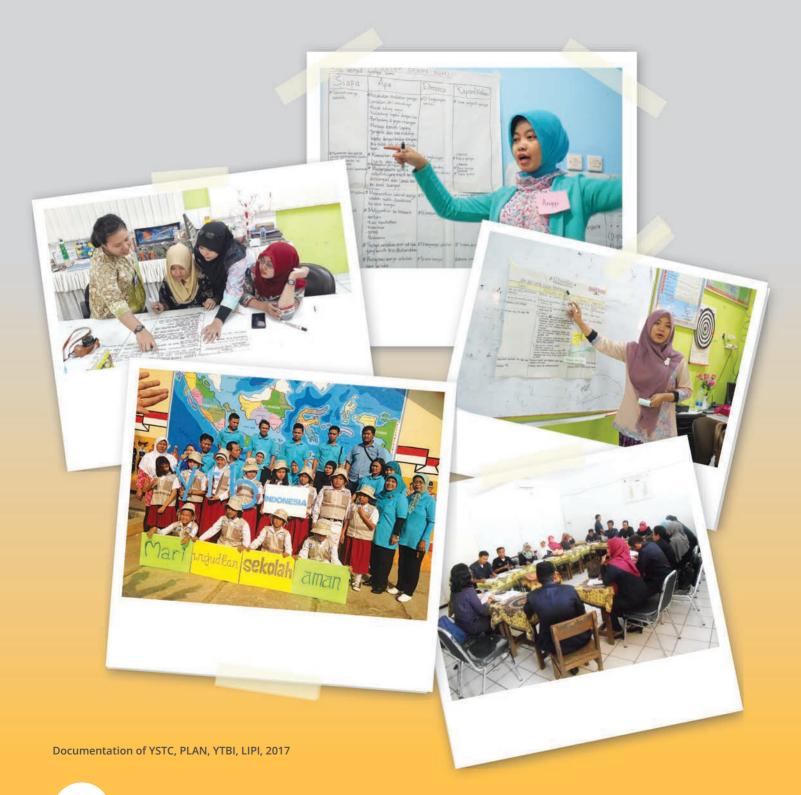
Therefore, it is necessary to make a breakthrough so that these teachers can understand and equipped with basic understanding of disaster management skill, such as survival skills.







Disaster risk reduction and first aid training for Teachers, YSTC and ASB documents, 2016



MONITORING OF INTEGRATED SPAB IMPLEMENTATION WITH THE EDUCATION MONITORING AND INFORMATION SYSTEM

The Indonesian government has started to pilot the integration of monitoring the implementation of SPAB with education information management system. The data inserted independently by each school is collected 2 times a year. The information collected includes:

- 01 The allocation of funds to support the implementation of SPAB
- 02 The existence of institutions that assist the school in implementing SPAB
- 03 The location of the school against the potential risk of disaster
- 04 The existence of disaster related facilities from disasters, such as:
 - a) Evacuation route map
 - b) An agreed early warning tool (siren/kentongan/hazard lights)
 - c) The clasroom door open outward
 - d) Signs and evacuation routes
 - e) Accesible safe havens
 - f) First aid kit
 - g) Light Fire Extinguisher (APAR)
- 05 Periodical safety audits related to school buildings and facilities
- O6 School's disaster preparedness team, involving students

- The standard operating procedures for school disaster management signed by the school's principal
- Action plan on prevention, pitigation and disaster preparedness activities in the school's activity and budget plan (RKAS)
- 09 Teachers and other education personnel who have participated in SPAB training
- 10 Disaster awareness campaigns to all students
- 11 School drills performed routinely
- 12 Synergy between school preparedness plans and the surrounding community



Documentation of YSTC, 2017

INFORMATION, EDUCATION AND COMMUNICATION MATERIALS

Information, Education, and Communication Materials (IEC) related to disaster education in Indonesia are a lot and have many varieties. This is because it was made by various SPAB stakeholders in Indonesia including government and non-government agencies. Existing IEC materials can be accessed at smab.kemdikbud.go.id.





