

# SCHOOL DISASTER RISK REDUCTION AND MANAGEMENT MANUAL

BOOKLET 1



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This School Disaster Risk Reduction and Management (DRRM) Manual has been developed by the Department of Education to serve as a common template for localization, contextualization, and adaptation at the sub-national context. It is expected that the content will be reviewed by education and disaster management authorities, and education sector partners working on disaster and risk reduction and who have adapted policy and practices for the school environment.

BOOKLET 1

# ACKNOWLEDGEMENT

We express our heartfelt appreciation to Undersecretary Reynaldo Antonio D. Laguda for his leadership in the development and publication of this Manual, and to the following:

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# FOREWORD

The Philippines is prone to multiple hazards. The education sector is one of the most vulnerable sectors during emergencies. It is among those that often suffer the impacts of disasters brought about by natural and human-induced hazards. From our experience, we recognize that disasters deprive children of their right to a continuous quality basic education in a safe environment. They threaten the lives of children, their families, and education personnel. Disasters also set back the investments made by the education sector.

Reducing disaster risks confronting the education sector is paramount to the achievement of the Department of Education's (DepEd) outcomes, namely: access, quality, and governance. As such, the Department, as a member of the National Disaster Risk Reduction and Management Council (NDRRMC), has been building the resilience of education by advancing school safety. In accordance with this thrust, DepEd has created the Comprehensive DRRM in Basic Education Framework, which underscores the following three pillars or areas of focus: 1) Safe Learning Facilities; 2) School Disaster Management; 3) DRR in Education. The ongoing implementation of these pillars is aligned with DepEd's commitment to the four thematic areas of the Philippine DRRM Act of 2010, otherwise known as RA 10121. These areas are Prevention and Mitigation, Preparedness, Response, Recovery and Rehabilitation.

To enable focused, effective and strategic implementation, DepEd has established the office of the Disaster Risk Reduction and Management Service (DRRMS), with regular full time staff in its central, regional and division offices. The division offices are responsible for ensuring that schools have a functioning disaster management team.

This School Disaster Risk Reduction and Management Manual provides guidance to our division coordinators and schools in the implementation of the Comprehensive DRRM in Basic Education Framework. This Manual explains the Framework and identifies the tools to be used by the schools, with a particular focus on School Disaster Management (Pillar 2). I call on our partners to likewise use the Manual to support the capacity building of our schools.

I hope that this Manual will be beneficial in strengthening the safety and resilience of our schools nationwide.

  
BR. ARMIN A. LUISTRO FSC  
SECRETARY

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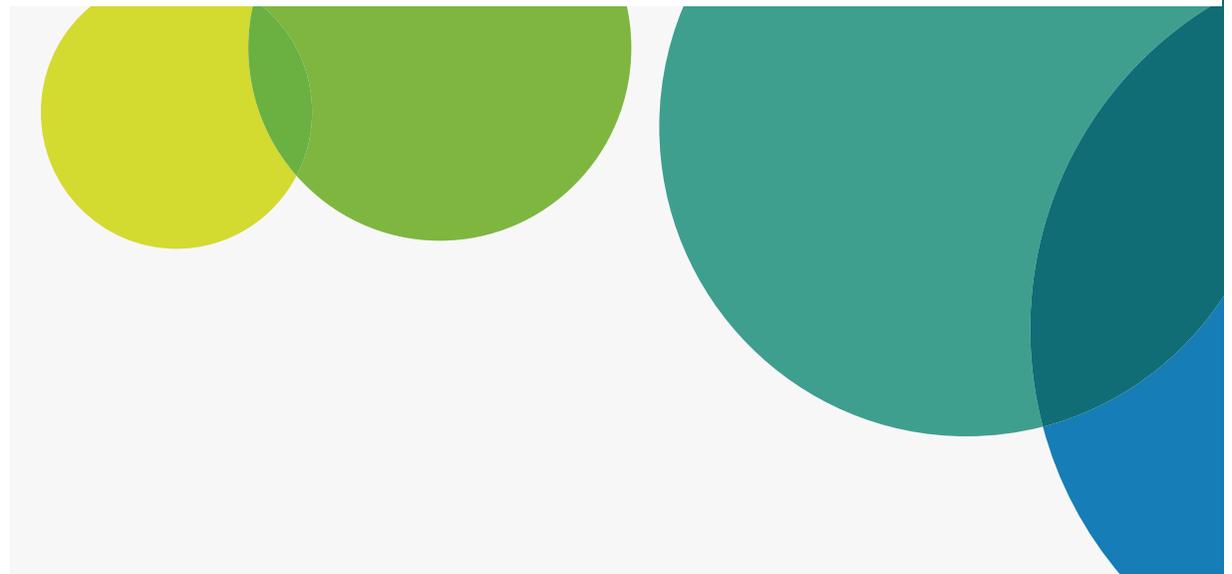
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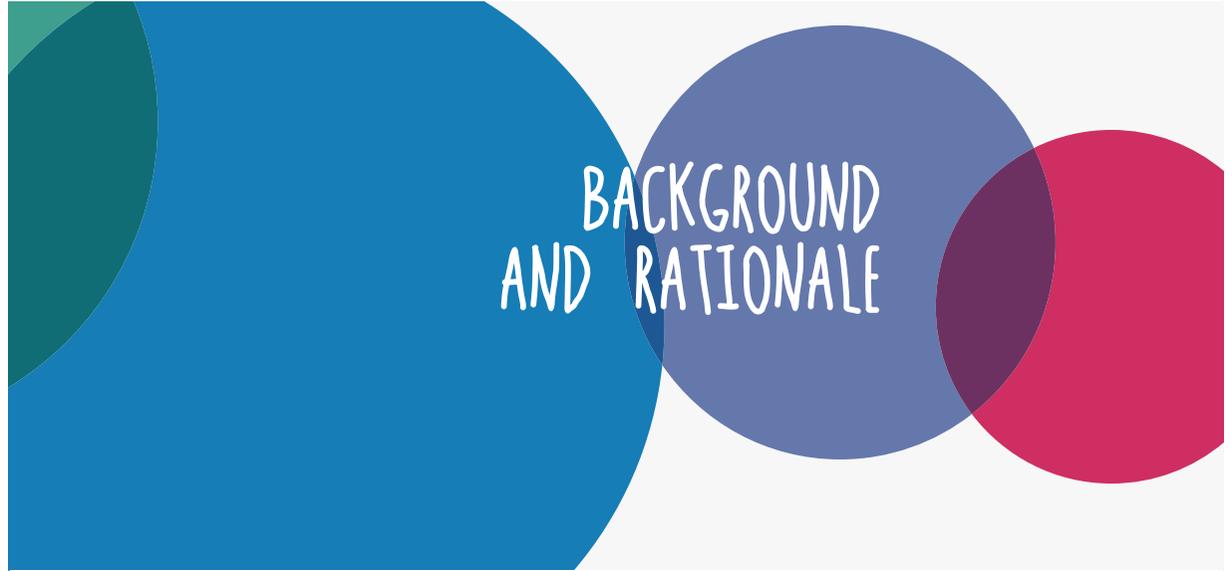
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## BACKGROUND AND RATIONALE

