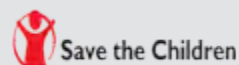


# School Safety Toolkit for Myanmar



"Make Every School a Safe School in Myanmar"



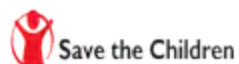
Photos credit to Lanthit Foundation, Plan International Myanmar, World Vision International Myanmar.



# School Safety Toolkit for Myanmar

“Make Every School a Safe School in Myanmar”

This toolkit is part of ASEAN Safe School Initiative (ASSI) under AADMER work program (2010 – 2015) developed with the leadership of Ministry of Education (Department of Basic Education), in cooperation with DPRE working group and implemented by AADMER Partnership Group Plan International Myanmar (ASSI Lead), World Vision International and Save the Children International with the financial support of ECHO.



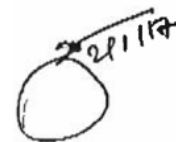


## Foreward

The Republic of the Union of Myanmar is exposed to multiple natural hazards including floods, cyclones, landslides, fire, earthquakes, tsunamis, droughts and thunder storms. Cyclone Nargis which hit the coastal areas of Myanmar in May of 2008 is considered the worst natural disaster, having affected 2.4 million people and leaving 138,373 people dead in its wake. The total damage and losses were estimated at 11.7 trillion Myanmar Kyats with the most devastating consequences for children, older people and women.

The Ministry of Education of Myanmar has been mainstreaming DRR initiatives since mid-2000. The Government of the Union of Myanmar developed the Myanmar Action Plan on Disaster Risk Reduction (MAPDRR) in 2012, aligned with the Hyogo Framework for Action (HFA) and the ASEAN Agreement on Disaster Management and Emergency Response (AADMER). Since the wake of Cyclone Nargis in 2008, the Government made strong commitments to ensure safety in schools and set clear targets for mainstreaming DRR in education. Ministry of Education has been leading work in the Education sector in areas that cover the three pillars of the Comprehensive Safe School (CSS) Framework: Safe Learning Facilities, School Disaster Management, and Risk Reduction and Resilience Education – making up a comprehensive approach for school safety.

This "School Safety Toolkit for Myanmar" was developed as part of the ASEAN Safe School Initiative (ASSI) which was initiated in 2012 under the preview of the ASEAN Committee on Disaster Management and supports the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) work programme 2010-2015. This toolkit is in line with the three pillars of Comprehensive School Safety Framework and is designed to be used within Myanmar context. The toolkit provides guidance for actions to be taken at school level in implementing all three pillars of school safety with an aim to secure the safety and security of children in school from the impacts of all types of hazards and ensure education continuity.

A handwritten signature in black ink, consisting of a stylized circular mark and a horizontal line above it. To the right of the signature, the date '29/1/17' is written in a similar hand.

p.p. Director General

## Abbreviations and Acronyms

AADMER	ASEAN Agreement on Disaster Management and Emergency Response
ACDM	ASEAN Committee on Disaster Management
ADM	Alternate Delivery Modes
ADPC	Asian Disaster Preparedness Center
ASEAN	Association of South East Asian Nations
ASSI	ASEAN Safe Schools Initiative
BoT	Board of Trustees
CBI	Capacity Building Initiative (Myanmar NGO)
CDA	Community Development Association
CDD	Community Driven Development Project of World Bank
CESR	Comprehensive Education Sector Reform
CSS	Comprehensive School Safety Framework
DBE	Department of Basic Education, Mo E
DEO	District Education Officer
Dep Ed	Department (Ministry) of Education, Philippines
DM Law	Natural Disaster Management Law
DMH	Department for Meteorology and Hydrology
DM	Disaster Management
DOC	Disaster Operations Centre (in the school)
DP	Disaster Preparedness
DPRE	Disaster Preparedness Response Education Working Group
DRR	Disaster Risk Reduction
DRRWG	Disaster Risk Reduction Working Group
EiE	Education in Emergencies
EMIS	Education Information Management System
ETWG	Education Technical Working Group
EW	Early Warning
EWS	Early Warning System
GAD	General Administration Department



GoUM	Government of the Union of Myanmar
HFA	Hyogo Framework of Action
HVCA	Hazards, Vulnerabilities and Capacities Assessment
IASC	Inter Agency Standing Committee
IDM RAND	Improving Disaster Management and Response against Natural Disasters
IOM	International Organisation for Migration
INEE	Inter-Agency Network for Education in Emergencies
INGO	International Non-Governmental Organization
JICA	Japan International Cooperation Agency
VDSG	Village Development Support Groups
LCC	Local Content Curriculum
LDC	Least Developed Countries
LINK	Local and INdigenous Knowledge
MAPDRR	Myanmar Action Plan for Disaster Risk Reduction 2009-2015
MES	Myanmar Engineering Society
MoC	Ministry of Construction
MoE	Ministry of Education
MoRA	Ministry of Religious Affairs
MoST	Ministry of Science and Technology
MNBC	Myanmar National Building Code
MNPED	Ministry of National Planning and Economic Department
MRCS	Myanmar Red Cross Society
MSWRR	Ministry of Social Welfare, Relief and Resettlement
NAPA	National Adaptation Plan of Action
NDMTC	National Disaster Management Training Centre
NDPCC	National Disaster Preparedness Central Committee
NESP	National Education Sector Plan
NGO	Non-Governmental Organization
PTA	Parent Teacher Association
RRD	Relief and Resettlement Department

SAR	Search and Rescue
SC Sub WG	School Construction Sub Working Group
SDM	School Disaster Management (pillar 2 of CSS)
SDMC	School Disaster Management Committee
SDMP	School Disaster Management Plan
SEAMEO	South East Asian Ministers of Education Organisation
SEEDs Asia	Sustainable Environment and Educational Development Society Myanmar office
SFDRR	Sendai Framework of Disaster Risk Reduction
SSC TF	Safe School Construction Task Force of the SCSWG
TDMC	Township Disaster Management Committee
TDSC	Township Development Support Committee
TEO	Township Education Officer
TVET	Technical and Vocational Education Training
TWG	Technical Working Group of MoE project
UN	United Nations
UNDP	United Nations Development Program
UNESCO	United Nations Education, Social and Cultural Organisation
UNFCCC	UN Framework Convention on Climate Change
UNICEF	United Nations International Children's Emergency Fund
VDMC	Village Disaster Management Committee
VT	Village Tract
VTDMC	Village Tract Disaster Management Committee
WB	World Bank
WISS	Worldwide Initiative for Safe Schools





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2.8	Developing and implementing a School Disaster Risk Reduction and DM Plan
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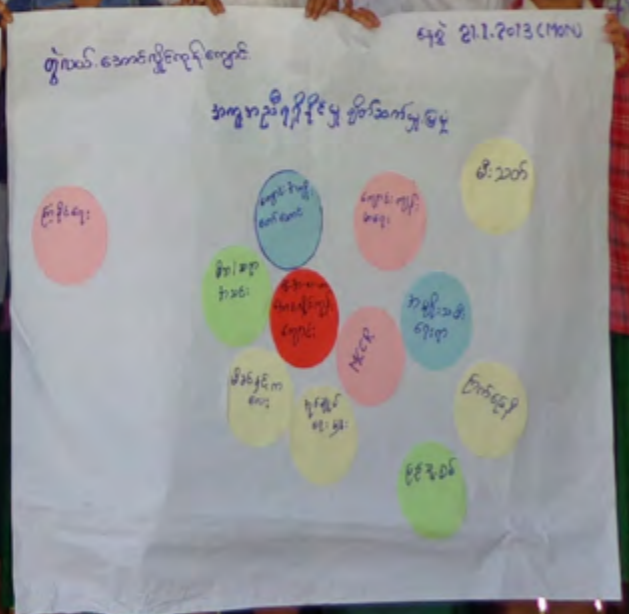
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# Preface

This toolkit is designed to guide school authorities working at the school level (school principals and teachers), to develop and implement a systematic program of school safety, as part of the ASEAN Safe Schools Initiative (ASSI). ASSI was first initiated in 2012 in response to the growing incidence of disasters in the ASEAN region which adversely affects the education sector. This was introduced after a series of consultations in the region facilitated by the AADMER Partnership Group (APG)<sup>1</sup> and the ASEAN Secretariat promoting a comprehensive approach for school safety in the region.

The first phase of ASSI comprised of a series of in-country consultations in nine ASEAN Member States between January-March 2013 to gauge the progress of country-level initiatives towards safe schools. These consultations were organised by APG with support from the ASEAN Secretariat as part of the AADMER Work Programme 2010-2015, and involved a range of national and international stakeholders (national and local governments, non-government agencies, private sector, and experts in DRM and Education).

This school Safety toolkit was developed as part of ASSI Phase 2, in line with the three pillars of the Comprehensive School Safety (CSS) Framework, under the leadership of the Ministry of Education. It was developed in partnership with Disaster Preparedness and Response Education (DPRE) Working Group, and is implemented by Plan International, World Vision and Save the Children (the ASSI Consortium).

The toolkit was specifically designed to be used within the Myanmar context and developed as a national product for use across the country by school principals, senior teachers, and SDMC in partnership with School Board of Trustees, PTA and MRCS branches. A set of Secondary audiences for this toolkit are the TEOs, Region/ State Education Directors and MOE officers who are expected to use in motivating school authorities to take action at the school level.

The toolkit is built on similar national toolkits including DPRE Resource Pack developed and used by MoE and partners with DPRE Working group, SEEDs Asia toolbox, MRCS School Safety framework, and draws on Plan CSS regional training manual, SEAMEO toolkit and some other national toolkits from other Asian countries.

The development of this toolkit is supported by the European Commission Humanitarian Aid and Civil Protection (ECHO) and has been developed through consultative processes at different levels, including field testing and incorporating inputs from various stakeholders such as DPRE WG, DEO, TEOs, Teachers, PTA, students and MoE Officials from both national level and states and regions.

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<sup>1</sup>APG is composed of ChildFund International, HelpAge International, Mercy Malaysia, Oxfam, Plan International, Save the Children, and World Vision International. For ASSI, the APG is being led by Plan International.

# Module ( 1 )

## Why School Safety and how to use this toolkit

### 1.1. Impact of disasters on schools and the education sector

Worldwide, approximately 1.2 billion students are enrolled in primary and secondary school. Of these, 875 million school children live in high seismic risk zones and hundreds of millions more face regular floods, cyclones, landslides, extreme wind and fire hazards. In the 4 years during 2010 - 2013; eleven thousand schools were destroyed or affected by disasters. On average, 230 schools are affected by disasters every month, affecting more than 275,000 children annually. According to UNISDR, over 100 million children (aged 0-17 years) in South East Asia are affected by disasters annually.

Myanmar is prone to a range of high impact natural hazards, including cyclones, seasonal flooding, landslides, droughts, fires and earthquakes. In recent years, two major cyclones (Nargis 2008, Giri 2010) have hit the coastal parts of the country with devastating impact on children and women; since 2002 flooding has affected over 500,000 people, inflicting the greatest damage in the coastal and hill areas; landslides due to flooding and seismic activity have occurred in hill areas; a series of earthquakes have affected the country's northern and eastern parts, most significantly in eastern Shan in early 2011 (6.8 on the Richter scale); and fires have destroyed homes and infrastructure in communities across the country. In Myanmar, natural hazards have been compounded by civil and communal conflicts across the country. This interplay of natural hazards and human-induced risks has drastically exacerbated existing vulnerabilities among women and children - both in terms of their socio-

economic status, and their access to basic social services such as education and primary healthcare. Widespread poverty and poor infrastructures are at the heart of the country's relatively low capability to recover from a significant event. It is this combination of high hazard vulnerability and low capacity which makes Myanmar the "most at-risk country" in Asia-Pacific according to the InfoRM risk model<sup>6</sup>. During Cyclone Nargis alone, 138,373 people lost their lives, and 19,359 were injured while 2.4 million people were severely affected by the cyclone out of an estimated 7.35 million people living in the affected townships. Assessments also indicate that more women than men died, distorting social structures, and child deaths are also believed to have been substantial, although fatalities disaggregated by age are not available.

During the recent floods and landslides in Myanmar in July-August 2015, 27 children (17 girls, 10 boys) died, 26 through drowning (17 girls, 9 boys). These 27 children represented 8% of all deaths. 4116 schools were affected in 11 states and regions. 213 schools were destroyed, and 430 structurally damaged. Of the other schools, most did sustain damage to learning materials and equipment. Affected schools were closed for about 3 weeks on the average, affecting children's learning. As reported by the Govt of Myanmar Post Floods and Landslide Needs assessment report, 'the distress caused by floods and landslides also threatened children's psychosocial well being, and that of their teachers, caregivers and families'.

## 1.2. Impact of disasters on children and their education

- Students and teachers access to school is restricted or disrupted, either because of damage to the school or to roads, bridges, or other infrastructure leading to the school. This is especially true for female students and students with disabilities.
- The school's structure may be totally or partially destroyed or damaged and furniture and/ or teaching-and-learning materials may be lost/damaged. Children's exercise books kept at home may also be destroyed.
- The water and/ or sanitation facilities of the school may be inaccessible or damaged.
- Children may drop out of school due to their involvement in economic activities during the post disaster period to support their families, early marriage, etc. Families may not have enough money to send their children to school if their livelihoods are impacted by disasters.
- Children's vulnerability to neglect, exploitation, or abuse is increased.
- Educational disruption resulting in curtailing of contact hours and consequent impact on student performance.
- Schools being used as disaster shelters, often means that the education program is stopped or disrupted. When schools are used as disaster shelters, sometimes the school building or furniture is damaged.
- Children and teachers who are in the school when disaster strikes may suffer serious physical or emotional harm or even death.
- Such trauma is completely contradictory to the purpose of education - a point poignantly made by the mother of a young girl disaster victim- "I sent my daughter to school to educate her, but now she was buried in the rubble"

## 1.3. Why do we need School Safety?

School-going children spend about 30-35% of their time in the school (in a 24-hour day-night period). Therefore, it is essential to make the school safe from disasters. Making schools safer and enabling children to become disaster aware will go a long way in saving their lives and that of their community. Children are willing to think afresh and go for difficult objectives if they are satisfied they make sense and are also an excellent way to influence their parents and the wider community. Messages on safety, health and hygiene, etc., conveyed by children to the parents and to the society at large have a useful and beneficial impact.



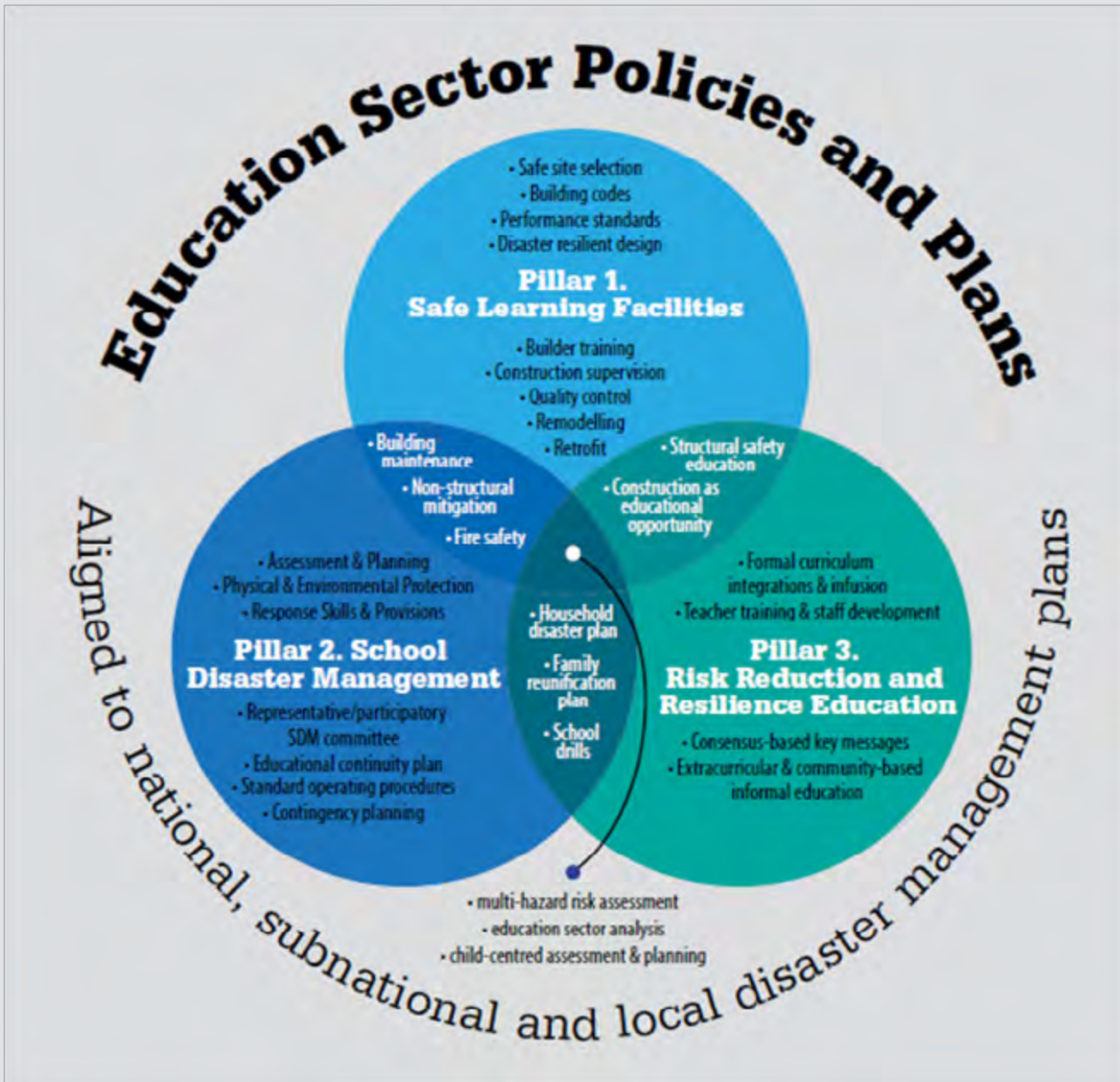
## 1.4. What is the globally recognized Comprehensive School Safety Framework

- A safe school provides a learning environment where children’s education, health, safety and security are assured in both normal times and during disasters.
- A safe school consists of infrastructure that are structurally sound and facilities that do not harm the students, teachers and staff, especially during disasters.
- A safe school is a community of learners committed in promoting a culture of safety, aware of its risks and prepared to respond to disasters.
- A safe school has minimal disruption during disasters and thus continues to provide a healthy learning environment to the youth.