Documentation of LPBI NU, Box Breaker, ASB, YSTC, KYPA, Plan International Indonesia, Unesco, Hope Indonesia, UNDP, Macquarie University, BNPB

A POSTER



A Poster of "My Safe and Comfortable School" by Save the Children

Posters can be used as a medium to provide information related to SPAB.

POSTER IS AN ANNOUNCEMENT
OR AN ADVERTISEMENT
CONTAINING INFORMATION
AND PERSUASION IN A FORM OF
GRAPHIC OR TEXT ATTACHED ON
THE WALLS OR STRATEGIC PUBLIC
PLACES TO BE EASILY SPOTTED BY
MANY PEOPLE.

A poster contains a short, clear, solid, and straightforward image and text, and it is also relatively easier to understand. Posters are also designed to be able to be read by people who are constantly moving (driving or walking) and to attract attention. The conventional size of the poster is A3 to A0 paper size.

In school environment, posters can be used as a means for students to recognize the types of disasters, the signs of disaster, how to evacuate, etc. Posters can be created independently by students themselves or by other people beside students.

B COMIC

An educational comic is another book genre that is now popular in the society. One of many unique features of this type of comic is, in addition to having the story content and comic narrated in general, it also have educational content and information related to the subject of lesson delivered, so it is suitable for learning media.

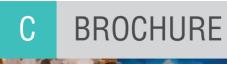
A picture story is a suitable media for children to play while learning. When a child sees a picture, the child is trained to play his fine motor for imagination. Comics usually have story characters who convey messages and information which go in line with the storyline.





Comics on Tsunami, Flood, and Fire Preparedness, BNPB, Jakarta Education Office, PLAN and YTBI, 2014, 2015

The storyline should be easy to understand and the message should be clear. If the comic is developed for a certain level of education then language and displayed images should be adjusted to make learning process successful. The accuracy in the use of term and conformity with proper spelling should also be noted.





CSS Framework, 2012

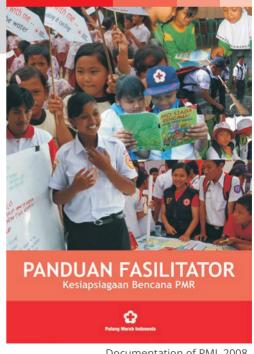
Communication media in the form of an A4 or A5 paper size can be folded into 3 or 4 parts. It includes headline, image, and information arrangement. It contains information about safe school concepts. An example is the comprehensive Safe School brochures from 12 institutions in Indonesia. This medium is easy to distribute but has limited reach and is intended for public in general.

GUIDEBOOK

It contains guidance on how to develop SMAB at school. For example is this Indonesian Red Cross guidebook. It is divided into two parts, namely manual and explanation. In the manual, it contains two module sections and a second guide for the facilitator.

An example is from PMI. Here are 3 books, namely:

- 1. Ayo Siaga Bencana Manual Module
- 2. Ayo Siaga Bencana The Facilitator's Guide
- 3. Adolescent-based risk reduction



Documentation of PMI, 2008

E FLIPCHARTS







Documentation of Plan International Indonesia, 2014

Learning materials that can be used by educators in the socialization and implementation of SPAB activities.



A video is a medium capable of displaying both images and sound at the same time. BNPB has a Youtube channel that contains videos related to disaster education. The video can be divided into 3 types, namely:

1. DOCUMENTARY VIDEO

In the documentary video, there is a clip about SMAB activities process with statements from various parties related to SMAB activities at school. For most clips, duration is short, typically around 5 minutes. Two examples are the KYPA documentary and the Plan International videos entitled: "Safe Schools, High Achievements"

2. ANIMATION VIDEO/CARTOON

It is a story/drama usually about the condition of a location and recorded activities to improve disaster preparedness of a region / school. There are cartoon characters in these videos and the duration lasts for around 30 minutes. One example is a movie created by MDMC en titled Anak Siaga Bencana which is available at the following link: https://www.youtube.com/watch?v=tDaY52QLj-8