DISASTERS DEPRIVE CHILDREN OF THEIR RIGHT TO A CONTINUOUS, QUALITY, BASIC EDUCATION IN A SAFE ENVIRONMENT. THEY THREATEN THE LIVES OF CHILDREN, THEIR FAMILIES, AND EDUCATION PERSONNEL.

# SCHOOL HAZARDS AND RISKS

Floods, tropical cyclones, and major earthquakes, though not always as destructive, are the deadliest and costliest of hazards. The most terrible consequences are deaths and injuries in schools.

There are schools that are unusable because of damages, their prolonged use as shelters, having unsafe access, the loss of equipment and materials, or lack of teachers are some effects of hazards which can hinder children to achieve their goals.

From SY 2009/10 to 2013/14, top three hazard exposures of schools are tropical cyclones, flood

and earthquake (DepEd EBEIS; 2009 – 2013). In some cases, schools experience more than one hazard at one point in time. It should also be noted that schools are as well exposed to human-induced hazards like armed conflict and fire at 7% and 2%, respectively (DepEd EBEIS; 2009 – 2013).

The accompanying risks from natural hazards could be determined by the structural integrity of school buildings; awareness and capacity of teachers and students; geographic location of schools; population distribution; and institutional support, among others.



## **Hazards only become disasters when it affects a population.**

The severity of the disaster depends on a population's capacity to cope using its own resources. Hazards that occur in an uninhabited island or hazards that occur in a community which is well prepared for such events may not experience a disaster. Decreasing vulnerabilities and increasing capacities of a community exposed to a hazard could prevent disasters.

*For further reading: DepEd Disaster Risk Reduction Manual (Safer School Resource Manual) 2008, UN Convention on the Rights of a Child, Sendai Framework, The Philippine Disaster Risk Reduction Management Act*

## PURPOSE

Many risks associated with hazards can be avoided by the actions we take. This School Disaster Risk Reduction and Management (DRRM) Manual is designed to guide school heads and administrators in facilitating the protection of children, education personnel, and education itself.

In addition, this Manual guides the development or improvement of existing policies, practices, protocols and plans at the

school level. The list of activities will serve as minimum guidance for schools to implement DRRM, which could enhance existing practices or require new ones.

This Manual is divided into two booklets. The first booklet covers the Comprehensive DRRM in Basic Education Framework, including the institutional mechanisms that support it. It also explains the three pillars of the Framework that will guide the implementation of DRRM in schools. The second booklet provides practical steps and useful tools to operationalize DRRM

## SOME IMPORTANT DEFINITIONS

HAZARD	A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.
DISASTER	A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources.
DISASTER RISK	The potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period.
DISASTER RISK REDUCTION	The concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.
DISASTER RISK MANAGEMENT	The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster.
	<i>Above definitions are from UNISDR</i>
RECOVERY	Decisions and actions taken after a disaster with a view to restoring or improving the pre-disaster living conditions of the stricken community while encouraging and facilitating necessary adjustments to reduce disaster risks.
PREPAREDNESS	Activities and measures taken in advance to ensure effective response to the impact of hazards, including the issuance of timely and effective early warnings and the temporary evacuation of people and property from threatened locations.
RESPONSE	The act of implementing or translating into actions what are called for by the preparedness plans. Response includes actions taken to save lives and prevent further damage in a disaster or emergency situation. Seeking shelter from strong winds accompanying a typhoon and evacuating to higher grounds due to an impending flood are examples of response.