Since 2011, during the special campaign on children and disasters, children came together around the world to develop the children’s charter for disaster risk reduction, based on which organizations working on the subject developed this framework. It was subsequently adopted by Governments under the Worldwide Initiative for Safe Schools launched in Istanbul in 2014, and was endorsed by a large number of Govern-ments and development partners at the 3rd World Conference in Sendai , Japan in March 2015 which called for action to “Make every school a safe school by 2030”

**Table 1 : The comprehensive school safety framework has four goals corresponding to the three pillars of CSS which are:**

No	Goal		Pillar
1	Safeguard Educational Investments	1	Safe Learning Facilities
2	Protect Students and Staff	2	School Disaster Management
3	Ensure Educational Continuity during disasters		
4	Promote a Culture of Safety	3.	Risk Reduction and Resilience Education



## Comprehensive School Safety Framework

1. Safe Learning Facilities involves education authorities, planners, architects, engineers, builders, and school community members in safe site selection, design, construction and maintenance (including safe and continuous access to the facility). The key responsibilities for both public and private schools are to:

- Select safe school sites and implement disaster- resilient design and construction to make every new school a safe school.
- Implement prioritization schema for retrofit and replacement.
- Minimize structural, non- structural and infrastructural risks to make buildings and facilities safe for survival and evacuation.
- Incorporate access and safety for people with disabilities in design and construction of school facilities.
- If schools are used as temporary community shelters, design them to meet these needs, and plan for suitable alternate facilities for educational continuity.
- Ensure that children's access to schools is free from physical risks (eg. pedestrian paths, road and river crossings).
- Adapt water and sanitation facilities to potential risks (eg. rain-fed and lined latrines).
- Implement climate-smart interventions to enhance water, energy and food security (eg. rainwater harvesting, solar panels, renewable energy, school gardens).
- Plan for continuous monitoring, financing, and oversight for ongoing facilities maintenance and safety.

2. School Disaster Management is established via national and sub-national education authorities and local school communities (including children and parents), working in collaboration with their disaster management counterparts at each jurisdiction, in order to maintain safe learning environments and plan for educational continuity, conforming to international standards. The key responsibilities are to:

- Establish national and/or sub-national level committee and fulltime focal point(s) leading comprehensive school safety efforts.
- Provide policies, guidance at sub-national and school-site levels for ongoing site-based assessment and planning, risk reduction, and response preparedness as part of normal school management and improvement.
- Develop, train and institutionalize school committees with participation of staff, students, parents and community empowered to lead identification of all hazards inside and outside school and community and action - planning for risk reduction and preparedness activities.
- Adapt standard operating procedures as needed, for hazards with and without warnings, including: drop @ cover and hold, building evacuation, evacuation to safe haven, shelter- in-place and lockdown, and safe family reunification.
- Engage schools in making early warning and early action systems meaningful and effective. Establish national and subnational contingency plans, to support educational continuity, including plans and criteria to limit the temporary use of schools as temporary shelters and alternate locations for temporary learning spaces and alternate modes of instruction.
- Incorporate needs of pre & out-of-school children, and with disabilities, both girls and boys.
- Link education & disaster management sector, & public safety plans at national, sub national, local & school site levels. Establish communication & coordination linkages across sectors.
- Practice, critically evaluate, and improve on preparedness, with regular school wide and community-linked simulation drills. Adapt standard operating procedures to each school.

3. Risk Reduction and Resilience Education is designed to develop a culture of safety and resilient communities. Key responsibilities are to:

- Develop consensus-based messages for reducing household & community vulnerabilities, preparing for and responding to hazard impacts for formal and non-formal education.
- Engage students and staff in real-life school and community disaster management activities, including school drills for fire (and other hazards, where applicable).
- Develop scope and sequence for teaching about critical thinking for all hazards.
- Infuse risk reduction throughout the curriculum and integration it into career subjects.
- Develop quality teaching and learning materials for students and teachers. Address all dimensions of climate-smart risk reduction education and a culture of safety and resilience.
- Provide teacher training for both teachers and teacher trainees on risk reduction curriculum materials and methodologies.
- Develop strategies to scale-up teacher involvement for integration of DRR into formal curriculum as well as non-formal and extra-curricular approaches with local communities.

## 1.5 Comprehensive School Safety in Myanmar

The key GoUM initiatives for the three pillars of Comprehensive School Safety are:

### Pillar 1 Safe Learning Facilities

- Following cyclone Nargis, MoE developed designs and constructed schools to higher standards of disaster-resilience. These child friendly school and school-cum storm shelter designs, are used in several parts of the country, especially coastal areas.
- Myanmar National Building Code developed by Myanmar Engineering Society and UN Habitat is nearing the completion and endorsement process. The provisional MNBC is in place and compliance with it is being promoted by the Government.
- In line with regional good practice, construction standards will be further enhanced through the ongoing development of national safe school construction guideline by MoE with support from the SC Sub WG which will be linked with National Building Code.

- The Safe School Construction Guideline will include principles for architectural design and planning, site selection, structural design standards, planning and implementation processes, safety and risk reduction measures, safety of construction workers, operational and maintenance policies, cost benefit analysis and costs of resilience compared with costs of retrofitting and reconstruction, monitoring and evaluation and promotion of social inclusiveness especially for children with disabilities and girls.
- A study on identification of areas needing improvements, will inform development of an action plan by the Government for enhancing school construction system.
- The SC Sub WG identified six focussed thematic areas related to construction of safe schools where the Government needs to be supported technically and financially by stakeholders in building an enabling environment: (i) Inspection and Vulnerability Assessment of existing schools, (ii) Maintenance and Retrofitting of existing facilities, (iii) Use of Schools as Emergency Shelters, (iv) Safe Construction of new schools and educational facilities; (v) Safe and continuous access to schools for all children, (vi) Climate smart investments to enhance water, energy and food security in schools.

## Pillar 2 : School Disaster Management

- Teachers training using the “DRR Resource Pack” Training includes a session for establishment of School Disaster Management Committee identifying task and roles for each position. “Master Trainers for DRR education ” were fostered in 2009, and now 4000 teachers and 150 education administrators have been trained.
- INEE: Inter-Agency Network for Education in Emergencies Workshop was held in 2013 to have minimum standard for securing education in emergencies.
- MoE and DPRE member agencies have collaborated for implementation of School Based DRR and establish School DM Plans with Capacity building programmes.

## Pillar 3 : Disaster Risk Reduction and Resilience Education

- DRR and Resilience education has been incorporated to Life skill subject and core curriculum (Science, Geography, English) after 2009 with the leadership of MoE with the collaborated efforts of DPRE. In order to promote sustainability, series of “Master of Trainers for DRR education” was held in 2009 and they have 20-30 core members to implement DRR education training in whole country.
- Educational policy and political commitment through Myanmar Action Plan on Disaster Risk Reduction (2009) also ensures DRR education to be promoted for schools and community as well. Over the years, many School Based DRR projects were implemented and several teaching and learning materials have been produced by government and partner agencies.
- DRR education is poised to be incorporated in the reform of National education.

## 1.6 Global, Regional and National commitments on CSS made by Myanmar

In the wake of Cyclone Nargis, the Government of the Union of Myanmar (GoUM), made strong commitments to comprehensive school safety as follows:

- The GoUM Myanmar Action Plan for Disaster Risk Reduction (MAPDRR), launched in 2012 sets clear targets for the mainstreaming of DRR in education, on safe learning environment, school disaster management and resilient education.
- In 2009, the Ministry of Education and the Ministry of Social Welfare with support from ASEAN the United Nations and ADPC published guidance on the mainstreaming of DRR in the education sector in rural areas of the country.
- The Comprehensive Education Sector Reform (CESR) Assessment recommended 'a policy framework based on five child-friendly school indicators: Inclusiveness; Relevance, quality; health, safety and protection; gender friendliness; involvement of students & families'. CSS is expected to be in the national education sector plan.
- Myanmar is implementing the ASEAN Safe School Initiative, a key priority for the Phase 2 of the AADMER Work Plan endorsed by the 22nd Meeting of the ASEAN Committee on Disaster Management (ACDM) in May 2013 in Hanoi, Vietnam.
- In 2015, Myanmar was one of the 192 member countries that adopted the Sendai Framework for Disaster Risk Reduction which commits to advancing school safety and ensuring safety of all critical infrastructure, especially education and health facilities as one of 7 globally agreed targets.

Ministry of Education (MoE) in collaboration with DPRE, EiE and SC Sub WGs of the ETWG are working on all three pillars of Safe Schools, and member organizations are supporting WISS and for Myanmar to become a Safe School Leader. In December 2014, a National Workshop on Mainstreaming DRR in Education, with officials from the Ministries of Education, Social Welfare, Relief and Resettlement and Construction, and representatives from UN agencies and national and international NGOs, aimed to ensure that Myanmar's progress on comprehensive school safety be effectively furthered through the ongoing education reform and in the National Education Sector Plan (NESP), under six heads on Early Childhood Development, Basic Education, Teacher Education, Higher Education, Technical and Vocational Education (TVET) and Non Formal Education.



## 1.7 What is the purpose of this toolkit and who is the primary audience

This toolkit is designed to guide school authorities working at the school level (school principals and teachers), to develop and implement a systematic program of school safety, so as to achieve the goals of school safety in the education sector: to invest in safe learning facilities, to protect students and staff and ensure educational continuity, and to promote a culture of safety through risk reduction education.

The primary audience for the toolkit is the School Principal and senior teachers, working with the School Disaster Management Committees and their members working and in partnership with School Board of Trustees, Parent Teachers Associations and MRCS branches. They should develop, implement and maintain a school safety program for all time to come.

The Toolkit serves as simple, concise and coherent guidance material on school safety based on the global 'Comprehensive School Safety Framework.'

This Toolkit provides guidance for actions to be taken by school authorities at the school level in implementing all three pillars of school safety, namely in assessing impact of potential hazards specific to schools; repair and retrofitting, building safely in the first place, identifying local resources available to respond to disasters, formulating and implementing school disaster management plans, and teaching disaster risk reduction through the curriculum and through extra-curricular activity.

## 1.8 How should the school authorities use this toolkit

The toolkit has 6 chapters, this first an introductory chapter to the concepts and approach and guidance on how to use it. The other 5 chapters are as follows:

### Module 2: CSS Pillar 2: School Disaster Management

- 2.1: *Introduction to School Disaster Management*
- 2.2: *Forming a School Disaster Management Committee (SDMC)*
- 2.3: *School and its surroundings, Hazards, Vulnerabilities and Capacities Assessment (HVCA)*
- 2.4: *Developing a School Disaster Preparedness Plan Overview and Introduction Section*
- 2.5: *Developing the School Disaster, Emergency Preparedness and Response Section of SDMP*
- 2.6: *Exercising the School Preparedness, DM Plan and holding periodic drills*
- 2.7: *Planning for Educational continuity during Emergencies and Psychosocial support*
- 2.8: *Developing and implementing a School Disaster Reduction and DM Plan*
- 2.9: *Linking SDMC Committee and SDMP to Village, Village Tract and Township level ect.*



### Module 3: CSS Pillar 3: Risk Reduction and Resilience Education

- 3.1: *Teaching DRR in Classroom under different subjects of the curriculum*
- 3.2: *Teaching locally relevant safety information under local content of curriculum*
- 3.3: *Developing DP/DRR concepts and skills through extracurricular activity*

### Module 4: CSS Pillar 1: Risk Reduction and Resilience Education

- 4.1: *Introduction to Safe Learning Facilities*
- 4.2: *Assessing safety of existing schools*
- 4.3: *Improving non structural safety in schools*
- 4.4: *Planning action for repair and retrofitting of existing unsafe schools*
- 4.5: *Locating and building new safe schools.*

### Module 5: Addressing Cross Cutting themes while implementing School Safety programs

- 5.1: *Addressing special needs of the girl children in schools and dealing with special challenges they faces*
- 5.2: *Adopting principles of universal design for access and addressing special needs of children with disability*
- 5.3: *Linking environment and climate change adaptation to safe schools*

### Module 6: Implementing School Safety by school authorities in a sustainable manner

- 6.1: *Linking School Safety and work of SDMCs with regular work of School Board of Trustees and Parents Teacher Associations Management Committees*
- 6.2: *Linking School Safety Improvements with Educational quality improvement and School Improvement Planning*
- 6.3: *Reporting, Monitoring and Evaluation of School Safety and its links to the Educational management Information System*
- 6.4: *Action to be taken by school and Educational authorities on an annual basis during the school year to ensure sustainable implementation of Safe School Program*

Each of chapters 2, 3 and 4 have 8, 3 and 4 sub-modules respectively, which contain a step by step guide on how to implement the subject of the sub-module. Each submodule has an objective, and a list of actions that should be taken by the school authorities at the school level.

Modules 5 and 6 like this introductory chapter has several sections which provide guidance on how to address special needs and deal with cross cutting issues and sustainably implement school safety and make it a routine part of school management and administration.

School safety has been implemented in Myanmar by the Ministry of Education with the support of a number of UN Agencies and International and Myanmar NGOs through externally funded projects. This manual builds on that experience, and will need to be reviewed and revised periodically, incorporating experience of schools undertaking implementation using this toolkit.

However it is intended that the manual be used by school authorities with minimal external support to achieve the eventual goal of making "Every school in Myanmar a safe school"

When embarking on this effort, the school principal and School Disaster Management Committee are encouraged to begin with Chapter 2 on school disaster management, through establishing an appropriate School Disaster management committee and plan. Overall the implementation of the modules 2, 3, 4 and 5 of this manual at the school level will take a minimum of 12 months.

Having implemented these modules to start up and establish the school safety program, Module 6 suggests an approach of routinising implementation through an annual program of action, to be implemented every year, to maintain the standards of implementation on the subject.

### 1.9 Who is the secondary audience ( TEOs, DEOs, Region/ State Directors of Education) for this toolkit and how should they use it

A set of Secondary audiences for this toolkit are the Township Education Officers ,Region/State Education Directors, Ministry of Education offices who are expected to use in motivating school authorities in taking action at the school level.

The toolkit will help them work with schools in their region/state, district and township in promoting the three pillars of

- *School disaster management:* establishment of school disaster committees and plans, identifying approaches for educational continuity and locations for temporary learning spaces.
- *Risk reduction education:* ensuring that curriculum and life skills on disaster management are taught, making locally specific information available, promoting use of learning resources and organising township and district wide competitions
- *Safe learning facilities:* organising specialized teams to assist in undertaking assessment, promoting non structural safety. Building case for repair and retrofit of vulnerable buildings and selecting safe locations and implementing the MNBC and Safe School Guidelines for safe schools. In addition there are some specific actions that are to be taken by township, district and state/regional education department officials in implementing these three pillars.

Modules 2.8, 4.5 and 6.3 highlight specific roles to be played by the TEO and officials at higher levels.

## 1.10 How was this toolkit prepared

This School Safety Toolkit for Myanmar was prepared in 2015 under the ASEAN Safe Schools Initiative of the AADMER Work Program 2010-2015. It was developed under the leadership and guidance of the Department of Basic Education, Ministry of Education, Myanmar to be in line with the three pillars of the Comprehensive School Safety (CSS) Framework in line with its vision to make every school in Myanmar a safe school. This working draft draws from similar toolkits developed elsewhere in the region including under ASSI regional project, the SEAMEO Toolkit on Disaster Resilient School communities, Plan CSS regional training manual, and some other national toolkits from other Asian countries. It builds on similar national resources including School Safety Resource Pack developed and used by MoE and DPRE Working group, the collaborative work of Save the Children, UNESCO, UNICEF, SEEDs Asia DRR Learning toolkit, MRCS School Safety framework, and SBDRR manuals developed and used by different members of the DPRE Working group. The manual is based on an outline developed through consultation with the DBE and DPRE Working group in August 2015 by the AADMER Partnership Group members in country namely Plan International, World Vision, and Save the Children. The module 2 was piloted in 12 schools in Yangon region and Rakhine state in October, and modules 2, 3, 4, and 5 were reviewed by the DPREWG and the Ministry in two consultations held in November in Yangon and Nay Pyi Taw.

The toolkit has been designed for use at the school level by school authorities to be fit to use within the Myanmar context. This version of the toolkit is to be piloted further across a larger number of schools in 2016. It will then be reviewed based on this experience and the work of other projects implemented by the ministry's development partners, it will be revised and finalized as a national product for use across the country. Due consideration will also be taken of the ASEAN Safe School Indicators and School Disaster Risk Management Guidelines developed at the ASEAN level under this same project. The revised version will eventually be published by the Ministry of Education in partnership with ETWG and its sub working groups, and will be available to all schools and all DPRE WG members for use in future projects.