3. FILM

Films usually contains a story of a society that experienced a disaster and how they work to anticipates it. One example is a puppet movie entitled Badu produced by IDEP. The movie series tell a story about disaster in Wanabalu Village. Badu and the people in the movie anticipate disaster to reduce the risk of disaster. The link to The Story of Earthquake Disaster movie is: https://www.youtube.com/watch?v=-NdwLQH2R_M

G

GAMES (CONVENTIONAL, ELECTRONIC)



Mariana Pardede, 2017



Plan International Indonesia, 2013



Unesco, 2016

To make it easier to learn about disaster preparedness, climate change adaptation, and SPAB related materials, a number of games, both conventional and electronic games have been developed. These games are:

- 1. SNAKES AND LADDERS ABOUT DISASTER PREPAREDNESS
- 2. PICTURE CARDS OF DISASTER-SAFE SCHOOLS / MADRASAH
- 3. PICTURE CARDS
- 4. CARD GAME ON DISASTER-SAFE SCHOOLS / MADRASAH
- 5. BOARD GAME ON DRR AND CCA
- 6. MONOPOLY ON DISASTER-SAFE SCHOOLS / MADRASAH
- DOMINO ON DISASTER-SAFE SCHOOLS / MADRASAH AND DRR

 Domino card game that is modified by disaster-safe schools and disaster preparedness. It is 4x6 and is made of thick paper. To play the game, a person should be at least at 3rd grade.
- 8. DISASTER-SAFE SCHOOLS / MADRASAH PUZZLE
- 9. GAMES IN THE FORM OF MOBILE APPLICATION

This game can be downloaded on Playstore (Android) and App Store (IOS) with game titles:

- 1. Safe School (luminov/PLAN Internasional Indonesia)
- 2. Sai Fah (Opendream/UNESCO)
- 3. Tanah the Conqueror of Tsunami dan Earthquake (Opendream/UNESCO)

H PROPS





Documentation of YSTC, 2016

Documentation of Box Breaker, 2017

Props have been used to help children learn about disasters. The props here is, a volcano. It is made of clay to resemble a volcano crater, made from baking soda and water mixed with red dye.



Documentation of LPBI NU, 2015



Documentation of KYPA, 2014

DISASTER RESILIENT EDUCATION IN THE YEAR 2030

DECLARATIONOF MAGELANG 2017

DISASTER RESILIENT EDUCATION IN 2030

We recommends the central government, local government, and other stakeholders to:

- Publish regulations of the Minister of Education and Culture, Minister of Religious Affairs, Minister of Research of Technology and Higher Education, and other Ministries/ Institutions related to Disaster Education.
- lssue Joint Decree by Minister of Education and Culture, Minister of Industry, Minister of Research and Technology and Directorate of State Owned Enterprises on Disaster Education and its financing.
- Promote secure and accessible school facilities and infrastructure to meet the rights of people with disabilities in accordance with Law Number 8 of 2016 regarding Persons with Disabilities.
- Establish a Joint Secretariat of Disaster-Safe School/ Madrasah (SMAB) in each district/city.
- Establish an Integrated Emergency Madrasah in the form of sister schools to work as partner in implementing SMAB program.
- Encourage private sector to be actively involved in disaster education.

POLICIES AND REGULATIONS ON DISASTER-SAFE EDUCATION UNIT HAVE BEEN ISSUED AND OPTIMALLY APPLIED





On September 2017, the Ministry of Education and Culture, together with the Consortium on Disaster Education, have started drafting academic paper and the regulation for Ministry of Education and Culture related to the Disaster-Safe Education Unit. This regulation will replace the existing Circular Letter and encourage schools located in disaster-prone areas to ensure that their schools are safe from disaster risk as a mandatory requirement.