*These definitions are from the DepEd Disaster Risk Reduction Resource Manual*

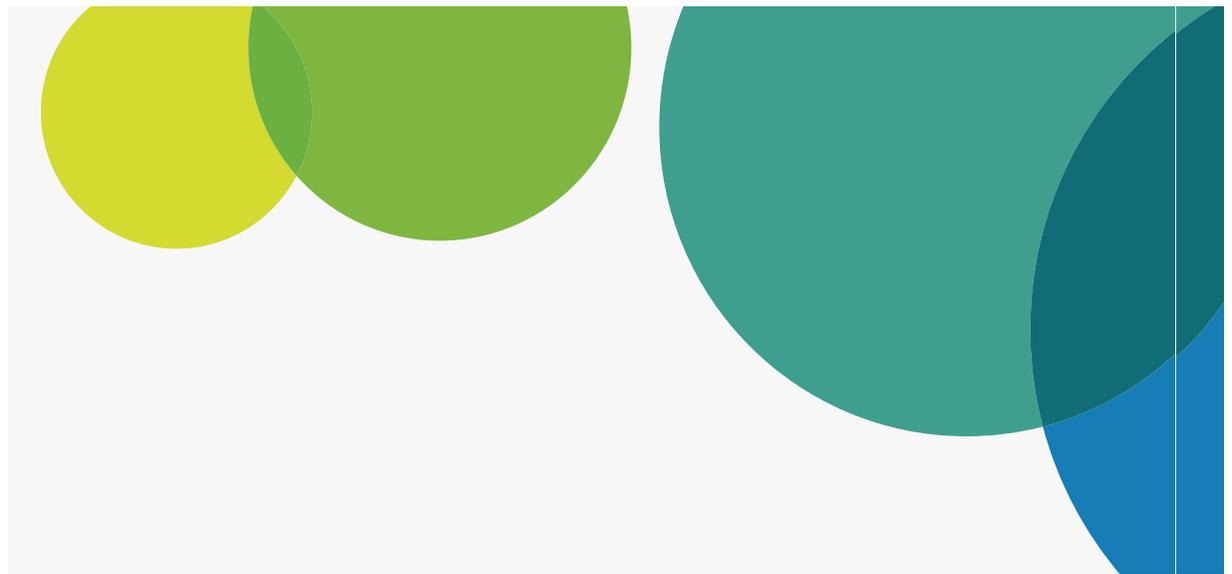
in schools.

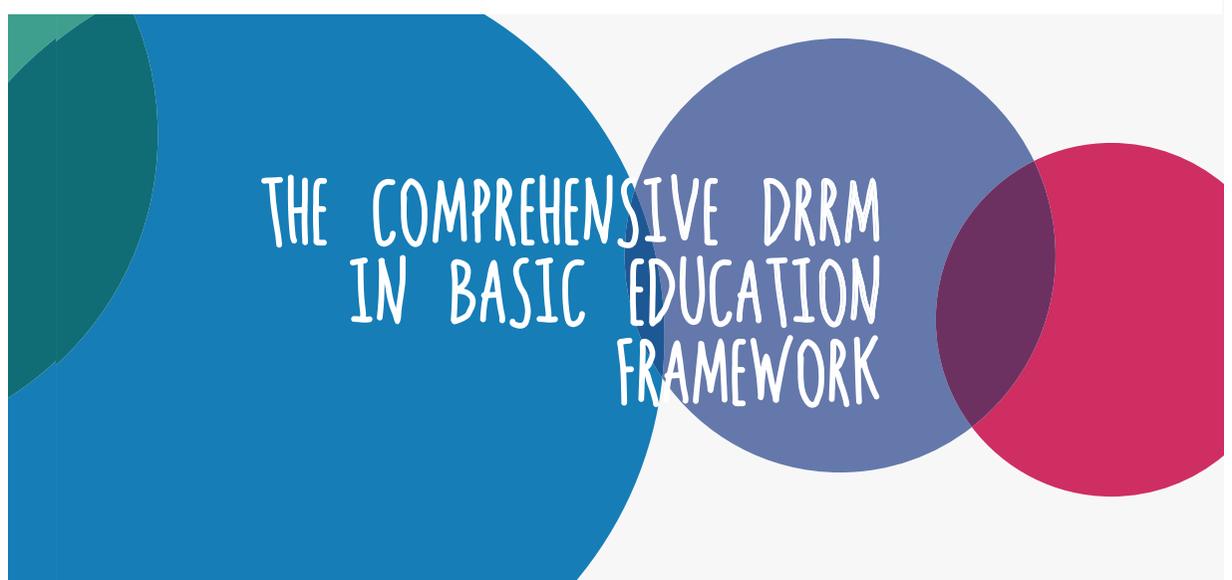
## END USER

This Manual is written for school administrators, school planning team (SPT) and school DRRM team. It ensures that school heads and administrators are with standards on how to reduce risks and manage the effects of hazards in their schools.

It primarily supports the implementation of school-based management.







THE COMPREHENSIVE DRRM  
IN BASIC EDUCATION  
FRAMEWORK

# LEGAL BASIS

The implementation of DRRM in basic education is guided by DepEd’s three major outcomes—Access, Quality and Governance. These set the program and policy development agenda of the agency.

As a member of the National DRRM Council (NDRRMC), the Department is also committed to implement DRRM in basic education within the following thematic areas: Prevention and Mitigation; Preparedness; Response; and Recovery and Rehabilitation.

As shown in Figure 1, the translation of DepEd’s commitment to its mandate and to the NDRRMC is reflected in its Comprehensive DRRM in Basic Education Framework which has been adapted from the Global Comprehensive Safety Framework. DepEd’s framework provides guidance in:

- The implementation of DRRM for education practitioners’ and partners’ planning and programming at all levels;
- The inclusion of DRRM in the school, division and regional education development plans;
- Serving as mechanism for engaging partners and aligning their thrust to DepEd priorities;
- Defining the agency’s response to hazards affecting school operations;
- Guiding collaboration with the private schools.