## 1.11 Assessing your schools baseline status against the three CSS pillars

Before embarking on establishing a safe school program in your school, it is useful to understand its performance against all three pillars of school safety. This can be done by using this simple checklist. Once you have established the program in a year's time, you can do the assessment again and see the improvement in performance.

**Table 2 : Checklist : Parameters of performance against 3 Pillars of School Safety (Baseline assessment form)**

[A total of 30 Parameters are shared in the following checklist. Your school will be highly disaster resilient if you get the score above 21, moderately disaster resilient if score between 9 to 20, and poorly disaster resilient if score below 9]

Parameters of performance against 3 pillars of School Safety	
<b>Safe school facilities</b>	
<b>1. Location</b>	
• School is close to a fault line, on a steep slope, on the lap of hills, on the top of a ridge or on a flood plain or stream bed	0.0
• Location is safe from the current disaster risks but not from the future disaster risk	0.5
• Locations are open and spacious, distant from hazards, easily accessible, and close to social amenities like clean water, electricity, and communication networks	1.0
<b>Total score</b>	
<b>2. Soil conditions of the school's location</b>	
• School is constructed on marshy soil	0.0
• Soil is not compacted prior to construction	0.5
• Choose loamy/sandy soil with enough compaction before the school building construction	1.0
<b>Total score</b>	

3. Compliance with building codes	
• Ignorant about building codes provisions	0.0
• Building code provisions are addressed in designs but not adopted during construction	0.5
• Building code provisions are addressed in designs as well as during construction	1.0
<b>Total score</b>	
4. Culture of HVCA mappings and their updates	
• Ignorant about these exercise and rationale of mappings	0.0
• Mapping exercise done in the past but not updated at all	0.5
• Mapping exercise done in the past but updated regularly and displayed near the school for awareness and action	1.0
<b>Total score</b>	
5. Load carrying system	
• Masonry, stone, and adobe without an earthquake tie beam	0.0
• Adobe with no horizontal or vertical reinforcement	0.5
• Masonry without regular cross-walls and small window and door openings	1.0
<b>Total score</b>	
6. Design shape	
• School building with "L", "H" and "T" shape	0.0
• School building without calculating length and breadth correlation	0.5
• Rectangular shaped school whose length is double its breadth	1.0
<b>Total score</b>	
7. Drainage facilities	
• Flood water cannot flow easily through or around the school building	0.0
• Drainage is not in a strategic location	0.5
• Drainage system is strategically place so that there is no problem of inundation	1.0
<b>Total score</b>	
8. Condition of RCC building Roof	
• Rainwater leaks	0.0
• There is no problem of leakage but dampness is clearly seen	0.5
• No problem of leakage at all	1.0
<b>Total score</b>	

<b>9. Provision of railing</b>	
• No provision of railing at all	0.0
• Provision of railing in staircase only	0.5
• Provision of railing in staircase, roof, balconies, water tap and ramp	1.0
<b>Total score</b>	
<b>10. Hazard condition in and around school</b>	
• Ignorant about possible hazards (tall trees, trenches in school ground, open wells, electricity transformer, high tension line, etc)	0.0
• Have knowledge about these hazards but no action is taken	0.5
• Action plan is prepared and enforced to reduce the risks posed by different hazards	1.0
<b>Total score</b>	
<b>11. Limit, isolate, or secure flammable and hazardous materials (namely electrical lines and appliances, heaters and stoves, LPG tank, petrol and kerosene) within the kitchen and science laboratory</b>	
• Ignorant about these issues	0.0
• Have some knowledge, action is taken but no action	0.5
• Action plan is prepared and enforced to secure flammable and hazardous materials	1.0
<b>Total score</b>	
<b>12. Installation of fire extinguishers with clear orientation for its handling including refilling on a periodic basis</b>	
• Ignorant about the use of fire extinguishers	0.0
• Installation of fire extinguishers but no periodic filling and maintenance	0.5
• Installation of fire extinguishers with clear orientation for its handling including refilling on a periodic basis	1.0
<b>Total score</b>	
<b>13. Regular maintenance of electrical systems and ensure that they are not overloaded</b>	
• Ignorant about regular maintenance of electrical system	0.0
• Action Plan is prepared for regular maintenance of electrical system	0.5
• Regular maintenance of electrical systems and ensure that they are not overloaded as per the action plan	1.0
<b>Total score</b>	

<b>14. Clear exit routes/pathways to facilitate safe evacuation in case of fire or other emergency</b>	
• Ignorant about rationale of exist routes or pathways	0.0
• Action Plan is prepared to clear exit route/path ways but no actions in practice	0.5
• Clear exit routes/pathways to facilitate safe evacuation in case of fire or other emergency with action plan	1.0
<b>Total score</b>	
<b>15. Tight movable objects such as roof to prevent from being torn, blown away or battered by wind outside</b>	
• No initiative undertaken to work against wild hazard	0.0
• Action Plan is prepared but no actions in practice	0.5
• Tight movable objects such as roof to prevent from being torn, blown away or battered by wind outside with action plan	1.0
<b>Total score</b>	
<b>16. Fasten securely all objects that may slide, fall, and cause injury or block exits to the building to resist wind or earthquake shaking</b>	
• No initiative undertaken to work against wild hazard	0.0
• Action Plan is prepared to fasten all movable objects the but no actions in practice	0.5
• Fasten movable objects such as roof to prevent from being torn, blown away or battered by wind outside with action plan	1.0
<b>Total score</b>	
<b>17. Provision of two doors in each classroom and all exit gates in the school that open outwards</b>	
• No provision of two doors in class rooms and exist gates	0.0
• Provision of two doors in class rooms and exist gates but they never opened at all	0.5
• Provision of two doors in each classroom and all exit gates in the school that open outwards and have practice of use those doors during emergency	1.0
<b>Total score</b>	



18. Secure tall bookcases, cabinets, heavy furniture and appliance properly to the wall and heavy items moved below head level to lessen the risk of injuries

• No provision of securing tall bookcases, cabinets, heavy furniture and appliance	0.0
• Have knowledge about the implication if not securing tall bookcases, cabinets, heavy furniture and appliance and prepare action plan but not in practice	0.5
• Secure tall bookcases, cabinets, heavy furniture and appliance properly as per the action plan to the wall and heavy items moved below head level to lessen the risk of injuries	1.0
<b>Total score</b>	

19. Awareness and action for protecting glass that may break into large shards and cause injuries, by fastening pictures on closed hooks for instance

• No provision of protecting glass to avoid injuries	0.0
• Have prepare plan of action for protecting grass but not in action properly	0.5
• Awareness and action for protecting glass that may break into large shards and cause injuries, by fastening pictures on closed hooks for instance	1.0
<b>Total score</b>	

School disaster management

20. Inclusive committees and task force

• Non-inclusive SDMC and task force	0.0
• Inclusive SDMC and task force are formed but not functional	0.5
• Inclusive SDMC and task force are formed and functional	1.0
<b>Total score</b>	

21. Development and implementation of Plans

• Ignorant about school disaster management plan (SDMP) and evaluation plan	0.0
• SDMP and evaluation plan are formed but not functional because of resource constraints	0.5
• SDMP and evaluation plan are formed and translated into action	1.0
<b>Total score</b>	

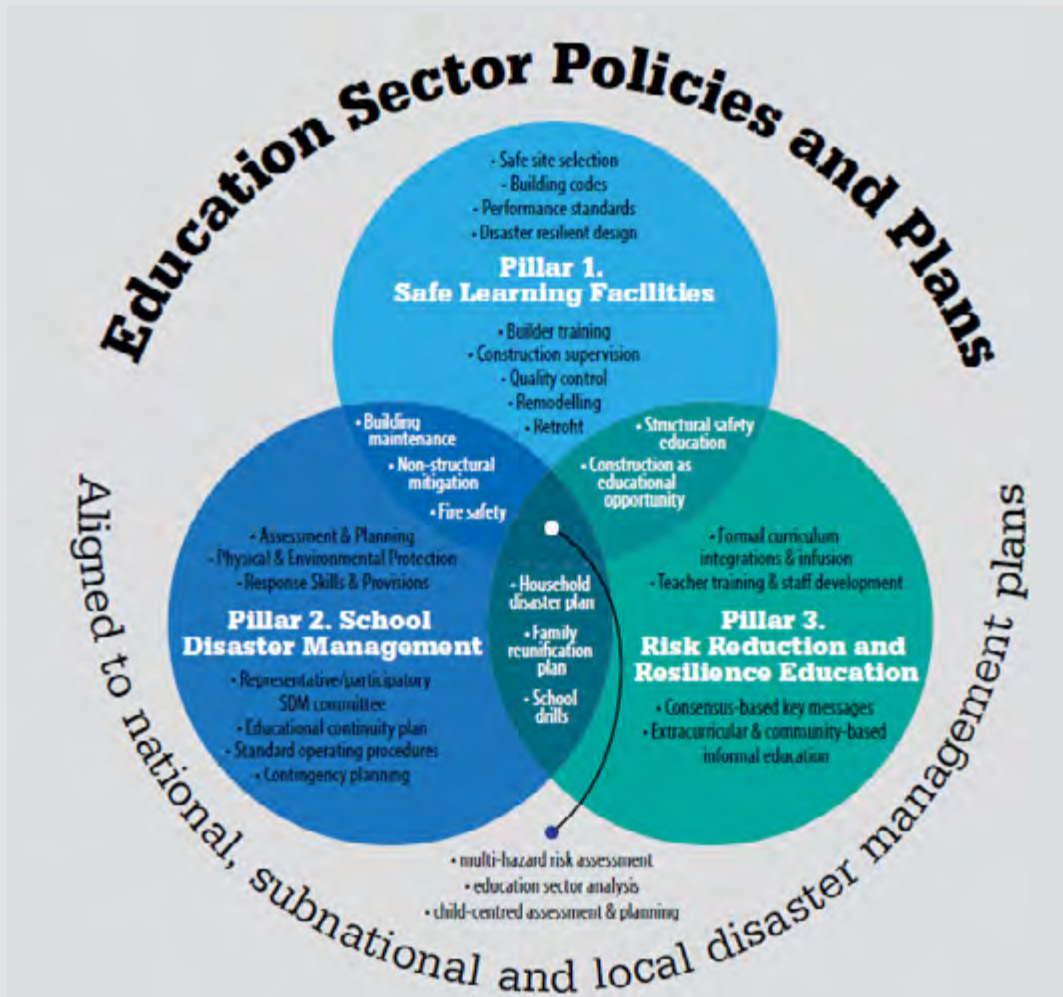
22. Knowledge and action about disaster mitigation measures	
• Ignorant about disaster mitigation measures and their prioritization	0.0
• Disaster mitigation measures are identified but not prioritized for action	0.5
• Disaster mitigation measures are identified and prioritized and are in action	1.0
<b>Total score</b>	
23. Updates the communication channel	
• The list of important contacts during emergency has not been prepared	0.0
• Have prepared a list of important people and their contact address but not updated	0.5
• Have prepared a list of important people and their contact address and updated periodically	1.0
<b>Total score</b>	
24. Knowledge about evacuation routes and safe assembly area	
• Ignorant about evacuation routes, safe Havens and safe assembly areas	0.0
• Evacuation routes, safe havens and safe assembly areas are identified	0.5
• Building evacuation routes, safe havens, and safe assembly areas are identified and drills conducted periodically	1.0
<b>Total score</b>	
25. Safety measures within the school	
• Ignorant about safety measures (detached desk/bench, doors and gate outward opening, etc)	0.0
• Have knowledge about this but not implemented	0.5
• All unsafe measures are corrected as per the skills and knowledge available from training and drills	1.0
<b>Total score</b>	

<b>26. Disaster exercises and drills</b>	
• Ignorant about disaster exercises and drills	0.0
• Organize drills without focused theme	0.5
• School drills held at least twice a year with concrete plan	1.0
<b>Total score</b>	
<b>27. Educational continuity plans</b>	
• Ignorant about education continuity plan (even if school is used as shelter during emergency)	0.0
• Education continuity plans are in place but not implemented	0.5
• Educational continuity plans are in place for recurring hazards and high impact hazards	1.0
<b>Total score</b>	
Risk reduction and resilience education	
<b>28. Capacity building</b>	
• No provisions for safe school related capacity building training to SDMC and PTA members	0.0
• School personnel receive first aid, light search and rescue, disaster management but skills are not really used	0.5
• School personnel receive first aid, light search and rescue, disaster management and able to translate the skills into practice	1.0
<b>Total score</b>	
<b>29. Extracurricular activities</b>	
• No extracurricular activities	0.0
• Organize extracurricular activities but not DRR/CCA focused	0.5
• Run extracurricular activities focused on DRR/CCA	1.0
<b>Total score</b>	
<b>30. DRR and CCA-led education materials</b>	
• No use of these materials at all	0.0
• Developed these materials but not linked with formal and extracurricular activities	0.5
• Use these materials both in formal and extracurricular activities	1.0

Source : Plan Nepal School Safety publication

# Module ( 2 )

## CSS Pillar 2: School Disaster Management



Safe School Training

## 2.1 Introduction

This module introduces the Comprehensive School Safety (CSS) pillar 2 on “School Disaster Management” (SDM). This pillar focuses on organizing the school and its education program to prepare for, respond to, and recover from disasters, and reduce disaster risk. School Disaster Management results in protecting the school, its students and teachers, and its resources from harm during disasters and ensures that educational activities can be continued even during emergencies. School Disaster Management should be incorporated within the regular planning and management structures and activities of schools.

### What is school Disaster Management

School Disaster Management requires schools to understand the hazards they are exposed to, have a organized set up to implement disaster management at the school level, be prepared to respond should a disaster strike to protect lives of children, teachers and other school staff, and school assets. It includes planning for maintaining this capacity to respond, continuing educational programs during emergencies and reducing risks at the schools.

School disaster management starts by establishing a school level disaster management committee that is well linked to the Township Committee and Plan for School Disaster Management and the Village, Village Tract and Township DM Committees and Plans.

### School Disaster Management Plan

A key product of the School DM Committee is the School Disaster Management Plan (SDMP). The objective of the SDMP is to identify disaster preparedness and mitigation measures needed and plan

for actions in an emergency as well as longer term measures to improve response capacity and reduce risks, based on the assessed hazards, vulnerabilities, risks and capacities of schools and their surroundings. It aims to help bring the stakeholders of safe school to a shared understanding of needs and actions required and thus avoid confusion or duplication of effort in the preparedness phase, as well as during an actual emergency.

The School Disaster Management Plan should have four distinct Chapters,

- (a) SDMP Overview and Introduction (Module 2.4)
- (b) School Disaster and Emergency Preparedness and Response Plan (described further in Module 2.5)
- (c) School Educational Continuity Plan (Module 2.7)
- (d) School Disaster Risk Reduction Plan (Module 2.8)

Schools are an integral part of the community and locality, are community nodes, and have many resources. Therefore, a school has responsibility towards its immediate locality, just as the neighboring community is linked to the school. Thus both the school and community DM plans and capacities are integrally linked, and how to operationalise this linkage is further elaborated in Module 2.9



SDMC members discuss about SDMP

## Ensure inclusion of vulnerable persons and groups in school disaster management: Guidance on how to do it

Consider the special needs and capacities of all persons when we are conducting School Disaster Management Planning. This includes all students/children; female students and teachers; older persons; children and teachers with disabilities; and children and teachers from marginalized religious, cultural, or ethnic groups. These persons may face unique challenges during disasters, for example:

- Different access to information including early warning information, the result of factors, including but not limited to differential power dynamics; physical impairments such as blindness or deafness; or social exclusion.
- Different decision-making power, such as the ability to decide how to react during disasters.
- Different ability to move freely during disasters, especially during evacuation.
- Limited consultation during community planning processes, hence their specific needs and capacities may not be considered.
- They may be de-prioritized or left behind when disaster assistance is delivered, even by their families.
- Their opinions and experiences may not be valued by society
- They have unique protection concerns during disasters and while staying in shelters

### Actions by school authorities at school level

- Understand the many dimensions of school disaster management as covered by the other seven modules of this pillar, all of which need to be developed as part of the SDM program.
- Get familiar with the national and township plans and structures for school disaster management.
- Get familiar with the village level structures and plans for disaster management.
- Recognise the need and seek to establish SDM as a subject that is regularly reviewed by the school management committee and is part of the school improvement planning process.
- Understand the concept of the School Disaster Management Plan and its three components.

## 2.2: Forming a School Disaster Management Committee (SDMC)

### Objective of this module

To guide establishment of a school disaster management committee (SDMC), including all relevant stakeholders from the school community, to lead disaster management ( DM ) by developing, and implementing a school DM plan and overseeing both preparedness and risk reduction efforts.



## Actions by school authorities at school level

- Identify all groups of stakeholders involved in School Safety and School Disaster Management
- Constitute a representative committee chaired by the head/principal of the school
- Confirm the role and mandate of this committee
- Establish Task Forces as needed
- Hold first meeting the committee
- Develop an action program to implement all School Disaster management tasks which are covered under modules 2.3 to 2.8 of this module.

### What is a School Disaster Management Committee and how is it established?



Formation of School Disaster Management Committee

A school disaster management committee (SDMC) is a school-based organization made up of different school officials and staff, student leaders, related local officials and community members to ensure that preparedness, response and prevention systems are in place to minimize the negative impact of disasters, and ensure educational continuity in emergencies, providing a coordinated and effective response to emergency and disaster situations and protecting the health, safety and well being of all members of the school community. The school head or principal is tasked with organizing this committee, serving as its Chair. A vice chair may be appointed to share some of the Chair's responsibilities.