This Regulation will cover various matters, including:

- The use of educational budget funds (eg BOS, DAK, etc) and/or external (eg NGOs, private, village funds) to support the achievement of disaster-safe education units
- b) Disaster-safe education program will become one of many criterias for school accreditation and teacher's competency assessment values.
- c) The disaster-safe education unit program covers all aspects in a comprehensive and integrated manner, ie ensuring facilities and infrastructure of disaster-prone education, implementation of disaster-safe education to all students, and the establishment of school disaster management. This will be developed by involving children and other school communities
- d) Implementation of disaster education through integrated curriculum and will be applied through existing subjects, as local content, or in extracurricular activities

- e) Disaster-safe education unit programs involve the whole school community inclusively, including children and people with disabilities
- f) Provision of facilitators for Disaster Resilient Education program
- g) The disaster risk education unit program covers every level of education and regulates the involvement of all school's stakeholders, including school committees
- h) The Disaster Resilient Education program considers the uniqueness / special circumstances of each region or district
- i) Synchronise with existing programs, such as adiwiyata schools, healthy schools, child-friendly schools, etc.
- j) The disaster resilient education program is supported by all parties, including from all relevant ministries and institutions, NGOs, and private sector.

THE NATIONAL SECRETARIAT OPERATING EFFECTIVELY INCLUDING ESTABLISHING PARTNERSHIP WITH THE PRIVATIVE SECTOR



The national secretariat (Seknas) for disaster-safe education units has been established in 2015, where currently is chaired by the Ministry of Education and Culture alongside BNPB, the Ministry of Religious Affairs, and the State Ministry for Women Empowerment and Child Protection. Coordination and collaboration with the private sector will be stronger especially in supporting program planning, implementation and monitoring/evaluation.

ACCESS TO MATERIAL RELATED TO DISASTER RESILIENT EDUCATION ARE AVAILABLE ON THE SPAB WEBSITE



The SPAB website will be a user-friendly information hub to collect teaching materials and gather disaster-safe education practice documentation that is accessible to all people promoting SPAB. Teaching materials and practical documentation can also be accessed and used by people with special needs.

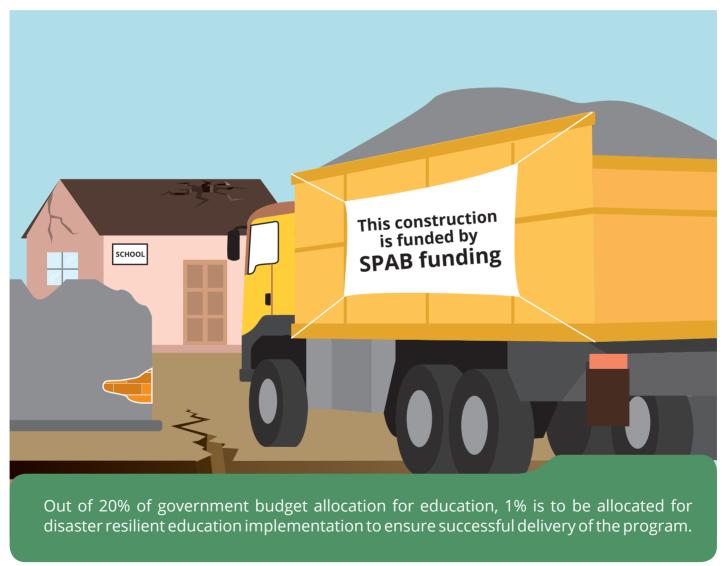
04

KNOWLEDGE AND SKILLS RELATED TO DISASTER RESILIENT EDUCATION ARE INCLUDED IN COMPETENCY OF TEACHERS AND OTHER EDUCATION PERSONNEL. MATERIALS CAN ALSO BE ACCESSED THROUGH E-LEARNING



SPAB materials to be integrated in the training curriculum to teacher, education personnel. SPAB material can be also accessed through an e-learning system (online/offline) by teachers, education personnel and principals who lack the opportunity to attend face-to-face training. E-learning from other agencies such as fire brigade and SAR can also be a reference. Not only as a competency assessment purposes, e-learning can also be used as a reference for government and SKPD community to know further on SPAB material