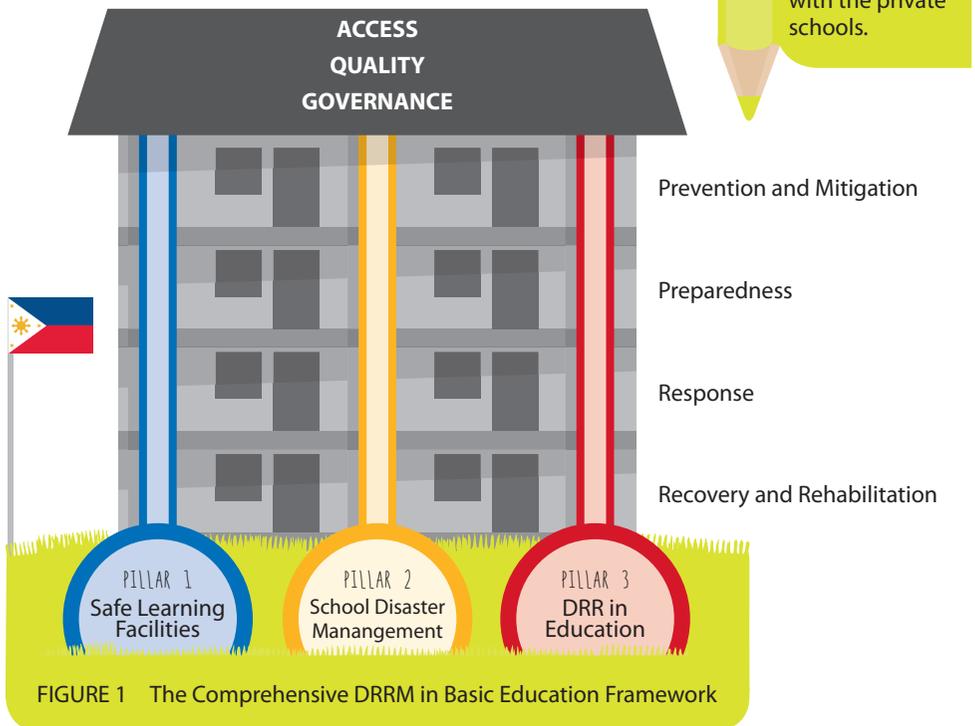


FIGURE 1 The Comprehensive DRRM in Basic Education Framework

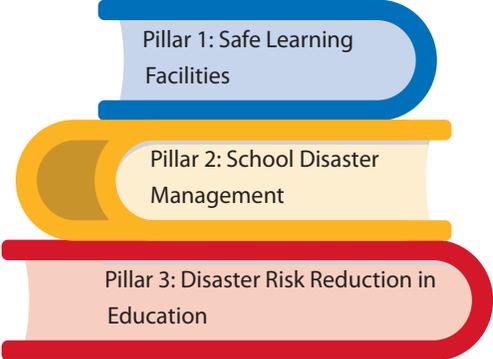
The Framework shows the interrelationship between the global and national frameworks in strengthening the implementation of DRRM in basic education.

The Comprehensive DRRM in Basic Education Framework seeks to:

1. Protect learners and education workers from death, injury, and harm in schools;
2. Plan for educational continuity in the face of expected hazards and threats;
3. Safeguard education sector investments; and
4. Strengthen risk reduction and resilience through education

With the issuance of a policy (DO 37 s 2015), the Framework is expected to guide schools in assessing, planning and implementing their specific prevention and mitigation, preparedness, response and recovery and rehabilitation interventions as expressed in the following:

These three pillars form the bases on the conduct of risk assessment which are incorporated in the education development plans of the regions, divisions, as well as in the school improvement plans. These three pillars are tackled in the next section



Pillar 1: Safe Learning Facilities

Pillar 2: School Disaster Management

Pillar 3: Disaster Risk Reduction in Education

## SCHOOL DRRM IMPLEMENTATION SUPPORT AND MECHANISMS

The creation and upgrading of the DRRM service in DepEd (DO 50 s 2011 and DM 112 s 2015) institutionalized DRRM within the basic education system.

Plantilla positions for DRRM Coordinators were created from national to division level offices to fully integrate DRRM policies and programs at all levels. Coordination and information management protocols as well as roles and responsibilities have been defined from school to regional levels to ensure coherence with the already existing structures and legal bases (DO 21 s 2015: DRRM Coordination and Information Management Protocol).

Schools, have established DRRM policies and programs in support of the national, regional and divisions directions (RA 9155: Basic Education Governance Act of 2001).

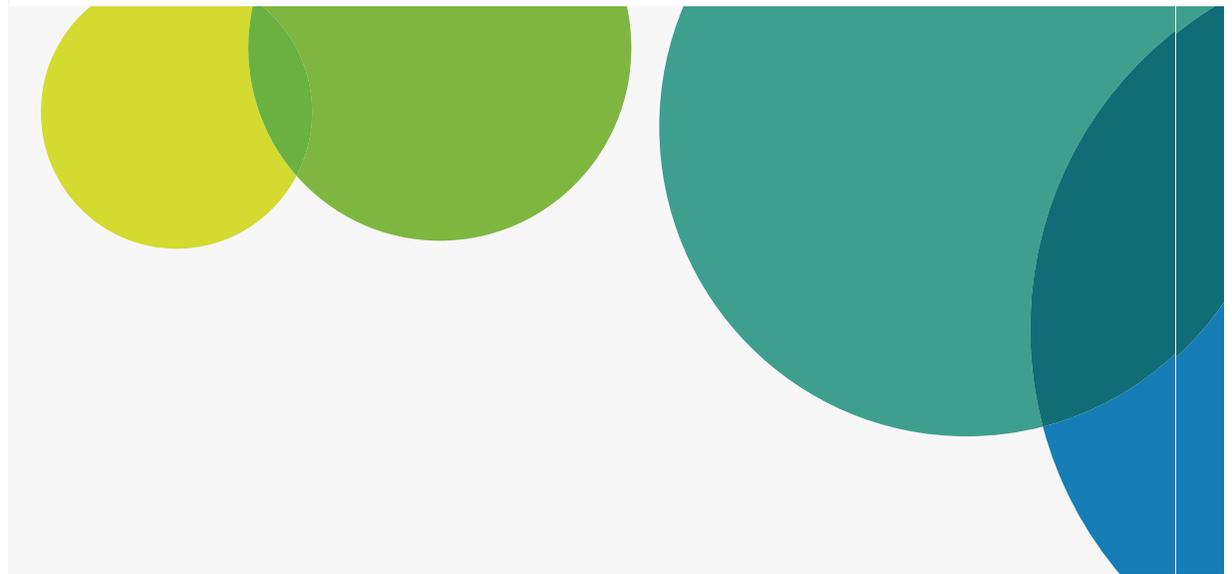
Specific interventions to address the effects of hazards and risks are determined at the school level. The School Planning Team (SPT) and the School DRRM Team (SDRRM Team) shall work hand in hand to implement DRRM. Within these two school groups assessment, planning, implementation, monitoring, evaluation and reporting of DRRM interventions will be made.