### Other SDMC member should be drawn from the following categories:

- Representatives from school community such as school management, teaching faculty, non-teaching staff, student representatives, children with disability, parents of children with disability.
- Representatives from community such as parents, leaders, youth clubs, resident welfare association, local NGOs, Disabled Peoples Organization (DPO) etc.
- Representatives of concerned village committees on disaster management, and other service providing agencies i.e. social service, police, fire service, health service etc.

It is important to match the skills, abilities, talents and interests of the potential members with the functions that the committee and its taskforces are responsible for. To get guidance and support, contact should be established and maintained with the Township Education Office, the township DM committees and other township level authorities such as social service, police, fire service, health service etc. To ensure regular attention and sustainability, it is preferable that the SDMC be one of the standing sub committees of the Parent Teacher Association, and feature as a regular agenda item in the PTA and School Board of trustees meetings.

**Overall Roles and Responsibilities of SDMC:** Following are the suggested major roles of SDMC, which should be contextualized based on the situation.

- Form relevant task forces. ( Module 2.2)
- Conduct Hazard, Vulnerability and Capacity Assessment. ( Module 2.3)
- Develop the School Disaster Management plan covering both preparedness and risk reduction aspects. (Module 2.4 )
- Review and update the disaster management plan annually;
- Review budget and obtain funds for implementing the Plan;
- Develop the School Disaster and Emergency Preparedness and Response Section of the plan. (Module 2.5 )
- Guide development of preparedness and response capacities, buy and maintain equipment and tools needed.
- Establish and monitor capacity building activities including training of task forces;
- Acquire necessary awareness materials and conduct awareness raising activities ;
- Develop, periodically review& update the school evacuation section of the School DM plan and inform the school community about evacuation routes and safe assembly areas in advance.
- Prepare and update evacuation maps and make sure designated safe holding/assembly areas are always kept ready to accommodate students in case of an emergency.
- Leads teachers & students to holding areas during emergencies through safe evacuation routes, prepare a list of attendees. Inform to search and rescue task force if someone is missing.
- Determines safe external evacuation routes should off campus evacuation become necessary.
- Guide and monitor action to be taken to remove or reduce structural and non structural problems inside school;
- Guide and monitor action to be taken to remove or reduce hazards and problems inside the school premises and outside school particularly for children travelling to and from school;
- Close all external gates and doors after evacuation to protect the school properties.
- In coordination with higher education authorities, prepare evacuation centers to handle internally displaced persons.
- Ensure continued teaching and learning during emergencies. ( Module 2.7)
- Establish a disaster risk reduction Section of the plan and program and monitor its implementation. (Module 2.8)
- Guide and monitor action to be taken to remove or reduce structural and non structural problems inside school;
- Guide and monitor action to be taken to remove or reduce hazards and problems inside the school premises and outside school particularly for children travelling to and from school;
- Update the task force members and through them the entire SDMC and school community on with disaster related information gathered from different sources such as Village DM Committee, radio and TV. Take the lead for identifying school related hazards, vulnerabilities and capacities. More details of how this is done is covered in module 2.3.



- Assists the SDMC chair in procuring and distributing supplies and equipment.
- Identifies where supplies may be found and arranges for pick-up and dispersal.
- Acts as the designated receiver of all supplies and materials.
- Organizes the village watch guards/police and activates their security functions to augment the manpower requirement of the dispatched personnel of the Myanmar National Police (MNP).
- Secures evacuees and property in the area of operation.
- Implements and enforces personnel identification and control by checking unauthorized vehicles and persons in cordoned off areas.
- Responds to alarm signals or other suspicious activities, and reports any unusual occurrences to the higher authorities concerned through the SDMC chair.
- Performs escort duties in the transport of persons, supplies and equipment.
- Maintains an inventory of vehicles and all available modes of transport ( i.e. boats) that could be used for evacuation and establishes peace time agreements with vehicle owners to do volunteer service.
- Contacts volunteer private vehicle owners to solicit their support when emergency transport is needed.
- During the preparedness stage identifies all vehicles as above and preposition for evacuation vehicles at the designated pick-up points.
- Supports the transport needs of the school during emergency operations.
- Coordinates with the Township authorities and the Region/State offices of Department of Social Welfare (DSW) and Relief and Resettlement Department (RRD) for relief assistance.
- Assists in organizing and facilitating the preparation and distribution of relief goods.
- Receives relief donations such as canned food, instant noodles, clothing, medicines, household utensils, equipment needed for emergency operations and materials for temporary shelters.
- Assists the VDMC chair in preparing relief status reports on conditions in schools for submission to the TDMC.

## Suggested Roles and responsibilities of chair and establishment of key task forces

### Chair

- Convenes the SDMC and prepares with it the school disaster management plan, and is responsible for its implementation.
- Identifies, designates and activates a school Disaster Operations Centre (DOC).
- Maintains active relationships with the chairs of the Township DM Committee (TDMC) & the Village DM Committee (VDMC)& coordinates with it for support in the event of an evacuation.
- Arranges for the procurement and distribution of required supplies and equipment.
- With technical assistance from various local agencies, conducts training in DM activities in school.
- Coordinates arrangements for and directs all drills and exercises and supervises evacuation activities during drills and actual disaster situations.

## Establishment of task forces

The SDMC should have a number of task forces to perform various functions during emergencies and be trained for them in advance. In the Myanmar context while doing school based disaster management, task forces have been established for core functions (i) Early Warning (ii) Search and Rescue and (iii) First Aid. Roles of the TFs are given in Module 2.5. Ensure that one of the SDMC members is leading each taskforce established. As appropriate, senior students in the school should become members of the committee and taskforces. Various additional emergency response related functions need attention such as hazard assessment, supplies, security, transportation, relief, fire management, damage control and psycho social support. These functions can be assigned to members of the SDMC, establishing additional taskforces only where necessary.

## Examples of Good practice from Myanmar

### School Disaster Management Committee in State High School No. (1) Kunyanangon

The State High School No.1 Kungyangon in Myanmar developed its School Disaster Management Plan ( SDMP ) through the collaboration of the school's Board of Trustees, the Parent - Teacher Association members, the district and township level administrative authorities, school council members, teachers and students. The plan, which aimed to promote DRR in school, was written in a simple way to facilitate ease of understanding and acceptance by concerned members of the school and community. In order to make SDMP sustainable and achieve long term benefits, DRR education activities are incorporated in the School Activities Calendar. Activities included in the School Disaster Management Plan (SDMP):

1. Formation of School Disaster Management Committee (SDMC)
2. Preparation of the School Disaster Management Plan
3. Activities to raise awareness on natural disasters among students, teachers, parents and communities
4. Identification of risk factors and resources in the school by students and teachers
5. DRR education orientation for SDMC members
6. Organizing disaster preparedness and response activities
7. Sharing of the plan with local authorities, community leaders and practice DRR activities frequently
8. Preparation of a map (risk and resource map) to show possible types of disaster that can affect the school and community and existing risk factors and another to show where to get assistance in case of disaster to minimize loss
9. Monitoring, evaluation and improvement of all the SDMP activities mentioned above

The SDMC has three sub-committees: (1) sub-committee for planning and assigning tasks, (2) for disaster risk assessment, and (3) for resource mobilization. Under these sub-committees, emergency teams are formed with members consisting of school staff and students. These teams implement activities according to the SDMP under the supervision and guidance of the SDMC. The Emergency Teams are categorized as Early Warning team, Evacuation Team, Search and Rescue Team, Relief, Resettlement and Rehabilitation Team, and Health Care Team. Each team has well-defined tasks and responsibilities during the pre-during and post-disaster phase.

Source : SEAMEO Toolkit

## 2.3: Assessing Hazards, Vulnerabilities, Risks and Capacities; and the safety of the school and its surroundings

### Objective of this module

This is the first step the SDMC has to take to improve safety of your school. In this module you will learn how to assess Hazards, Vulnerabilities and Risks at the school level and identify capacities and resources in the school and surroundings. The HVRCA that the SDMC develops will be an input and of use in developing your School Disaster Management Plan (SDMP) in Module 2.4. You will also begin to assess the safety of the school and its surroundings, as an input to pillar 3 of the CSS framework – Safe Learning Facilities, which will be elaborated in Module 4 of this toolkit.

#### Actions by school authorities at school level

- Identify the most common hazards your school and community is prone to. Compare your list with Table 1 to check for any additional hazards.
- Assess the magnitude frequency and severity of hazards that have occurred in the past or can occur in the future and record your findings in the format of table 2.
- Assign a score for likelihood (frequency) , and impact ( severity) using tables 3 and 5. Include Table 5 for your school in the School Disaster Management Plan
- Look at which seasons are most disaster prone using the seasonal calendar developed for your school and locally prevalent hazards similar to Table 4.
- Identify hazardous elements in the locality of the school. Compare your list with Table 8 to check for any additional hazardous elements you may want to add. Involve school children in this exercise using participatory techniques like hazard hunt.
- Record your findings in Table 9 and include this in the School Disaster Management Plan.
- Prepare a map of the hazardous elements identified and display in the school.
- Where or who are the most vulnerable to the hazards found in the hazard analysis. Use techniques given in the section on vulnerability analysis.
- What are the capacities in the school and who are the groups who are capable to respond to the hazards?
- What are the resources, materials in the school to respond to the hazards and where are locations for evacuation? Record your findings in Table 10 and include this in the School Disaster Management Plan.
- What are the resources in the school neighborhood to respond to the hazards and where are external locations for evacuation? Record your findings in Table 11 and include this in the School Disaster Management Plan. Preferably display these in a map.

- Assess structural safety features of the school using the six headings provided in the section. A more detailed inspection may be done under module 4.
- Identify non structural elements of the school and assess using the checklists in the section as to what might contribute to unsafe conditions in the schools. A more detailed inspection and how to improve non structural safety will be done under module 4. Incorporate these findings in the school disaster management plan.

## What is Hazards, Vulnerabilities, Risks and Capacities Assessment (HVRCA) and school safety assessment and why is it important?

Hazard, vulnerability, risk and capacity assessment (HVRCA) is an important input to identifying what are locally prevalent hazards, what elements of the school are vulnerable, what are the disaster risks a school is likely to face and how the school and SDMC should be better prepared to respond to disasters when they strike. HVRCA is the basis on which a school disaster management plan is prepared and an input to school safety assessment. School safety assessment explores the structural, non-structural and functional aspects of the buildings and facilities within the school campus and the equipment within. Such an assessment also looks at the location of the schools and its surroundings and the risks because these two factors. In the case of a new school we may have the option of choosing between 2 locations in a community and of choosing the safer one. In case of existing schools, we may be occasionally be talking about relocating a school, but in most cases it will be about additional measures to be taken to minimise the impact of the risks should a hazard event occur, or about special preparedness measure that should be included in our preparedness plan.

## Guidance on how do we do Hazards, Vulnerabilities and Capacity Assessment (HVCA)

**Hazard assessment :** A hazard is a geophysical, atmospheric or hydrological event/phenomenon (e.g. earthquake, landslide, windstorm, flood or drought) that has the potential for danger and to cause harm or loss. Broadly, hazards are natural or human induced; caused by natural processes or by human actions or inactions. Please refer copy of hazard profile of Myanmar (2009). There are four categories of hazards, as shown in Table 1.

**Table 1: Category of natural and man made hazards**

Water and climate-induced hazards	Hazards of Geological-origin	Man made Hazards	Hazards of Biological-origin
<ul style="list-style-type: none"> <li>• Floods</li> <li>• Hailstorms</li> <li>• Cloudbursts</li> </ul>	<ul style="list-style-type: none"> <li>• Landslides</li> <li>• Earthquakes</li> </ul>	<ul style="list-style-type: none"> <li>• Forest and settlement fires</li> <li>• Building collapse</li> </ul>	<ul style="list-style-type: none"> <li>• Epidemics</li> <li>• Pest attacks</li> <li>• Cattle epidemics</li> </ul>
<ul style="list-style-type: none"> <li>• Lightning strikes</li> <li>• Heat waves</li> <li>• Cold waves</li> <li>• Avalanches</li> <li>• Droughts</li> </ul>		<ul style="list-style-type: none"> <li>• Bomb blasts</li> <li>• Festival-related disasters</li> <li>• Electrocution and electrical fires</li> <li>• Air and road accidents</li> </ul>	<ul style="list-style-type: none"> <li>• Food poisoning</li> </ul>

Hazard assessment helps to identify threats to the school and its inhabitants and to understand their nature and behavior which is influenced by the following parameters: Frequency, Warning signs and signals, Speed of onset, Season of occurrence, Duration, Severity of phenomenon (force or intensity) and Severity of Impact. List all hazards (both natural and human-induced) that the school and community have faced over the last 50 years with the help of time line, disaster trend analysis, seasonal calendar, etc. and make a list of the hazards in the following table as shown in Table 2.

**Table 2: Hazards, their magnitude, and the damage they cause**

Type of Hazards	Month/Year	Level of Impact	Past Experience and specific Impacts
Earthquake	2001	For example: H	<ul style="list-style-type: none"> <li>• IBlock 3 of school building partly damaged.</li> </ul>
Cyclone	2007	For example: H	<ul style="list-style-type: none"> <li>• 5 houses completely destroyed and 13 houses are damaged above 50%.</li> <li>• Almost all major roads link road of schools are damaged including study materials of students.</li> </ul>
Flood	2011	For example: H	<ul style="list-style-type: none"> <li>• Damaged roads, school, houses and students' study materials.</li> <li>• Children missed school, suffered from food shortage</li> </ul>
Fire			
Tsunami			

- Discuss the likelihood of occurrence of each hazard, using government data. By nature, some hazards are ever-present, some seasonal, some on the increase, & some infrequent but inevitable.
- Rate the likelihood that each will happen on a scale of 1 to 5 based on the simple indicators.
- Identify how severe the impact of each hazard is on a scale of 1 to 5. Use this list of impacts to help you judge:
  - Human—number of deaths, injuries, disabilities
  - Physical—number and extent of damage to buildings, equipment, supplies
  - Socio-cultural—destruction of social assets and cultural heritage
  - Economic—costs of repair and replacement, loss of livelihoods in education
  - Environmental—degradation of natural resources and habitats
  - Psychosocial—loss of educational continuity, hopes and dreams

**Table 3: Types of hazards, likelihood of hazard occurrence and their severity**

SN	Types of hazard	Likelihood of hazard occurrence					Severe impacts of hazards					
		1	2	3	4	5	1	2	3	4	5	

### Seasonal Calendar

Another lens to look at natural hazards, particularly climatic and weather related is which months of the year they are likely to occur. A seasonal calendar is an additional visual tool of showing the distribution of seasonally varying phenomena such as natural events/hazards over time. Prepare a seasonal calendar for the hazards that affect your school like the one below:

**Table 4: Seasonal Calendar**

Month Hazard	01	02	03	04	05	06	07	08	09	10	11	12
Severe weather	Cold Wave				Heat Wave							Cold Wave
Rainy season						Monsoon Season						
Flood												
Tropical storm												
Drought												
Tornado												





School Seasonal Calendar

Hazardous elements in the school surroundings: Risk is associated with the nature of hazardous elements in the school surroundings and locality, and their proximity from the school. Closer the distance, larger is the risk produced. Table 8 below shows different types of hazardous elements.

Table 5: List of Common hazardous elements located in and around school

• Electricity transformer, High-tension electrical wire, Wooden electric poles
• Staircase without railings, School grounds with trenches, Open wells and ponds
• Busy road close to school
• Old tall trees
• Abandoned/ unused physically ruin school buildings
• Large mass of rocks, Streams/torrent/streams, Steep slopes close to school
• Gullies around the school
• Hazardous factories near to school

The following table 9 could be used to organise information on different hazardous elements and should be included in the School DM Plan

**Table 6: Hazardous elements and their proximity from the school**

Hazards	Very close to school (less than 1 Km away)	Close to school (1-2 Km away)	Far from school (more than 2 Km away)	Risk posed
Hazardous factories				
Busy road				
High-rise building				
Selling centre of highly inflammable materials like kerosene				
Open/blocked/unclean drains				
Petrol pump				
.....				
Open Wells				
Small torrents and streams				
Electricity lines				
Others				

### Vulnerability assessment

Vulnerability is a set of prevailing conditions that adversely affect people’s ability to prevent, mitigate, prepare for and respond to hazardous events. Physical, environment, social, economic, political, cultural and institutional factors determine the degree of vulnerability.

Vulnerability assessment is the process of estimating the susceptibility to suffering harm or loss of ‘elements at risk’ (people, school, and faculties) to various hazards and is related to the capacity to anticipate a hazard, cope with it, resist it and recover from its impact. Vulnerabilities weaken the coping capacities of the school and communities during disasters.

Tools useful for vulnerability assessment are : (1) mapping to identify vulnerability caused by identified hazards in a school and its neighbourhood, (2) Venn diagram to identify institutions that could lessen the vulnerabilities at schools and neighbourhood, (3) Seasonal calendar to explore the variation of vulnerabilities over the year, (4) Problem tree and ranking to assess linkages between vulnerabilities. Vulnerability reduction demands a joint action of stakeholders and programs for capacity building, advocacy and campaigns, System improvement and structural mitigation.