1% OF EDUCATIONAL BUDGETS ARE ALLOCATED FOR DISASTER RESILIENT EDUCATION



06

TECHNICAL GUIDELINE ON SCHOOL OPERATIONAL FUNDING (BOS) IS UNDERSTOOD BY ALL TEACHERS, OTHER EDUCATION PERSONNEL AND SCHOOLS ABLE TO ALLOCATE BUDGET FROM BOS FOR DISASTER RESILIENT EDUCATION PURPOSES



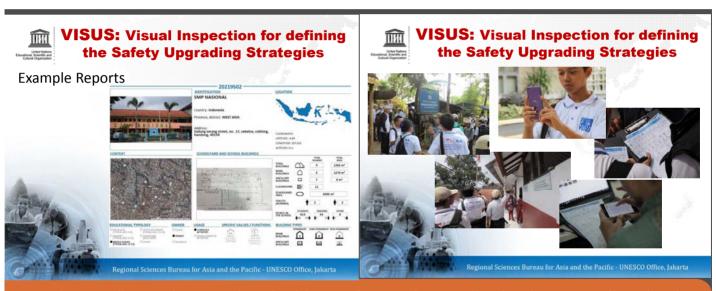
The technical guidelines for BOS 2017 which were published by the Ministry of Education and Culture have included safe school activities. Schools in Banda Aceh have incorporated SPAB programs into RKAS to be funded through BOS funds. However, other schools are not ready and still do not understand how to best use BOS funding for SPAB purposes. In the future, it is expected that all schools can use BOS funds to ensure the SPAB program runs smoothly and effectively.

MONITORING THE IMPLEMENTATION OF SPAB IS INTEGRATED IN BASIC DATA FOR EDUCATION (DAPODIK)



Currently, progress from SPAB is being monitored periodically in basic data for education (DAPODIK), completed directly by the school. As the result of this integration, the implementation of SPAB can be monitored through the Education Management Information System (EMIS).

BUILDING SAFETY AUDITS



Funds are allocated to conduct building safety audits in all schools, especially schools located in disaster-prone areas. Existing audit technologies/applications such as VISUS and earthquake and tsunami preparedness applications, as well as collaborative work with relevant agencies and private sector can contribute to make building safety audit an easier and more affordable process.

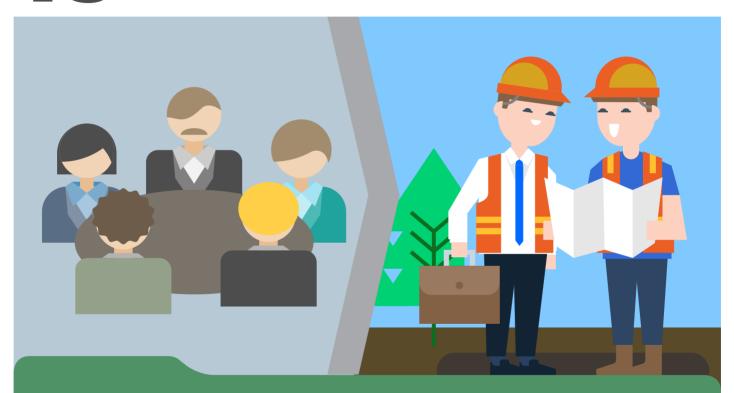
REGULAR SCHOOL DRILLS TWO TIMES A YEAR



In the future, it is envisioned for all schools, especially those located in disaster-prone areas to conduct a mandatory periodic school drills, at least twice a year because to build a culture of disaster safety needs to be done routinely.

The drills will be more effective if it is done before the "disaster season" starts, especially those which are predictable and regularly take place at a certain period. For example, such drill can be organized before the rainy season starts (for areas prone to flooding) or before dry season starts (for areas prone to forest and land fires).

COLLABORATION BETWEEN MINISTRIES AND OTHER STAKEHOLDERS WORKS EFFECTIVELY



All relevant- ministries (Ministry of Education and Culture, Ministry of Religion, Ministry of Research, Technology and Higher Education, BNPB, Ministry of Social, Ministry of Health) issued ministerial-level policies and regulations and hold the capacity to issue other policies which supports the implementation of SPAB at national and sub-national levels.

An example of such policy is how people can access village funds for SPAB's purposes for various education levels.

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