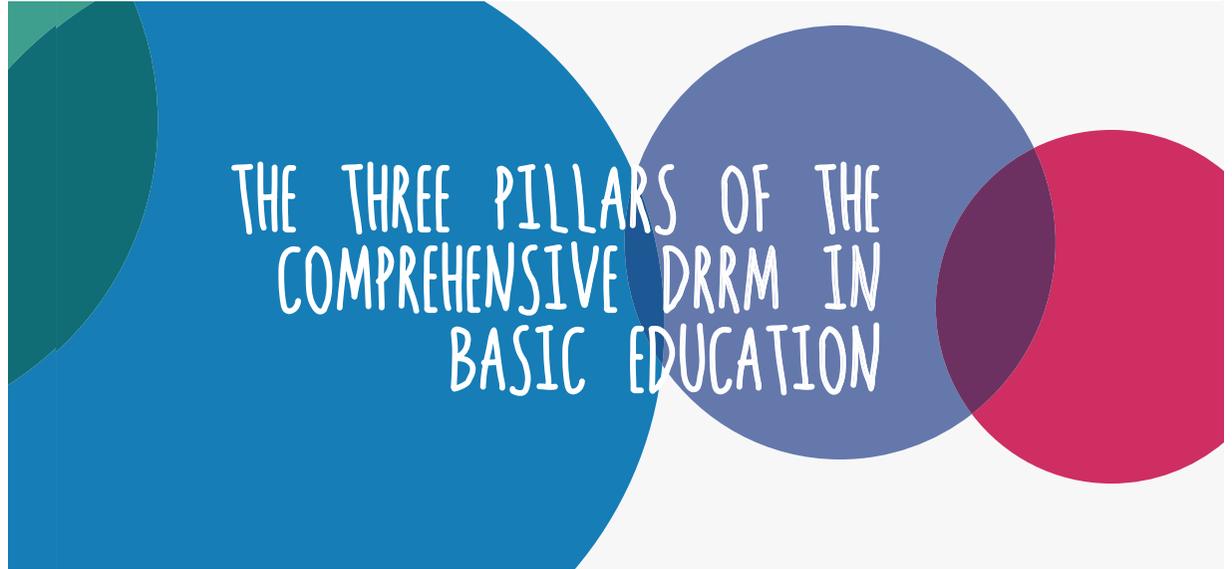
Based on DO 21 s 2015 the SDRRM Team will undertake the following:

1. Ensure the establishment of an Early Warning System (i.e. bulletin board for weather advisories, bell/siren emergency signal and the like);
2. Conduct an annual student-led risk identification and mapping within and around the school premises to ensure a safe environment that is conducive to teaching and learning;
3. Maintain close coordination with local DRRM Council on the conduct of preparedness activities and on response needs, among others;
4. Provide capacity building activities for teachers, non-teaching staff and learners on DRRM;
5. Maintain, disseminate, and post relevant and updated emergency hotlines in strategic locations throughout the school;
6. Post safety and preparedness measures and evacuation plans;
7. Conduct disaster preparedness measures, including but not limited to quarterly multi-hazard drills applicable to the school's identified hazard such as earthquake, fire and flood;
8. Maintain the safekeeping of vital school records and learning materials;



9. Organize school DRRM team to support the implementation of preparedness and response measures;
10. Ensure the availability of updated baseline education data of the school;
11. Integrate DRRM in regular school programs and activities and school improvement plan (SIP);
12. Pre-identify possible Temporary Learning Spaces (TLS) and alternative delivery modes of education;
13. Monitor the effects of hazards, including the use of the school as evacuation center;
14. Track all school personnel during disasters and/or emergencies;
15. Prepare and submit reports on the effects of any hazard;
16. Ensure implementation of DepEd Order No. 43, s. 2012 or the "Guidelines on the Implementation of Executive Order No. 66 s. 2012 (Prescribing Rules on the Cancellation or Suspension of Classes and Work in Government Offices Due to Typhoons, Flooding, Other Weather Disturbances, and Calamities)";
17. Conduct rapid assessment of damages after every hazard and submit RADaR (See Annex A and B) within 72 hours via SMS;
18. Facilitate immediate resumption of classes to track learners;
19. Monitor recovery and rehabilitation interventions being implemented in the school.