## Capacity and resource mapping

Capacities are the resources, means and strengths which exist in households, schools and communities which enable them to cope with, withstand, prepare for, prevent, mitigate or quickly recover from a disaster. All facilities/ resources available within the school and outside the school for helping in disaster response and management should be compiled and listed. Facilities within the school include evacuation area and shelter, equipment and materials useful for disaster response, trained manpower, awareness materials, etc. The facilities outside school include fire station, hospital, police station, locally available technical persons (electricians, firemen, plumbers, and health staff within the school and in its neighbourhood), village head-

man's office/ house, village tract office and township offices etc. Some of the facilities may be very close to the school and some may be far away from the school. Facilities should be listed depending on the hazards and vulnerabilities affecting the school, using formats below in tables 10 and 11. Both tables should be used in DM Plan.

Some of the facilities may be very close to the school and some may be far away from the school. Facilities should be listed depending on the hazards and vulnerabilities affecting the school, using formats below in tables 10 and 11. Both tables should be used in DM Plan.

**Table 7: Type of resources available in school (please tick ✓ in the Yes and No column)**

Safety materials and measures	Yes	No
First aid kit		
Fire extinguisher		
Fire equipments including sand baskets		
Portable ladder		
Tools (spade, picks, shovel, hacksaw, etc)		
Telephone		
Tarpaulin		
Radio		
Safety helmets		
Rope		
Life jackets		
Stretcher		
Mike		
Torch/batteries		
HVRC mappings		
School evacuation plan/ School evacuation map		
Task force		
School disaster management committee		
Emergency contact details list		
Drinking water facilities (gravity flow, hand pump, rain water harvesting)		
Sanitary facilities (separate toilets for boys and girls)		
.....		

**Table 8 : Response resources in the neighbourhood of the school**

Facility	Distance from school	Name of Contact Person	Contact Number	Details about the facility
Police station	1 km			
Fire station				
Hospital				10 beds
Taxi stand				
Medical shop				
Person with disabilities resource centre				
MRCs Branch office				
Village Development Committee				

### Guidance on how do to do School Safety assessment and take preliminary action

Once the hazards the school faces are identified and prioritized, then structural and non-structural risks for each hazard and associated environmental risks should be assessed, as well as resources for mitigation, and recovery. The location, design and construction of a building can increase or decrease your school’s vulnerability in the case of fire, earthquake, flood, landslide or winstorm, extreme temperature, volcanic hazards, or bomb threats. If structural safety measures have not been taken during the course of school site selection and school construction, then township and region/state authorities should be alerted to these dangers and investment on repair and/or retrofitting requested. These questions will be returned to in depth under Module 4.

### Assessing Structural Safety

The School Building Safety Checklist introduced in module 4 includes:

Location and soil. Load carrying system Building Height	Design Construction detailing Water damage
---	--

Any structural safety concerns identified may require further investigation with professional engineering help, based on which a strategy will have to be developed for mitigating structural deficiencies through retrofitting or during ongoing or future remodeling.

**Assessing Non-structural safety :** Where fire, earthquake, flood, and windstorms are prioritized, you will need to assess non-structural risks associated with your buildings will need to be assessed to identify measures to make classrooms, offices, and common spaces safer. The review team should include users of each space as well as facilities maintenance staff.

**Fire prevention and fire safety :** measures are part of your initial school design, and require regular maintenance and testing. These are explained in module 2.8

**Electrical Safety :** Old Wiring leading to electricity leakage and shocks must be attended.

**For cyclone/high winds safety :** identify objects that can be torn or fly away or be battered by wind outside, including tall trees, powerlines, water tanks, and other buildings. Identify what can fall on or fly towards the building. Identify what can be done, who should do it, and when it can be completed. Look at equipment or objects within buildings that can be blown over or shift location or fall on someone. Look at the safety of glass windows and see how one could protect them to prevent shattering by flying objects, or if they shatter to prevent shards from flying into the classroom.

**For earthquake safety :** inspect every room in every building as well as the areas outside the building, looking for objects that may slide, fall, and fly, and especially anything that can cause injury or block exits. Taking action is covered in Module 2.8.

**For flood safety and potential water level rise on lower floors :** Are there storage areas either on a second floor, on high shelves or baskets suspended above expected high water, or waterproof containers available for storing valuable school equipment and supplies during heavy rains?

## 2.4: Developing the School Disaster Management Plan Overview and introduction Section

### Objective of this module

The objective of this module is to help understand the School Disaster Management Plan (SDMP) and its four Sections. The SDMP you will develop and implement during module 2 covers the process of planning (based on the risk assessed in module 2.3), physical protection and response capacity development, continued learning during emergencies and reduction of risks over time by implementing policies and procedures designed to:

- Protect students and staff from physical harm
- Ensure continuity of education for all children
- Inculcate culture of safety

This module will guide and start up the development of the introductory Section 1 of the Plan.

## Actions by school authorities at school level

- Understand the concept of the School Disaster Management Plan and its four constituent Chapters.
- Convene a meeting of the School Disaster Management Committee and decide how the School Disaster Management Plan (SDM Plan) is to be developed.
- Discuss the suggested outline for the SDMP, agree on whether any sections are to be added or deleted and what will be the process of development of the plan and each of its chapters.
- Discuss the outline of the Chapter 1 and assign responsibility for the tasks of overall coordination and the specific task of compiling and writing chapter 1.
- Develop lists of school buildings, inventories, and maps of school and surroundings.

### What is a School Disaster Management Plan and how is it structured

Myanmar's Natural Disaster Management Law, 2013, requires authorities at various levels to establish disaster management plans. Section 13 (a (i)) requires "departments, organizations ... that have been assigned responsibility under this Law to ..... undertake .... in accord with the natural disaster management plans....preparatory and preventive measures .... in pre disaster period." Section 15 b) explains that these "preparatory measures....include... keeping the early warning systems, training for search and rescue and making rehearsal."

A key product of the School DM Committee is the School Disaster Management Plan (SDMP). As explained in the introductory module 2.1, the SDMP's objective is to identify disaster preparedness and mitigation measures needed, plan for actions in an emergency as well as longer term measures to improve response capacity and reduce risks, based on the assessed hazards, vulnerabilities, risks and capacities of schools and their surroundings.

The School DM Plan developed using guidance of this module will have four distinct Sections,

1. Introduction and SDMP Overview ( Module 2.4)
2. School Disaster and Emergency Preparedness and Response Section (Module 2.5)
3. School Educational Continuity Section ( Module 2.7)
4. School Disaster Risk Reduction Section ( Module 2.8)

### School DM Plan a living document

The School Disaster Management Plan should be simple and easily understandable. Each SDMP should be a "living document", a work-in-progress and never a finished document, but one that is to be continuously improved and periodically updated. Realistic plans emphasize planning as a 'process' rather than a 'product'. An integral part of the plan is an assessment of the capital investments to ensure that equipment and systems are in place, as well as the recurrent costs arising from maintenance, supplies, training, testing and updating the plan. The School DM Plan, particularly its section on investments and recurrent costs, should be integrally linked to the School Improvement Plan.



## Starting up school safety program by holding Orientation meeting on School Disaster Management

As a first step, an orientation meeting to create understanding for the need of the program on comprehensive school safety and the need for a School Disaster Management Plan should be held for key stakeholders. These include Principal, teachers, selected students from senior classes, local NGOs, MRCS, monks, elderly people from the community, local Fire Services Department/Auxiliary Fire Brigade and local Basic Education Department representatives. Representation of female teachers as well as students should be encouraged in the meeting. The following issues can be discussed in the meeting:

- What are the probable hazards in and around the school?
- What kind of disasters and emergencies are likely and possible to occur and what will be their impact on school community and its functioning.
- Advantages of disaster preparedness and mitigation measures and steps required.
- Resources required and Potential individuals and organizations who could support disaster preparedness measures in the school.
- Awareness generation on Do's and Don'ts for various disasters.

The Township Education Officer, MRCS branch personnel, trained principal or teacher or local NGO or individuals having disaster management expertise can facilitate these meetings. Present findings from the base line study done under Module 1.

## Key considerations when formulating and implementing a School DM Plan

- Prepare the Plans in a participatory way. Incorporate needs of out-of school children, children with disabilities and girls as these groups of children are often forgotten.
- Base Plans on a thorough assessment of hazards, vulnerabilities, capacities and resources.
- Inform education stakeholders about the plan; so that they are familiar with it and understand where they fit in, and it works effectively.
- Organize periodic meetings among education stakeholders to educate about the SDMP to create an environment conducive to resource generation and management.
- Organize capacity-building to translate these plans into high-quality operational capacity.
- Train teachers in the development of an evacuation plan, emergency response, first aid, fire safety, and search and rescue to ensure that SDMPs will be sustainable.
- Hold rehearsals, exercises and drills to test and exercise the plan.

## Outline of the Chapter 1 of the School DM Plan

### Section 1: School Disaster Management Plan Overview and introduction

1. Introduction about the School and its location
2. Objectives of the School Disaster Management Plan
3. Contents of the School DM Plan and its 4 chapters
4. Roles, Responsibilities and Membership of the School Disaster Management Committee with complete contact information
5. Brief description of PTA and School Board of Trustees and links with SDMC
6. List of school buildings and school property inventory (details in Annex)

7. Maps of school and surroundings and floor plans indicating evacuation routes and assembly points.
8. Dissemination of Plan including periodic orientation of School Emergency Preparedness Plan.
9. Reviewing and updating of the plan
10. Addressing special needs of the girl child and children with disability.

### Maps of School and surroundings ( sect 7 of chapter 1)

The school map is an essential part of the plan and should be drawn by the teachers and SDMC members after doing a detailed survey of the school and its surroundings. The map shall show:



Hazard & Resource Map

- All physical structures: buildings, classrooms, staff rooms, library, toilets, laboratories, places for emergency equipment ( Communication system, Fire extinguisher, Fire hooks, Sand bags, First Aid kit, etc.)
- Identified, undisturbed evacuation paths which are used in an emergency and safe place (assembly point) within or outside the school premises wherestudents can be evacuated.

A second map should include the school environment or the community where the school belongs to, produced in cooperation with parents & community leaders and should include the following:

- Geographical characteristics (lakes, rivers, higher/lower grounds, hills, beach, etc.)
- Transport (roads, bridges, boats, railway, etc.), evacuation routes and safe areas or shelters
- Buildings including the nearest available resources (Public Phone, Police Station, Sub Rural Health Center, Station Hospital, Jetty, Myanmar Red Cross Society, Pagoda/Temple/ Church, Mosque, etc.)

The school maps should be shared with the students and displayed at various points including school notice board in the school.

## Dissemination of the School Disaster Management Plan (sect 8 of Chapter 1)

Dissemination of the School Disaster Management Plan (SDMP) to all teachers, students and supporting staff is important. The School Disaster Management Plan can be read in the school assembly. It can be read out and discussed even in each class. A copy of the SDMP should be displayed on school notice board. Dissemination can be done in other manner depending on the local context. The familiarization of SDMP should be done at least at the start of a new academic session so that new students are acquainted with the evacuation procedures and other contents of the school disaster management plan.

## Review, Evaluate and Update the Plan (sect 9 of Chapter 1)

School Disaster Management Plan should be reviewed, evaluated and updated periodically. The school should fix a time in each year (i.e. June or July), to review and update the plan in order to ensure usefulness. One way to evaluate the plan and its effectiveness is to periodically exercise various aspects of the plan, and hold mock drills, especially for evacuation. This is covered in Module 2.6. Feedback from the exercises and performance of the plan become the basis for improvements and update of the plan. The updated plan should then be disseminated again amongst the school community through discussion and display at notice board. Of course, the updated plan will also be tested during the next round of exercises and mock drills. The responsibilities of updating the plan remain with the School Disaster Management Committee.

The following questions may help to ensure the improving the quality of the plan:

1. Has the school established the School Disaster Management Committee and considered including students and parents who may be helpful as members?
2. Have taskforce members been notified and their roles and responsibilities defined?
3. Has the school developed a list of taskforce members and resource persons with names, addresses and telephone numbers?
4. Has the school organized training for the members of the School Disaster Management Committee and School Disaster Management Taskforces of the SDMC?
5. Has the school considered the relationship between the township/ village tract administration and the School Disaster Management Committee and how these groups interact?
6. Has the school developed and distributed the School Disaster Management Plan document and made provisions for its review by the Committee and Taskforces?
7. Have arrangements been made for regularly scheduled meetings, mock drills and other awareness and training activities?

## Ensure inclusion of vulnerable persons and groups in School Disaster Management Plan: Guidance on how to do it (Sect 10 of Section 1)

Pay special attention in the plan to needs of children with disability, including assisting them with access that ensuring the adoption of universal design principles and improved access. For girl children, pay special attention their safety and security. The plan should incorporate specific information on numbers of such children and their special needs. More guidance on this is given in module 5.1 and 5.2.

## 2.5: Developing the School Disaster and Emergency Preparedness and Response chapter of the SDMP

### Objective of this module

The objective of this module is to help you use the HVRCA developed in the previous module (2.3) to develop a chapter of the School DM Plan dealing with School Disaster and Emergency Preparedness and Response and enhance your school's capacity to respond to an emergency and a disaster.

In the event of disasters, or even more frequent emergencies, the children and the staff could be at risk, require to be protected and may need to be evacuated. The school disaster preparedness chapter you will develop and implement during this module covers the process of planning (based on the risk assessed in module 2.3), physical protection and response capacity development, and policies and procedures designed to protect students and staff from physical harm. This SDEPR Chapter of the SDM plan defines the roles and responsibilities of key stakeholders, including those responsible for coordination, control and communication when responding to an emergency.

### Actions by school authorities at school level

- Within the concept of the School DM Plan and its four constituent Sections, recognize that we will be developing School Disaster and Emergency Preparedness and Response (SDEPR) Section.
- Convene a meeting of the School Disaster Management Committee and decide how the School Disaster and Emergency Preparedness and response plan (SDEPR Plan) is to be developed.
- Discuss the suggested outline, agree on whether any sections are to be added or deleted and who will take on the task of writing specific sections.
- Prepare contact lists of Emergency response and support agencies and equipment available and needed for response.
- Develop lists of school buildings, inventories, and maps of school and surroundings
- Include a section on Equipment and facilities needed for response based on guidance given in this module.
- Include a section on Physical protection of buildings including non structural safety with guidance given in the section in this module entitled physical protection and further guidance in module 4.2.
- Discuss sources of early warning information with respect to likely hazards, and protocols for the Early warning taskforce to sound alerts and warning, and record these in the plan.
- Write up the section on communicating with emergency response agencies based on the contact list in the format Table 9
- Include a section on evacuation with guidance given in the module 2.5.
- Write up the procedures on communicating with parents and guardians.

- Include a section on educational continuity with guidance given in the module 2.6.
- Plan arrangements for off-site back up of records in neighboring school and TEO office or any other feasible location.
- Write sections on dissemination, orientation and training of SDMC and TFs.
- Include a section on exercises and drills with guidance given in the module 2.5.
- Write a section on reviewing and updating the plan, identifying person responsible and periodicity of updating.
- Develop/Assemble the Annexure.
- Once the entire plan is written, have a full meeting of the SDMC to review the draft, revise and finalise. This should include a review of inclusion based on module 5.1.
- Develop the go boxes with emergency equipment and supplies as per the guidance given, under the responsibility of the equipment and supplies taskforce.

### Checklist of key actions under the Disaster and Emergency Preparedness and Response Plan to be done during an actual emergency

- As soon as an emergency occurs the students and the staff should be informed by the Early Warning Dissemination Taskforce.
- Initial steps should be taken to control the emergency, e.g. if fire then use fire extinguishers and other available resources.
- In parallel, the warning should be assessed by the Evacuation taskforce and if agreed, an evacuation is done led by the Evacuation Taskforce.
- Evacuation Taskforce should conduct a head count and the trained Search and Rescue Taskforce, should search for missing persons.
- The First Aid Taskforce will treat the victims on the spot, at a predesignated first aid post.
- After first aid operations, victims should be rushed to the nearest hospital as soon as possible, if necessary.
- Fire Services Department and Myanmar Police Force should be informed immediately.
- The situation should be handled calmly by SDMC and all the taskforces. Students should be kept calm and controlled by their teachers.
- The Site Security Taskforce should prevent any person running into a disaster site.
- After the emergency, lessons learnt and future improvement measures should be discussed with the participation of the school community.

### Outline of the School Disaster and Emergency Preparedness and Response (SDEPR) Section

#### Section 2: School Disaster and Emergency Preparedness and Response (SDEPR)

1. Roles, responsibilities and membership of the Preparedness and Response Taskforces
2. Telephone numbers and contact details of emergency and support agencies including the village headman, VT Administrator, Township Education, Auxiliary Fire services, MRCS, NGOs, doctors, hospitals, etc

3. Physical Protection to protect students against hazardous elements and risks to their health
4. Equipment needed for protection of life and emergency supplies
5. Emergency warning system
6. School evacuation plan and map, including sequence, routes, identification of assembly areas and safe havens for family reunification
7. Procedures for informing parents and guardians
8. Provision of emergency transportation
9. Off-site back up of important school records
10. Rehearsing and exercising the plan and periodic mock drills (Module 2.6)
11. Training of Task forces

### Annexures should include

- Hazard, Vulnerability, Risks and Capacity Assessment of the school (use results from Module 2.3)
- School and community maps
- Detailed school property inventory
- Do's and Don'ts for various disasters

### Suggested Roles and responsibilities of chair and establishment of key task forces (sect 1 of chapter 2)



Action of Early Warning TaskForce

- Prepares the school communication plan and protocols.
- Working with the EW Task Force, using predetermined warning signals, informs the school community of warnings and advisories during the preparatory and evacuation stages.
- Keeps a record of all communication and warning messages.
- Acts appropriately on all communications pertaining to disasters.
- Share from time to time the instructions on how to behave during flood, landslides, fire, thunder and lightning, windstorm to stay safe.
- Should discourage listening to rumors, but instead to all official warnings
- Prepares the school early warning (EW) system, & the school communication plan & protocols.
- Share the role of EW task force & type of EW signals & their function to PTA & BoT members.