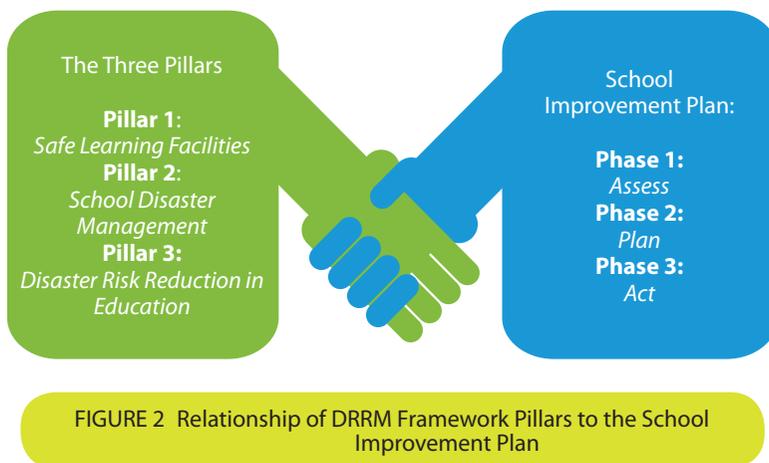


THE THREE PILLARS OF THE  
COMPREHENSIVE DRRM IN  
BASIC EDUCATION

THE THREE PILLARS OF THE COMPREHENSIVE  
DRRM IN BASIC EDUCATION FRAMEWORK  
WILL GUIDE SCHOOL IMPLEMENTATION.

## THE THREE PILLARS

The three pillars of the Comprehensive DRRM in Basic Education Framework are aligned and supportive of the implementation of the School Improvement Plan (SIP), as shown in Figure 2.



The following sections provide a detailed explanation of the three pillars and other major considerations for implementation.

## PILLAR I SAFE LEARNING FACILITIES

This pillar refers to the physical and other related structures of the schools. It also includes the establishment of temporary learning spaces that can be used during possible displacement brought by disasters and/or emergencies. Here, education authorities, architects, engineers, builders and school community members undertake safe site selection, design, construction, and maintenance of school structures and ensure safe and continuous access to the facility (DO 37 s 2015).

### RISK IDENTIFICATION AND ASSESSMENT

National and provincial hazard maps have been prepared to increase knowledge of risks and at the same time influence development of policies and programs. These tools are

made available to assist local planning and implementation. Schools can have these maps from their respective local government offices.

School administrators, teachers and students, at their level, should be able to identify hazards and assess risks. This will facilitate the school

planning process and enable them to apply quicker and appropriate response. It should be second nature to school administrators, teachers and students to take care of their school and to take control of their safety.

## DEFINING A CONDUCTIVE AND SAFE LEARNING ENVIRONMENT

The lists of criteria below will guide you in securing safe environment for teachers and learners with or without disasters and/or emergencies.

### Key indicators of education facilities that are conducive to the physical well-being of learners:

- The school is accessible to all, regardless of physical ability.
- The learning environment is marked by visible boundaries and clear signs, as appropriate.
- The school grounds have adequate space for classes and administration, recreation and sanitation facilities.
- Class space and seating arrangements are according to the prescribed ratio of space per learner and teacher, at all grade levels, in order to facilitate participatory methodologies and learner-centered approaches.
- Communities participate in the construction and maintenance of the school.
- Basic health and hygiene are promoted in the learning environment.
- Adequate sanitation facilities are provided, taking into account age, gender and special education needs and considerations.
- Adequate quantities of water for safe drinking and personal hygiene are available at the learning site.

Source: INEE (Inter-Agency Network for Education in Emergencies)

### **The student-led school watching and hazard mapping is the first step in engaging learners in disaster prevention, mitigation, preparedness and management.**

This activity raises awareness and equips learners with information and skills necessary to address the impact of hazards. In conducting the school watching and hazard mapping, stakeholders could come up with action points in addressing safety and preparedness at the same time provide inputs in improving disaster management strategies.

**In the preparation of School Improvement Plan (SIP), hazard map produced by the students is required in the Assess Phase**

DID YOU KNOW

## Key indicators of learning environments that are secure, and promote the protection and mental and emotional well-being of learners:

- Schools and other learning environments are located in close proximity to the populations they serve.
- Access routes leading to the school are safe and secure for all.
- The learning environment is free from dangers that may cause harm to learners
- Training programs for teachers, learners and the community are in place to promote safety, security and protection.
- Teachers and other education personnel are provided with the skills to give psychosocial support for the learners' emotional well-being.
- The community is involved in decisions concerning the location of the learning environment, and in establishing systems and policies to ensure that learners are safe and secure.
- The nutrition and short-term hunger needs of learners are addressed to allow for effective learning to take place at the learning site.

Source: INEE Minimum Standards for Education in Emergencies, Chronic Crises, and Early Reconstruction, 2004

DID YOU KNOW

### INEE or the Inter-Agency Network for Education in Emergencies

is the network responsible for gathering and disseminating information on education the regular exchange of information among its members and partners.

Further reading: GFDRR Guidance Notes on Safer School Construction

## PILLAR II SCHOOL DISASTER MANAGEMENT

This pillar refers to the establishment of organizational support structures such as the DRRM Service and DRRM Coordinators in all regional and division offices of DepEd. This shall also cover the setting up of systems, processes and standards to operationalize the four (4) thematic areas in the context of basic education. (DO 37 s 2015)

### LEADERSHIP AND COORDINATION

School safety is a responsibility of the entire community. However, school DRRM requires coordination to be headed by the school administrator or school head.

Involvement of teachers, non-teaching staff, students, parents and community members is a must as well as its integration in management strategies at each administrative level in the education sector. In this regard, a School DRRM Team should be organized.

The SDRRM Team will be in-charge of implementing, monitoring and reporting such initiatives to the school management. The Team

should encourage personal and organizational preparedness, guide mitigation work, and assure enactment of multi-hazard drills. The results of the activities are evaluated for subsequent plan adjustment. Ideally, the SDRRM Team is empowered by and maintains formal links between school and local disaster management authorities.

## INFORMATION MANAGEMENT

Information management involves gathering, storing, and disseminating information. It should complement the four thematic areas of DRRM.

School administrators should know how to manage information on any phase of the disaster. Proper management of information can save lives, prevent panic, and improve coordination among the community, other agencies, and organizations.

## High quality and detailed comprehensive hazard and vulnerability maps for major natural hazards need to be produced and constantly updated.

Knowledge enhancement and understanding of the nature and scale of impact of previous disasters and forms of vulnerability; greater consideration of hazard-related issues in broader sustainable development and poverty reduction policies and programs of the Department; and Appropriate, cost-efficient, post-disaster relief and rehabilitation efforts.

*Source: DepEd Disaster Risk Reduction Resource Manual*

## CORE FUNCTIONS OF THE SDRRM TEAM

### (SCHOOL DISASTER RISK REDUCTION AND MANAGEMENT TEAM)

Facilitates the harmonization of various efforts of DRRM in Education, externally and internally. The Team should ensure the engagement of various DepEd offices, relevant government agencies, and education partners in building resilience and coordination among stakeholders.

Ensures the availability of validated education information and monitoring and evaluation (M&E) results which would expand the analysis on various

vulnerabilities of DepEd schools, personnel and students and how DepEd programmatically responds to DRRM issues and concerns. It should ensure that weather advisories and emergency updates are communicated to and from field offices and that immediate and appropriate feedback is provided. M&E also tracks the actions taken, support services provided to affected areas and interventions from other government agencies and education partners.

Focuses on systems, standards, and processes that should be established to improve the implementation of DRRM in Education and ensure education in emergency interventions are appropriately implemented (e.g. psycho-social support, temporary learning spaces, ensuring protected and safe spaces for children, reunification).

Ensures the availability of resources and/or interventions to support affected areas and establish the mechanism to guide education partners in channeling their assistance during disaster response and recovery.

## INFORMATION MANAGEMENT PROTOCOL

In the event of any hazard, the following information should be collected

- | Before  | During and After  |
|---|---|
| <ul style="list-style-type: none"><li>• Hazard occurrences</li><li>• Baseline data</li><li>• Prevention and mitigation measures undertaken</li><li>• Preparedness measures undertaken</li></ul> | <ul style="list-style-type: none"><li>• Personnel affected</li><li>• Learners affected</li><li>• Schools used as evacuation centers</li><li>• Class suspension and resumption</li><li>• Classroom damages</li><li>• Temporary learning spaces</li><li>• Other interventions</li></ul> |

## INFORMATION MANAGEMENT GUIDE QUESTIONS

### Gathering information

- Is the source reliable?
- Is the information verifiable
- Who will benefit from this information?
- Does the information demand immediate action?

### Safeguarding information

- Who is the information custodian?
- How can these be stored safely?
- How timely and relevant are the information?

### Disseminating information

- Who should get this information?
- Who should not get this information?
- When should this information be given?
- How should this information be delivered?



**Turn over** of documents, policies, and baseline information should become part of school protocol whenever there are changes in the school administration or management.

## SCHOOL AND COMMUNITY STAKEHOLDERS' ENGAGEMENT AND PARTICIPATION

According to the INEE minimum standards, emergency-affected community members must actively participate in assessing, planning, implementing, monitoring, and evaluating Education in Emergencies programs.

Key indicators:

- The emergency-affected community, through

its chosen representatives, is involved in prioritizing and planning education activities to ensure effective delivery of education in emergencies program.

- Children and youth are involved in the development and implementation of education activities.
- The community education committee holds public meetings to conduct social audits of education in emergency activities and their

budgets.

- Training and capacity-building opportunities exist for community members, children and youth, to manage education in emergency activities.

## STUDENT-LED ACTIVITIES

It is important for students to have ownership and understanding of SDRRM. School DRR activities are maximized when students know first-hand what makes their school unsafe and how to make and keep their schools safe. They should also know what to do before, during, and after disasters. Child participation is paramount to the success of DRRM.

When conducting DRRM activities with students, make sure that they understand the value of the activity. As their teachers, we must make sure they understand that these are activities can save their own lives and even the lives of others.

**Involving and engaging the community allows for better reception, acceptance, and ownership of the project.**

Make sure to involve people from different social groups, age, and gender.

DID YOU KNOW



### **Make DRRM local!**

Remember, you can make your activities relevant to your geographic location, regional and cultural heritage, and your students' indigenous roots.



## STAFF TRAINING SUPPORT

### (TEACHING AND NON-TEACHING PERSONNEL)

Upon organizing the School DRRM Team, capacity building support should be included in the SIP. In addition to risk assessment, training needs analysis should be conducted to be able to design an appropriate program for the Team.

Partnership with non-government organizations (NGO), civil society organizations (CSO) and the academe could be maximized by relaying your training program to them.

The school could also look for online data to enhance the DRRM programs and activities. Echoing, mentoring and coaching should be crucial requirements for trained school DRRM team members. From these new information, create activities that can be implemented school-wide.

affect normal school operations. As such, it is important for schools to have an Education Continuity Plan (ECP). This includes identification of temporary learning spaces (TLS), and resumption strategies and learning materials. Consider different scenarios. The ECP will serve as your contingency plan in case hazards would incur significant damages to school facilities.

While some schools are being used as evacuation centers, this should not prevent the immediate resumption of classes to enable children to return to normalcy. TLS also allow for quicker facilitation of other interventions such as those related to health and nutrition of children.

## EDUCATION CONTINUITY PLAN

The intensity and magnitude of hazards could



The SDRRM Team must work with the student bodies and the SPT in creating their own localized, annual DRR activities.