- Receive updates on impending threats from Township Disaster Management Committee (TDMC), VTDMC and VDMC and advisories from DMH.
- Observe potential hazards and monitor these conditions, reporting observations to the SDMC chair for consultation with others outside the school and issuance of appropriate preparatory advisory or an evacuation movement.
- Using predetermined signals, inform the school community of advisories & warnings during the preparatory and evacuation stages, keeping record of all communication and warnings.
- Prepare a contact list of important people/places (hospital, fire brigade, local police)
- Conduct exercises/ mock drills customarily (at least once a year)
- Mobilize fire brigade, police, health personnel, education office and others in case of emergency
- Share the operating procedures of emergency equipment (e.g. fire extinguishers, etc), electric main switches and location of emergency equipment.
- Share from time to time the instructions on how to behave during flood, landslides, fire, thunder and lightning, windstorm to stay safe.
- Develop, periodically review & update the school evacuation section of the School DM plan and inform the school community about evacuation routes and safe assembly areas in advance.
- Prepare and update evacuation maps and make sure designated safe holding/assembly areas are always kept ready to accommodate students in case of an emergency.
- Leads teachers & students to holding areas during emergencies through safe evacuation routes, prepare a list of attendees. Report to search and rescue task force if someone is missing.
- Determines safe external evacuation routes should off campus evacuation become necessary.
- Close all external gates and doors after evacuation to protect the school properties
- In coordination with higher education authorities, prepare evacuation centers to handle internally displaced persons.
- Conduct evacuation drills as part of exercise /mock drills.



Action of First Aid TaskForce

- Consult with the evacuation team about first aid post during emergency. Prepare a first aid and medical kit for the school evacuation center equipped with proper medicines.
- Coordinate with the Primary health care centre, Township Health office, Red Cross, and other health agencies for first aid and medical self-help training.
- Work with the evacuation team to establish first aid post during emergency Direct first aid operations and health services, and controls access to medical supplies.
- Ensure the safe storage and handling of food and drinking water at the evacuation center.
- Maintain adequate sanitation and hygiene standards within the evacuation center.
- Inform the SDMC , teachers and the School BoT about injured persons and their conditions.
- Notify the Primary health care centre and health facilities closest to school if special medical services are required, contact with respective authorities in local hospitals about situation of human casualties/ injuries & facilitate sending injured to hospital as soon as possible.
- Organize refresher training of first aid and drills at a regular interval.



Action of Search & Rescue Taskforce

- Organize & train rescue service teams so that they are skilled in first aid & life-saving techniques, in coordination with the TEO, Myanmar Red Cross (MRCS), Fire Services, RRD and GAD.
- Request budget appropriation to support training requirements.
- Where there are mass casualties, conduct search, rescue and recovery operations in school and coordinates for emergency vehicle assistance (e.g., ambulances).
- Prepare a map of school showing exit doors & gates, locating vulnerable places within, keeping a record of students & teachers & managing keys, stretchers, ropes and ladders in advance.
- Obtain information on missing persons from the evacuation team & Search for missing people.
- Take the injured to first aid post for further medical treatment.
- Mobilize the search and rescue team from outside if situation is severe.
- Check every room in the building and report the injured to the first aid team.
- Organize drills, orientation and consultation intermittently to memorize and hone the skills.

### Communication with key agencies for emergency response (sect 2 of Chapter 2)

The chapter should contain a contact list of key contacts, particularly of response agencies and all stakeholders must be on hand so they can be mobilized when needed (See format in Table 9 below)

**Table 9: List of agencies to be contacted during emergencies**

Important stakeholders	Contact person's name/address	Telephone	Distance from school	Telephone numbers
Township Emergency Operation Centre				
Local Hospital/Health Post/Medical shop				
Nearest Chemist				
Fire Station				
Local Police				
MRCS				
VDMC and VTDMC chairs				
Head teacher				
SDMC members				
PTA				
Township Education Office				
Township and VT Development Committee				
.....				
Others				

A contact list should also be maintained for each task force and should include the name, address, and telephone number (both residential and mobile) of each member. Efforts should be made to develop an internal communication system which functions even in disasters because only then can response agencies be updated about the emergency situation. The list of key response agencies be posted on information board, in classrooms and other necessary location for use in emergency.

### Physical Protection (sect 3 of Chapter 2)

School Buildings, grounds and other facilities should be maintained, protected from damp, termites and fungus. When damage occurs they should be repaired. Buildings should be designed and built according to seismic, wind or flood codes, and inspected by a qualified engineer. Where they are not sufficiently compliant with requirements of the Building code, required repair or retrofit should be done. For specific hazards, following additional physical protection measures are advised:

In areas prone to earthquake: Fasten tall and heavy furniture, appliances, large electronics, lighting fixtures and other items that could injure teachers or students, to wall stud or stable surface. Put latches on cabinets, secured televisions, computers and other electronic items, hang pictures securely on closed hooks to avoid injury, or would be expensive to replace. Secure school 'heirlooms' and items of cultural value that could be lost to future generations.

For areas prone to storms and cyclones: Install shutters or similar window protection (heavy curtains, window film) to protect from glass breaking.

For areas prone to flood and debris flow: Keep flotation device or life-jacket on the highest floor in the building. Create channels and be prepared to procure or make sandbags.

For buildings facing fire risk: Clear away fire hazards from around the school. Install Fire extinguishers and maintain once a year, with at least two staff trained in its use.

### Equipment and facilities in Schools for response (Sect 4 of Chapter 2)

- Fire Extinguishing equipment, Sand bags
- Availability of telephone, including mobile phones in school for communication
- Radio for use to receive early warning, School bell for warning or alert
- Open space in school premise or vicinity which can be used for evacuation
- Nearby pagoda can be used for safe shelter
- In case of 2 storey schools, first floor can be used as safe shelter from storm surge or flood
- A well-stocked first aid kit, checked regularly. Make sure the flashlight batteries work, and check expiration dates and replace any used or out-of-date contents.
- Search and rescue equipment including ropes, life jackets, life buoys, etc.
- Boats and vehicles in the community and even nearby locations identified and listed

### Equipment and facilities in Schools for response (Sect 4 of Chapter 2)

Following three boxes should be maintained that can also be moved in an emergency. These are the Administration office evacuation go box, the school Emergency supplies bin and the classroom shelter in place bucket. The contents of each are described below :

**Table 10: Administration Office Evacuation 'Go-Box'**

DESCRIPTION	READY	MISSING	INITIALS / DATE
School Disaster and Emergency Plan Binder			
Student Emergency Contact Cards			
First Aid Kit			
Keys			
Megaphone			
Radio and extra batteries			
Flashlight and extra batteries			
Pens / Marking pens			
Notepads			
Staple/staples/paper clips			
Masking tape			
Sheet			
Blanket			
Student prescription medication			

Source: INEE Handbook 2012

**Table 11: School Emergency Supplies Bin**

DESCRIPTION	READY	MISSING	INITIALS / DATE
Water (rotated into stocks)			
Mats or blankets (student-supplied)			
Emergency Radio			
Incident Command System necklaces (and vests)			
Soap			
Shovel			
Long-lasting food (rotated into stocks)			
Rope			

Source: INEE Handbook 2012

**Table 12: Classroom Shelter-in-Place Bucket (for each class)**

DESCRIPTION	READY	MISSING	INITIALS / DATE
Current Class Roster			
One (1) clean sheet			
Three (3) marking pens			
Plastic Bags			
Pens			
Notepad			
Supplies for student activities (optional)			

Source: INEE Handbook 2012

### Student Comfort Bag/Go Bag

Each student should have a student go bag which they can take with her/him if they have to evacuate from the classroom. This should be kept in class and contents replaced once a month. The inspection by the student and teacher should be done about once a month.. Each school should decide how practical this is and how much of the contents should be prescribed. At minimum, every student should always wear, or leave with her ID card.

**Table 13: School Emergency Supplies Bin**

DESCRIPTION	READY	MISSING	INITIALS / DATE
½ l. bottle of drinking water			
Student ID card displayed or carried by student			
One (1) high energy / long life snack			
Whistle and mini flashlight			
Family photo and/or comfort note			

(For each student, supplied by parents where possible; in a sealed or tied plastic bag)

Source: INEE Handbook 2012

## Early Warning System (EWS) (Sect 5 of Section 2)

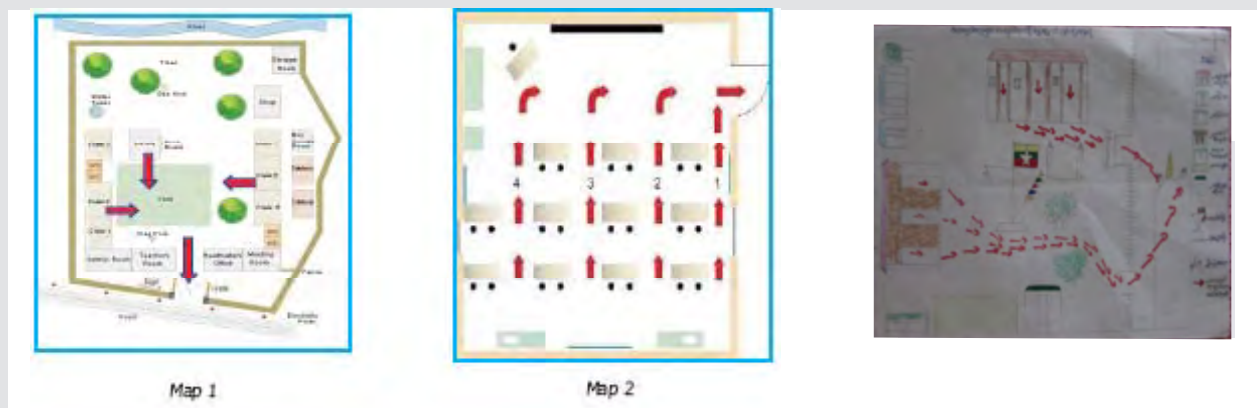
EWS helps know about upcoming hazards and prepare advance to minimizing the impacts. Materials needed are information board, speaker, bell, siren, mobile phone, radio, TV etc.... Each school can choose warning materials specific and suitable for themselves, introduce this system to students and other stakeholders, so that they understand the system well. The Early Warning and Information Dissemination Task force follows up information on climate and meteorological prediction via media such as TV, radio, daily newspaper and local DM Committee and disseminates this information during national flag salute, in each classroom, and post it on the information board.

## Evacuation Plan and map ( sect 6 of Section 2)

School emergency evacuation is the immediate and rapid movement of school community away from the threat or actual occurrence of a hazard. The purpose of the evacuation map is to prevent chaos and stampede in an emergency, ensure the safe and orderly evacuation of all the occupants, display safe and accessible escape routes from the school building to the designated identified safe and accessible location, identify children, especially those with disabilities who may require additional support and plan to provide it.

Every school must designate appropriate evacuation routes, a safe exit, identify and assign emergency evacuation focal persons within the school community who are members of the Evacuation task force, and a place to assemble, preferably on high ground so that it will not be flooded, either in the school grounds or close by. The plan should describe the procedures during evacuation, with thumb rule that the class closest to the exit will be evacuated first and followed subsequently in order of distance from the exit. School children and their guardians must be informed in advance of those routes, exits and areas of assembly and drills must be organized periodically so that even in a real emergency, there is no confusion and all escape safely. If possible, emergency supplies should be stored in the safe area for distribution if it is necessary.

An evacuation map should show evacuation route: safest and shortest exit paths from each classroom, emergency exits, and place of assembly indicated with arrow signs, and safe evacuation paths clearly marked with arrows, preferably in red colour. Alternative access routes to the school along with the nearest key infrastructures should also be included in the map. This map should be displayed at various points including school notice board in the school, in each classroom and corridor to guide safe evacuation and prevent any confusion among students, teachers and parents.



School Evacuation Map



## Informing parents and guardians in an emergency: (sect 7 of Chapter 2)

Schools need to prepare student data including important information such as contact address and numbers for parents and guardians to contact in emergencies and update it each year when the new school year begins. In an actual emergency, the lists should be used to verify safety of students after assembly in safe areas, parent/ guardian contacts and also to contact them in case of need.

## Disaster Operations Center in the school and in a back up location (Sect 7 of Section 2)

The Committee should also designate an area of the school where the committee could meet during normal times and to convene during an emergency or a disaster to plan for and take action according to their respective functions. This will serve as the Disaster Operations Center and its location should be mentioned in the plan. Also identify a back up location for the DOC and establish this as an alternate location for storage of back up records. Other locations could be a neighbor in school or the TEO office.

## Training of the Committee and the Taskforces (Sect 11 of Chapter 2)

The School Disaster Management Committee (SDMC) Task forces should be trained for their responsibilities such as evacuation, first aid, security, early warning and search and rescue. It should be recognized that there will be some turn over in Task force membership. Periodic training of the Task forces should be planned. The planned training activities should be reflected in the Plan and the necessary resources should be identified, like materials and trainers. Organizations that can help to provide training are: Fire Services Department, Department of Health, Department of Basic Education (DBE), Relief and Resettlement Department (RRD), the National Disaster Management Training Centre (NDMTC) being set up at Hinthada, Department of Meteorology and Hydrology (DMH), MRCS, the DRR WG and other International and local NGOs including Capacity Building Initiative (CBI).

## School Disaster Preparedness Checklist

Here is a suggested checklist which may be used to check actions taken on the assessment, planning and implementation of activities to ensure a school's preparedness and completeness of plan. This is useful for the SDMC to use once draft is finalized, and during periodic updating.

1. Ongoing committee guides the school disaster management process on ongoing basis.
  - School disaster management has the full support of school leadership.
  - School DM committee leads in ongoing planning for prevention, mitigation, response & recovery.
  - School disaster and emergency management plan is reviewed and updated at least annually.

## 2: Assessment and Planning for Disaster Preparedness and Mitigation takes place continuously.

- Hazards, vulnerabilities, risks, capacities and resources are researched and assessed.
- Mitigation measures are identified and prioritized for action.
- Evacuation routes, safe assembly areas and safe havens for family reunification are identified.
- Educational continuity plans are in place for recurring hazards and high impact hazards (including alternate locations and transitional learning spaces as needed).

## 3. Physical protection measures are taken to protect students and staff and facilities.

- School buildings and grounds are maintained and repaired against moisture, termites, fungus.
- Fire prevention and fire suppression measures are maintained and checked regularly.
- Safety measures related to non-structural elements, furnishings and equipment within the building are taken to protect from hazards especially due to earthquakes, severe weather etc.
- Measures taken to protect equipment & materials from wind & water damage from floods, storms.
- School infrastructure, access routes, shelters & safe havens are developed and maintained.
- Crime, vandalism & bullying prevention measures are maintained & students feel safe & secure.
- Measures to provide clean drinking water, food security, drought & hazardous materials protection (e.g., rainwater harvesting, school gardens, solid waste management, erosion prevention).

## 4. School personnel have disaster and emergency response skills and school has emergency provisions.

- School personnel are ready to organize disaster response using a standard emergency management system (e.g. incident command systems).
- School personnel receive training in response skills including, as needed: building and area evacuation, first aid, light search and rescue, student supervision, shelter, nutrition and sanitation.
- School maintains first aid supplies and fire suppression equipment.
- School maintains emergency water, nutrition and shelter supplies to support expected staff and students for a minimum of 72 hours.

## 5. Schools have and practice policies and procedures for disasters and emergencies.

- Policies and standard operating procedures are adopted to address all known hazards, including SOPs for building evacuation and assembly, evacuation to safe haven, shelter-in-place, lockdown, and family reunification procedures.
- School identified safe assembly area & everyone knows how to go there after building evacuation.
- School personnel practice procedures to ensure safe student reunification with emergency contacts identified in advance by parents or guardians.
- School drills are held at least twice yearly to practice and improve upon disaster preparedness skills and plans. One drill is preferably a full scenario drill to practice response preparedness.

Sources: Seeds of Safety, Save the Children, 2013

## 2.6: Exercising the School Preparedness, DM Plan and holding periodic drills

### Objective of this module

The objective of this module is to guide the establishment of a periodic program to exercise the school DM plan, especially its SDEPR Section to organize and conduct regular exercises and drills and use lessons learned from drills to revise and update the plans.



School Mock Drill

### Actions by school authorities at school level

- Understand the importance of exercises and plan an exercise program for your School DEPR Plan, planning to run exercises of different kinds according to needs and objectives.
- Hold an orientation exercise for the Plan, familiarizing all members of the SDMC and other stakeholders about the Plan and their role in it.
- Plan a drill exercise, deciding on the particular hazard and scenario you will rehearse against. Prepared the scenario, with a write up on how the emergency will impact your school over time.
- Choose an objective to rehearse from the list of objectives in the section above on drills. Conduct the exercise based on that objective and response function.
- If the function you choose to rehearse is evacuation, follow the steps mentioned in the section on evacuation to draw up a specific evacuation map and procedures for your school, similar to the guidance given in the section on evacuation procedures. Display the map on your school notice board.
- At the planned hour and day, sound the alarm, ensure children practice and follow duck cover and hold, and after the end of the alarm ensure they do an orderly evacuation following procedures. At the assembly point do a headcount. Do a debrief with the assembled children and staff, and later a more systematic evaluation with the School DM committee to identify any improvements needed in the School DEPR plan.
- In the evacuation, pay special attention to needs of vulnerable children, including assigning a buddy.
- Use the checklist for teachers to prepare themselves, their students and communities to be ready for evacuation and emergency response as a way of keeping the plan up to date.
- Revise the plan after every drill and at least once a year.

## What are exercises and why are they important

As explained in Module 2.4, Myanmar's Natural Disaster Management Law, 2013, requires authorities at various levels to rehearse preparedness plans. Section 15 b) explains that these "preparatory measures... include... keeping the early warning systems, training for search and rescue and making rehearsal."

Exercises are activities that simulate a real life situation of an emergency or disaster so that an agency, is able to test and review procedures as per its disaster management plan. The objectives of conducting simulation exercises in schools are to:

- a. Educate and train staffs, teachers and students to react to emergency situations
- b. Build up courage and confidence in staffs, teachers and students
- c. For emergencies like earthquake & fire, which have a quick onset and hardly have any warning signs, protective action and evacuation must be practiced and rehears
- d. Apply life saving and rescue techniques by school staffs, teachers and senior students that they have learned during training to enable them to be life savers at the time of emergencies.
- e. Test the efficacy of School Disaster Emergency and Response Plan and improving it further so that it becomes more practical.
- f. To improve clarity and understanding of the roles and responsibilities of all stakeholders.

## How can we exercise a plan and what are different ways of doing it?

There are five types of exercises that can be done to rehearse a plan, namely Orientation, Table top, Drill, Functional and Full scale exercises. Each type has a different objective, a different level of complexity in planning and organizing and a different level of resources required.

An orientation (walk through) exercise is normally run as a workshop, putting people in the role they would play during an emergency response, or uses them as participants in demonstrating an activity. It familiarizes the players with their roles in a response and lay the foundation for a state of preparedness.

In a table-top exercise participants are presented with a simulated scenario by the exercise moderator that they discuss and formulate the appropriate response. As the exercise advances, supplementary problems and developments are introduced. It practices problem solving and coordination of services with or without time pressures. There is no deployment or actual use of equipment or resources.

In a drill exercise, usually focused on a single school, staff test procedures by physically handling specific equipment or performing a specific procedure or single operation, such as sounding the established warning system, performing orderly and safe evacuation, or first aid. The drill usually is a subset of a full-scale exercise, has a time frame and performance is evaluated in isolation.

The objective of a drill is one or two of the following :

- ( i ) To ensure everyone has read and understand new evacuation procedures;
- ( ii) To test how everyone reacts to a more specific hazard (like a predetermined blocked exit route),
- (iii) To determine people's ability to locate and operate fire extinguishers;
- (iv) To ensure everyone in the school premises can clearly hear the alarms;
- ( v) To discover if the staffs, teachers and students know the exit routes to take;
- (vi) To determine whether staff and teachers with special roles (in the case of an emergency) know what steps to take;
- (vii) To find out how long it takes to get everyone out of the building.

A functional exercise takes place in the school and requires participants to actually perform the functions of their roles. A normally complex response activity is simulated, which may require multiple response activities, including all three functions: warning, evacuation, & first aid, as well as rescue and response by fire services and local ambulance. It only lacks the people "on the ground".

A full-scale exercise ( 'field' exercise) includes the movement or deployment of people and resources to include physical response 'on the ground' to a simulated situation. Full scale exercises should be preceded by other types of exercises and are often the climax of a progressive exercise programme.

For functional and full scale exercises we may test several of the above objectives listed for drills.

### Guidance on how to do periodic drills

Lot of homework needs to be put in to prepare to conduct a drill exercise which may last only a few minutes. It is a participatory method to practice safety-related measures as per the plan. It may also include evacuation from the school building during an emergency situation.

For fire related evacuation mock drills, the fire-alarm is activated and building is evacuated as though a real fire had occurred. This is done in an orderly manner and under supervision of the class room teacher and school's evacuation task force, as per procedures laid down in the plan. Generally, the time it takes to evaluate is measured to ensure that it occurs within a reasonable length of time.

## Key procedures when doing evacuation drills

- Ensure that the total number of students leave the room after the headcount of the class.
- In the classroom all persons must line up, form a queue, and must gather at the outside assembly area or safe area. No one will run, turn back or shout. This is important to prevent panic and stampede.
- If there are injured students who are unable to leave on their own, the teacher should ask for help from others to take them out of the classroom.
- The class teacher must be the last to leave the room, and will walk together with the students.
- At the safe area, there will be a headcount. If any person is missing then the information must be given to the school administration, and Search and Rescue Team.
- The last to leave the premises should be the principal and senior staff. They can lock the valuables before leaving.
- If there is a need to evacuate outside the school premises, then get the help of traffic police, especially at junctions, to enable safe crossing of roads by the children.
- Take feedback from all participants for required amendments to the School Evacuation Plan.

## Guidance on how to ensure inclusion of vulnerable groups in School Evacuation exercises

At the start of each year, identify the children, teachers or staffs who have any special needs due to gender or disability. Arrange for special attention to be paid to them during evacuation, and later at the assembly point. If necessary designate one student as a buddy and an alternate in case the buddy is absent. Link this buddy to the overall warden in the school. Ensure her/his name is in the list of the evacuation Task force.

## Teachers Checklist for Drill Preparedness

### Teachers: Prepare yourselves

- School Emergency Evacuation Route map is posted in your room. On it mark your room clearly in a contrasting color. If you do not have one, please obtain it from the school office.
- Emergency Go-Bag or Go-Bucket Checklist, Emergency Notebook/Clipboard Checklists, and Student Comfort Kits Checklist are complete.
- All of these supplies are in place and are easily transportable for evacuation or field trips.
- Confirm what are your special duties. Get to know your buddies in neighboring classes. If your name is not on your emergency organization matrix, report to the disaster operations center.
- Check the location of your fire extinguisher & recall the acronym on its use : P.A.S.S. Pull the pin, Aim at the base of the fire, Squeeze the nozzle and Sweep at the base of the fire.



- Complete your Family Disaster Plan at home and with your own childcare providers. Please prepare yourself at home and at work if you are needed to stay longer than your scheduled day. The principal or designee will release staff members as the needs change. If you have extenuating circumstances discuss with your Principal NOW, not during an emergency.
- Plan a quiet activity that students can do in the assembly area in a real emergency or a drill.
- In case of disaster before or soon after the end of the school day, please be prepared to return to school to provide assistance to students.

### Teachers: Prepare your students

- Encourage your students to take all drills very seriously.
- Practice building evacuation with your classroom and with neighboring classroom. Make sure your students know the four rules for evacuation: Don't talk! Don't push! Don't run! Don't turn back! If there is an earthquake when they are out of class (during break or lunch or if they are somewhere), they should exit with the nearest class and should NOT go back inside. If they are between classes, they should assemble in the outdoor emergency assembly area with their next period class.
- Review the Emergency Evacuation Routes. Prepare four monitors who will work as buddies and lead the way, carefully checking to make sure that the route is clear.
- For classes on second floor or without easy access to open space outdoors, if you face earthquake risks, practice "Duck, Cover, and Hold" drill, having students hold their position for 45 seconds. You may count together: one-one hundred, two one-hundred, etc.
- Teachers in science labs should demonstrate to students how to extinguish any flames and isolate any hazardous materials in use.
- Make sure that students understand Emergency Student Release Procedures, that only their parent(s), guardian(s), or adult(s) listed on their Emergency Contacts Card will be allowed to pick them up from school in an emergency. Explain the "Request Gate"/ "Reunion Gate" reasons.

### Teachers and Students: Prepare your parents

- Teachers distribute drill announcements and parent letters to their students to take home.
- Confirm with parents that their Emergency Contact Form is up-to-date, and explain the importance of the reunification procedures.
- Reassure parents that their children will be safe at school until they arrive.

Source: School Disaster Management, Save the Children

## 2.7 Planning for Educational Continuity during emergencies and Psychosocial support .....

### Objective of this module

The objective of this module is to give guidance on Section 3 of the SDMP on how your school will plan to provide educational continuity during emergencies and help you prepare locations in the school campus or nearby vicinity, as well as guidance on instructional approaches. It also helps plan to provide children with psycho social support during these periods. It enables you to implement these aspects during an actual emergency.



ASSI Training

### Actions by school authorities at school level

- Recognise the adverse impact of educational disruption and the need for planning for educational continuity.
- Identify option for identifying Temporary Learning Spaces, deal with them and record in principle agreements reached in the plan.
- Plan on organising non formal education for children and youth.
- Identify options for adjusting schedules and modalities for learning by children.
- After considering innovations followed in other ASEAN countries, consider what you would need to do in context of Myanmar on alternative delivery methods.
- Develop the Section on educational continuity using the template in the section for inclusion in the School Disaster Management Plan.
- Recognise and provide for the special needs of vulnerable children.
- Plan to address psycho social support for children.
- If the school is to be used as emergency shelter, there must be a date fixed for early return.

### Template 1: for the Section 3 of the SDMP on planning Educational Continuity and Psychosocial support

#### 1. MAKE UP DAYS/HOURS

If school is disrupted for up to \_\_\_\_ days per school year, we can make up for school hours as follows (include shifts. etc.): (analyse for 2 scenarios of 24 and 120 hours , 3 days or 15 days)

Action

## 2. ALTERNATIVE SCHOOL LOCATION

If school is disrupted for up to \_\_\_\_\_ days per school year, we can hold classes in an alternative location. ( use same two scenrios )

Action

## 3. ALTERNATE MODES OF INSTRUCTION

How can we keep up with school work, accelerate learning, use peer-to-peer instruction?

Action

## 4. SURGE CAPACITY

Who can provide teaching and administrative support, if many staff are unable to work, or need help?

Action

## 5. PLANNING FOR SCHOOL CLEAN-UP (e.g., in event of flood)

Action

## 6. PLANNING FOR LIMITED USE OF SCHOOL AS TEMPORARY SHELTER

Is our school likely to be needed as a temporary shelter?

Yes  No  Maybe

For how long?

Do we have space set aside for this? Where?

What on-site supplies would be needed, and where will these come from?

How will we protect our school facilities, equipment and supplies?

Do we have rules for the use of our school, and how will they be respected?

## 7. TEMPORARY LEARNING FACILITY

What would we need in order to set up temporary learning facilities in case of prolonged lack of use of school facility?

Action

## 8. INCLUSION IN TEMPORARY LEARNING FACILITY

Pay special attention to needs of vulnerable groups including the protection for the girl child and children with disability, access to learning facilities, and assistance with to and for transportation/ support from home to school

Action

## 9. PSYCHOSOCIAL SUPPORT

What signs of distress do we see among our students? How do we set up debriefing conversations? What orientation do we as teachers require? Where do we refer students who need additional support?

Action

## Why educational continuity and psychosocial support during emergencies is important



Psychosocial support by playing

When schools become inaccessible or unavailable to student learning due to flooding, fire, and other security risks, or because they are used as emergency shelters for communities; alternative delivery modes (ADM) and methods of learning and teaching must be planned.

Restoring education for children, even in a temporary location, helps take the minds of children and parents off the trauma of the disaster, helps restore a sense of normalcy in the lives and a rhythm, in a disaster situation where many of the past known certainties of their life have changed. From a rights based approach, recognizing a child's right to quality education, the educational continuity program helps make up for lost time and learning, and helps compensate the loss of class time on a regular schedule. The emotional and psychosocial impacts of disasters and the needs of students after a traumatic disaster need to be recognized and addressed by providing appropriate psychosocial support.

### How do we establish temporary learning spaces?

A temporary learning space may be an existing building in your community, monastery, pagoda, or you may set up a tent or other temporary space where classes can be held. Where the school building is damaged, but there is a large enough campus, trying to keep the school within the campus using a temporary construction may be the easiest option. A temporary learning space should be: (i) safe and structurally sound, free of harmful objects or substances, and not vulnerable to hazards; (ii) close to the homes of most students; (iii) accessible to students with disabilities; (iv) have storage space for school supplies and food; (v) have access to water and sanitation facilities; (vi) within the budget of the school or education authority, or community using creative means to ensure that education continues.

Such child-friendly and safe spaces are the first response while formal education is being reactivated or established. Such spaces aim to protect and secure the well being of children and youth, giving them opportunity to come back to an away from home environment and often helping their care givers with much needed time to deal with other matters related to the home and the emergency and livelihood which have to be attended to. These spaces prepare children and youth to reenter the formal classroom, while also allowing them to participate in non formal learning activities. Children are organized in different age groups, ranging from young children to youth, with access to structured learning, play, sports, drama, arts, music, protection and psycho social support.

Often a school may become non operational because the facilities are being used as a community emergency shelter. If your school will be used as a disaster shelter, the School Board of Trustees and PTA must plan together with the Shelter Management Committee to agree how classes can be continued, while limiting the use of educational facilities as temporary emergency shelters for displaced people as an option of last resort, when there are no other possibilities. The negative impacts must be minimized by agreements reached between RRD, GAD and the TEO, on a date for returning the educational facility to its original function. This is one issue elaborated in module 2.9. This minimizes educational disruption, and families living in schools long after the emergency has occurred.

While resuming educational activities and instruction, we need to be flexible and adaptable doing

- Changes to class schedules, hours, shifts and annual timetables to meet the needs of particular groups of learners
- Alternate modes of delivery such as self study, distance learning, internet learning, and accelerated or catch up learning
- Child care services for young parents
- Access to other nearby functioning schools

Strategies to be followed when schools are used as emergency shelters include

- Setting aside classrooms during the day time where classes may continue to be held, while others are used to accommodate shelter temporary residents
- Protecting the school building, sanitation and water facilities, furniture and blackboards, and education materials from damage
- Providing a space for students to store their exercise books
- Arranging cleaning schedule of school sanitation facilities and environment
- Engaging parents and other community leaders staying in the shelter in the education program

## Good Practices Case Stories

Here are two examples of educational continuity in a post disaster situation, after a cyclone and flood in the Philippines.

### **Case Story (1) Philippines:** Binitayan Elementary School's Strategy for Continued Education

An elementary school in the Philippines served as an evacuation center for community members affected by the same typhoon Reming in 2006. The use of the school as temporary shelter for the evacuees was supposed to be for a month only but it was extended for several months. As soon as it was possible, the teachers decided to continue conducting classes so as not to totally disrupt the schooling of the children. The evacuees were requested to vacate the classrooms during the day and stay in the tents that were perched up in the school grounds so they could hold classes. They continued with this routine from November 2006 until February of the following year when all the evacuees were removed to temporary shelters in other barangays.

During those times, they opted to concentrate on teaching four major subject areas only—English, math, science and Filipino, or the Makabayan, plus character education. They also had to shorten the time allotment for each subject area in order to finish each day's lessons by lunchtime.

Despite the difficulties, the teachers managed to hold classes in the afternoons for the school children from the nearby Bañadero Elementary School. Some of these emergency classes were later on transferred to another school where the evacuees could be accommodated better. This also addressed the problem of overcrowding in the school premises.

The teachers and school staff cited the cooperation among the barangay officials and the evacuees as key to the continuation of classes in the midst of the adverse situation. The psychological intervention from the Department of Health (DOH), in cooperation with the local government units, also helped in enabling the teachers and the students to cope with the aftermath of the disaster. All teachers were taught how to help the students overcome the trauma of the experience through drawing exercises where students are asked to put into drawing what they experienced during the typhoon. This is a creative way of releasing fears felt during the disaster.



## Case Story (2) Philippines: J. Marquez Elementary School's Flexi-Curriculum Project after floods

The Flexi-curriculum Project of the J. Marquez Elementary School in Cotabato City in the Philippines is part of the Disaster Risk Reduction Management program of the school. It was an offshoot of Project BAKWET (Bigay Alalay sa Karunungan Wagi at Edukasyon para sa Taong Nangangailangan), which was developed at the time when disastrous floods severely affected the school and community. Classes were suspended indefinitely during those times and the school principal, together with his faculty and staff, developed a plan to continue holding classes despite the circumstances.

The flexi-curriculum program was designed to reach out to the learners and ensure that they still enjoy their right to education despite the emergency situation. The first step was to identify the school staff who would be available and to create committees to take charge of the different tasks needed to set up the program. They next conducted a campaign to track down students through radio announcements and house to house visit. Once they were able to round up students, the program was implemented and classes resumed within a reasonable period of time at the Mega Market in Cotabato City.

Other preventive measures identified in the strategic plan include regular conduct of DRRM seminar-workshops, drills and information dissemination in the classrooms. The school's DRRM project ensures that the students are not only safe during and after an emergency situation but also are able to gain access to education even while sheltered in evacuation centers. An important part of the curriculum is preparedness for natural and man-made disasters. The project also provides emotional support to displaced families through various interventions like management of trauma and other psychosocial problems.

"I think in spite of the difficulty of the children to go outside of their comfort zones, they still managed to attend the emergency classes at the Mega Market. In turn, I tried my best to make them feel safe and protected. I also reminded them of the earthquake and fire drills we did in the past, and re-oriented them on what to do in case of emergency or disaster.

"Even as we ourselves become victims of disasters, we teachers need to exhibit strength, maintain presence of mind and a positive attitude for the benefit of our pupils. To leave our homes in order to respond to the call of duty can be overwhelming. During the flood, it was also an effort on our part to leave our families behind so we can facilitate the flexi-curriculum classes at the Mega Market for almost a month. We all know that we were doing it for our common welfare, so it was important to support one another and work together towards recovery."