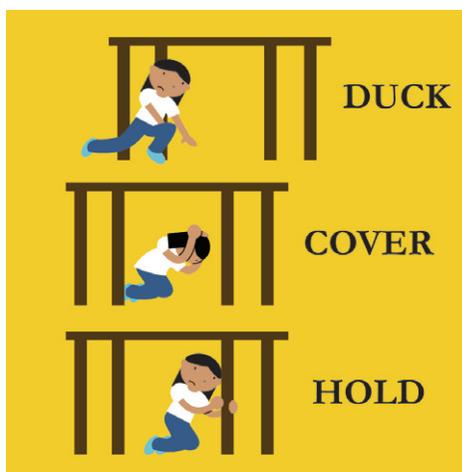
## PILLAR III RISK REDUCTION AND RESILIENCE EDUCATION

This refers to the integration of DRRM in the formal and non-formal school curricula and in extra-curricular activities. It should also provide the necessary material support. This covers building the capacity and skills of learners and personnel, particularly teachers. (DO 37 s 2015).

### DRRM INTEGRATION IN THE K TO 12 CURRICULUM

Based on the new K to 12 curriculum, DRR and CCA are integrated from kindergarten to Grade 10 in subject areas such as Health, Social Studies, and Science. The classroom teaching of DRRM could be complemented by various co-curricular activities such as poster making, slogan and essay writing, multihazard drills, solid waste management and posting of hazard maps.

Given the emotional stress caused by disasters, psychosocial support is also integrated in the learning process of students as a recovery mechanism. This allows students, and teachers to cope with their experience. This strategy is an additional enhancement to the curriculum support for DRRM.



### CO-CURRICULAR ACTIVITIES

The DepEd School Calendar can be your guide in incorporating DRR in your local activities. Events which may be relevant are the World Environment Day and Safe Kids Week in June; the National Disaster Consciousness

Ask your LDRRMC on how you can formulate an early-warning system. Make sure that everyone in the school knows about this system. Perform (announced and unannounced) drills .

Perform single-hazard drills: typhoon, storm surge, earthquake, landslide, etc. We talked about the Buddy System earlier, this is a perfect time to implement that.

Perform multi-hazard drills: what will you do if more than one disaster happens at the same time?

If your school is the only viable area that the community can use as an evacuation center, incorporate how you will admit and release evacuees.

Invite local disaster preparedness groups, NGOs, LGUs when you do your drills. Ask for their inputs.

Month in July; Clean and Green Month in September; National Simultaneous Earthquake Drill in November, and the Fire Prevention Month in March.

As part of the SDRRM Team, adapt a DRRM School Calendar of Activities to your local environment. Your school can take into account the results of risk assessment conducted by your school and/or community. This could also include the preparation of evacuation plans and conduct of multihazard drills.

## LEARNING MATERIALS AND STRATEGIES

DepEd has a repository of learning materials not just for DRR but for all education subjects. You may go to **[www.lrmds.deped.gov.ph](http://www.lrmds.deped.gov.ph)** to search for and download materials to help you in designing DRR activities in class. However, this is not a one-way communication tool, we urge you to upload and share materials that you, your students, and the School DRRM Team have created so that it may benefit other schools as well.

Here's a brief view of what you can do at the LRDMs:

### CREATE



Create your own resources using any of the over 5,000 photos, illustrations, video, and audio files in the Media Gallery.

### LEARN



Access Open Education Resources and online learning programs including professional development and alternative delivery mode and programs

### SHARE



Ideas on learning and teaching resources and provide feedback.

## NATIONAL GREENING PROGRAM

DepEd Order no. 5 s. 2014 provides us with guidelines in integrating the Gulayan sa Paaralan, ecological solid waste management and tree growing and caring as key components to attain the goals of DepEd on food security, biodiversity conservation and climate change mitigation and adaptation.

The NGP shall be implemented in all public elementary and secondary schools nationwide by establishing vegetable gardens to serve as food basket/main source of commodities to sustain supplementary feeding, practice waste management principles such as minimization, segregation at source, reduction, recycling, re-use and composting, establish nurseries/seed banks for the propagation of vegetable seedlings, fruit-bearing trees and small trees or saplings, and support the tree planting activity in schools and in the communities" (DepEd: DO 5, s. 2014).

The NGP, when implemented in all the public schools of the Philippines, has the potential to become a massive DRR effort. More trees will absorb more pollution from the air and will prevent soil

erosion. Fruit-bearing trees, vegetables, and root crops will provide food security, and if grown in abundance, even extra income.

As a prevention and mitigation strategy, strengthening of the NGP implementation could make schools contribute to resilience building.



### Tree Planting to Tree Growing

Have a class adopt several seedlings which they will take care of until they graduate. We can plant all the trees we can but if we don't make sure they mature, then our efforts are all for nothing!



### Growing, Affording, and Enjoying Food

Have a class adopt a vegetable garden, whether it is hung in plastic bottles, or on a garden plot. Let them plan what to plant and implement crop rotation, intercropping, and propagation techniques.

A part of their yield should go to the canteen to start or support a feeding program. The rest of their yield can be sold with the proceeds to be used in other DRR activities.

Let the students realize that nature provides us with nutritious food if we take care of it.

ASK YOUR LOCAL DA, DENR, AND DOH FOR RELEVANT TRAINING AND MATERIALS!

## References

1. Bogaziçi University (2004). Family Disaster Plan.
2. Concern Worldwide (2011). Disaster Preparedness for School Safety, India.
3. Inter-Agency Network on Education in Emergencies (INEE)
4. Department of Education (2008) Disaster Risk Reduction Resource Manual
5. DepEd published policies related to DRRM
6. Risk RED (2010). Toolkit for School Disaster Resilience and Readiness
7. Save the Children (2012). Tips for Supporting Children in Disasters
8. Save the Children, 2014. Participatory School Disaster Management Handbook
9. World Bank, IFC (2010). Disaster and Emergency Management Guidance for Schools and Universities.