Teacher Merlina, J. Marquez Elementary School, Philippines

### Case Story (3) Myanmar: J. Marquez Elementary School's Flexi-Curriculum Project after floods

To discuss and share experience during cyclone Nargis 2008, cyclone Giri 2010 and 2015 flood and landslide in the whole country of Myanmar which destroyed schools and experienced utilizing school building for relief camp and monastery building for temporary learning center.

How do we provide psycho social support to young learners experiencing distress?



Psychosocial support by playing

Emotional and psychosocial impacts and needs of students after a traumatic disaster need to be recognized by teachers and addressed by providing appropriate psychosocial support to children inside and outside the class including using referral mechanism to provide additional support. Learners who have experienced distress need teaching within a predictable structure, using positive disciplinary methods and shorter learning periods to build concentration. All learners can be involved in cooperative recreational and learning activities. Appropriate teaching methods and content help give children increased self confidence and hope for the future. Teachers and other focal persons need to be ready to manage the different emotions of students by debriefing them. The following conversation script provides guidance in holding a debriefing session.

Tool : Conversational Guide for Debriefing

#### Opening

This event has shaken all of us. Let's take a little time to reflect on what has happened so we can come to terms with it. I'm going to ask some questions that will help us gradually process what happened. I would like you to let everyone have their own answers – no interrupting, arguing, or judging what anyone says.

## Objective Questions

Imagine you were a video camera recording what you have seen and heard happening since the first events.

- What actions, words, phrases, objects, and scenes are recorded in your tape?
- When did you first notice that a disaster was happening?

Let's get everything out – the first events, then everything that has happened since – so we all have as full a picture as possible of what has happened to this point. Be sure to give everyone a chance to contribute some of his or her experience.

## Reflective Questions

- What were your first reactions?
- What shocked or frightened you most about this incident?
- What images or previous experiences were triggered for you?
- How else did you find yourself reacting?

## Interpretative Questions

- What impact has this had on you personally? How are you different now?
- How are we different as a group or as a society as a result of these events?
- How has our view of the world changed?
- What might have been some contributing factors to why this happened?
- What might be some of the underlying issues behind all of this?
- What might we learn from this?

## Decisional Questions

- What can we do to deal with the situation in the short term?
- What are some things we can do to begin to deal with the underlying issues and prevent events like this from happening again?
- What can we do to help each other?

## Closing

We will undoubtedly continue to reflect on this. If you need help, please be sure to ask for it.

## Hints

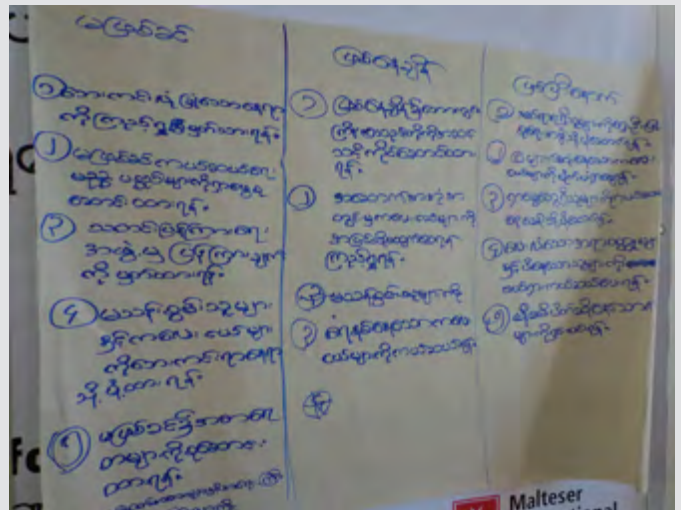
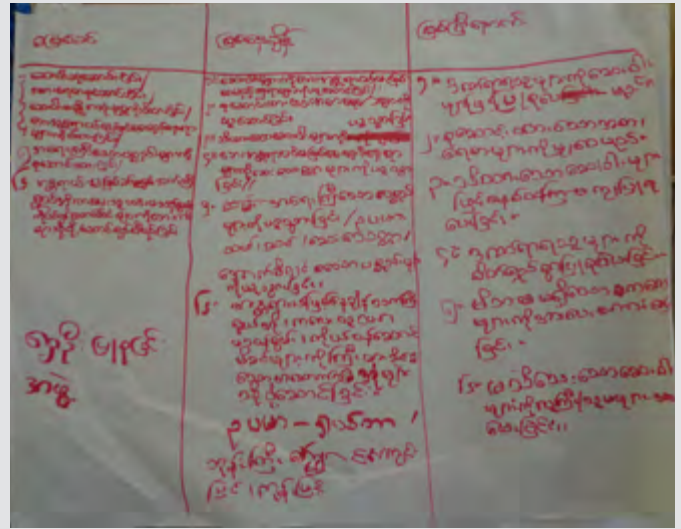
Some of these questions are difficult to answer, so if there are few spoken answers, don't worry. The very fact of raising these questions and following this flow allows deeper reflection later. It may be helpful to print out the questions for people to take with them for later reflection.

This conversation from the SEAMEO Toolkit where it has been adapted from a conversation in "The Art of Focused Conversation for Schools" by Jo Nelson

## 2.8 Developing and implementing the School Disaster Risk Reduction and DM Plan

### Objective of this module

The objective of this module is to help you use the Hazard, vulnerability, risk and capacity assessment (HVCA) developed in the module 2.3 to develop a Section on school disaster risk reduction which is the 4th Section of the school DM Plan, whose actions when implemented save lives and minimize impact through increasing safety of the school community and its facilities and assets.



Developing School Disaster Preparedness Plan



## Actions by school authorities at school level

- Within the overall concept of the School Disaster Management Plan and its four Sections explained in module 2.4, recognize that we will be focussing on developing the School Disaster Risk Reduction Plan.
- Convene a meeting of the School Disaster Management team and decide how the School Disaster DRR plan is to be developed.
- Discuss the suggested template and the examples, gather other school DRR plans, agree on whether any sections are to be added and who will take on the task of writing specific sections.
- Recognise that identifying DRR measures in the school is a contribution to the Ministry of Education DM Plan that the Ministry is required to prepare as per the DM Law 2013.
- Using the risks identified under the HVCA both in respect of the school and its surroundings, identify solutions.
- Plan on risk reduction measures under the four categories of structural safety, non structural safety, impact of local infrastructure and environmental safety.
- Assess which is the most viable, both in terms of cost, and how soon it can be done.
- Identify who has responsibility to get a task done and what is the deadline for implementation.
- Record the planned actions in the agreed template.
- Plan a annual program of public awareness raising among the students and school community.
- Once the entire plan is written, have a full meeting of the SDMC to review the draft, revise and finalise.
- For costly actions or those requiring time for implementation, make sure that proposals are developed for inclusion in the school improvement plan.
- Make sure that items requiring capital investment are included in school improvement plan for upcoming year.
- Review progress of implementation of the DRR Plan, including capital investments proposed, at least quarterly by the principal, once every six months by the PTA and at least once a year by the School Board of Trustees.

What is a School Disaster Risk Reduction (DRR) and why is it important?

Myanmar's Natural Disaster Management Law, 2013, defines natural disaster risk reduction as "measures to reduce short-term and long-term natural disaster risks for the preparedness and prevention against potential natural disasters or for the reduction of natural disaster risk and effective response during any natural disaster" (section 2 d of the Law)

Myanmar's recently enacted Natural Disaster Management Rules, 2015 encourage DRR activities to be considered as an underlying principle and DRR measures to be included in the national development plan, sector development plans, regional development plans for sustainable development. ( Rule 22) and allow Union Ministries, Region or State Government to prepare the long term and short term projects for the priority activities on disaster mitigation as sector and regional plans, for submission to the National Disaster Management Committee ( Rule 23). Applications of such projects are required to include : (a) the hazards and risks related to climate change in respective sectors and regional development plans, (b) disaster risk reduction measures to be undertaken, (c) the time frame, work-plan, the budget requirement and outcomes. Each Ministry is required to prepare its DM plan and submit it to the national committee through the Working Committee. ( Rule 13 (b))

Measures for prevention, mitigation, raising awareness of risks and preparedness measures and advocacy are key components of a School Disaster Risk Reduction Section of the SDMP that is developed by a school community based on the results of the comprehensive assessment of hazards, vulnerabilities and capacity that has been done using Module 2.3. The school disaster risk reduction plan you will develop and implement during this module covers the process of planning facility and campus safety, non structural and environmental safety, and capacity development, the systematic development of awareness of the school community and policies and procedures designed to:

- Ensure safety of students and staff from physical harm
- Inculcate culture of safety in all members of the school community
- Build the resilience of school infrastructure and assets

Template 2 : for Simple School Risk Reduction Section 4 of the SDMP

Risk	Location of Risk	Affected People/ Group	Activity to prepare for or Reduce Risk	Person (s) responsible	Resources required	Outcomes	Status

Template 3 : Sample of School in Nepal

Type of Problem	Description of problem	Action to be taken	When	Resources Required	Responsibility
Flood prone area	Low-lying area existing on the west side of the school that gets inundated during rainy season				
Topography	School buildings are located on mountain slope				
Others (please specify)					

Here is an example of a school DRR plan in located in Labutta township in Ayeyarwaddy region



#### Template 4 : Structural Problems within the school

Location of structural problem	Description of problem	Action to taken to reduce problem	Date by which action will be taken	Responsible person
School's wall and floor destroyed	Not make sure foundation	Can't able to perform by community		
School's pillar destroyed	Used inefficient woods	Can't able to perform by community		

#### Template 5 : Follow up activities based on the above discussion

Location of the problem	Description of the Problem	How to do it?	Update
School's wall, floor and pillar destroyed	Not make sure foundation, Used inefficient woods	Need to prepare by technician, The principal will request to TEO.	June 2015

#### Template 6 : Non-Structural Problems within the school

Location of non- structural problem	Description of problem	Action to take to reduce problem	Date by which action will be taken	Responsible person
Broken glass windows, no hinge, destroy desks	Windy, children are playing on the desk, playing football	Substitute new glass window, Prepare desk and exchange hinge	The end of February	Teachers and parents association
Damage water storage	Crack water storage	To patch water storage	The end of March 2016	Teachers and parents association

### Template 7 : Follow up activities based on the above discussion

Location of the problem	Description of the Problem	How to do it?	Update
Broken glass windows, no hinge, destroy desks	Windy, children are playing on the desk, playing football	Substitute new glass window, Prepare desk and exchange hinge(prohibit not to play on the desk and football in the class)	February

### Template 8 : Small Scale Mitigation Activities

Action Plan	Target Date	Responsible person	Necessary resources and expenditure	Performance procedure	Who can help	Priority
To build new school building	applying	Teachers and parent association	Teachers and parent association	New construction	NGOs, Government and Private donor	1
Fence	May 2015	Community Leader, Principle and SDMC	500 thousand, iron mesh and stone	Fence to the back side of school	Community	2
To repair school building 2	March 2015	Teachers and parent association, Community Leader and SDMC	1500 thousands, cements, Pillar and brick	Reconstruction	NGOs and community	3



Small scale Disaster Mitigation (Before)



Small Scale Disaster Mitigation (After)

## How do we reduce risks

The DRR plan to reduce vulnerability and risks will need to address 4 aspects of safety :

Structural safety – safety of buildings on or near the school site.

Non-structural safety – threats posed by building, furnishings, equipment & elements such as roofs, windows, stairs, heating and cooling systems, water storage, pipes, exit routes, fire safety.

Local infrastructure – lifeline utilities such as water, electricity, gas, communications & transportation.

Environmental safety – ambient conditions such as temperature, inundation, hazardous materials release, and climate change impacts.

## Do's and Don'ts and safety measures for all four types of risks

### 1. Structural safety and building upkeep and maintenance

While implementation of structural safety measures is beyond the scope of this toolkit, some guidance on what action a school head/principal can take will be covered by Module 4. School building maintenance is a critical component in ensuring structural and non-structural safety. Damage should be repaired as soon as discovered, and structural safety should not be compromised through alteration and misuse. Responsibility for this rests with local school administration.

Do not compromise columns or beams by cutting, exposing, or making holes in them.

Do not let reinforcing steel be exposed to air or moisture.

Cover exposed steel with concrete mortar.

Fix wood rot, cracked mortar, cracked bricks, and concrete damage.

Keep gutters and drainage systems clear of debris.

Make sure that water and moisture drains away from building.

Make sure that roof is securely fastened to the building and replace broken glass.

### 2. Non-structural safety

Non-structural safety measures are those that are not connected with the weight-bearing system of the building, and those that are in the hands of users. Some basic pointers on non structural safety, as well as fire prevention and readily available fire suppression equipment is covered.

All classroom doors, doors of high-occupancy rooms, and doors to outside open outwards. Classrooms have two exits where possible, sometimes second a window. Keep exit pathways clear. Fire extinguishers, suppression and control equipment are located appropriately, maintained in good working condition, regularly refilled and tested. Flammable and hazardous materials including trees and other combustible materials are limited, isolated, eliminated, and separated, away from dangerous interactions, electrical lines and appliances, heaters and stoves. Electrical systems are maintained & are not overloaded & detection and alarm systems are working. Mechanical, electrical, & civil structures are maintained and operated, in compliance with life & fire safety design criteria.

If your school faces earthquakes and cyclones: Note what can be done, who should do it, and when it should be completed.

Move heavy items below head level. Secure items that can kill or block exits (eg. heavy equipment, heating/cooling units, pipes, storage tanks, overhead lighting, bookshelves,). Tightly secure tall and heavy furniture and appliance to walls, floors and ceilings. (eg. Use L-brackets to walls or spring-loaded adjustable tension rods to ceiling or wedges under bottom front, or strip barrier fastened to tabletop, as appropriate) Fasten non-structural building elements and things can cause significant economic or cultural loss, cause injury, or impair educational continuity (eg. computers, audio-visual equipment, school awards, breakables, suspended ceilings.) are securely to the building Fasten cabinet doors and drawers with latches that will hold shut during shaking. Secure heaters & cooling systems suspended inside or outside of building & lighting fixtures to ceiling Fasten liquid propane gas tanks, Flammable liquids, fire extinguishers and gas cylinders to the wall. Protect from glass that may break into large shards (eg. rearrange furniture, use window film, curtains, or install strengthened glass.) Secure heavy & important electronic items to table top or floor using straps & clips, buckles or velcro. Fasten pictures on closed hooks. Limit, isolate, eliminate or secure hazardous (poison, flammable) materials.



Safety for Non-structural measures

And for floods:

Locate offices and classrooms above ground level. Create suspended shelving high up to store supplies and equipment during rainy season and raise important items above possible flood level. Use waterproof containers for storage. Limit, isolate, eliminate or secure hazardous (poison, flammable) materials above flood level. Construct flood protection measures if school buildings are located on a riverbank or in a flood-prone area. Create earthen or concrete flood barriers such as dikes, spurs and simple earthen dams at the school or at the source of the flooding. Flood water, especially fast-moving water, can damage a school site through erosion. Plantation helps to hold the soil in place and minimize erosion. If a school is built above the flood elevation but its access routes are not, children cannot attend school or escape in an emergency. Constructing elevated evacuation routes is essential to ensure that people are not trapped inside a school building or prevented from getting to it. Such routes can be constructed by dumping soil along the route and compacting it at a suitable slope.

### 3. Local infrastructure safety including transportation safety

Local infrastructure are water, electricity, gas, heating and cooling systems, communications and roads and transportation systems that function in the school area, usually part of larger systems maintained by government and private agencies. Careful design & problem-solving with these organizations, ahead of time, can protect students & educational assets, & make these systems resilient by:

- Relocate overhead wires and poles that may block exit routes
- Install automatic natural gas shut off valves at building level
- Use flexible connectors for pipes
- Consider dangers posed by overhead and underground pipes and depots
- Replace radioactive lightening rods with those that do not pose health risk

Transportation safety involves road and pedestrian crossing conditions, operations of school or contractor buses or minivans, cars, motorcycles and bicycles. On an annual basis, worldwide, transportation accidents are the leading cause of student deaths and injuries. Clear lines of sights and signage, stop sign, traffic lights, clearly marked pedestrian crosswalks, and crossing-guards at busy crossings are important safety measures. Vehicle safety, driver testing and training, and installation, maintenance, use of seat belts, adult supervision, rules of access and conduct, and careful routing are importance to ensure safe transport, boat transportation, or even planning for floating classrooms.

### 4. Environmental safety

Some of the environmental safety issues to explore to increase your own safety are

Table 14 : Environmental conditions and the solutions to explore

Conditions	Solutions to explore
Extreme weather during school year	school design, alternate locations, alternate delivery methods
Landslide	tree-planting, slope stabilization, retaining wall, evacuation routes
Forest fires	fire breaks
Tsunami	evacuation routes, stairs, ladder
Drought / Food insecurity	rainwater harvesting, school gardens, tree planting, food storage

Solid waste management	recycling point
Water and energy shortage and costs	water and energy conservation
Hazardous materials production or storage	community 'right-to-know', regular review of safety measures, facility tours and dialogues
Air pollution	walking and bicycling to school, car-pooling

## 2.9: Linking SDMC and SDMP to Village, Village Tract and Township level and to others

### Objective of this module

The objective of this module is to give guidance to the SDMC on how to link your Committee and School DM Plan with the village, VT and Township DM Committees and Plans, so as to better connect, share resources, link and cross reference each other's plans and where possible do exercises together. This is particularly important for the School Disaster and Emergency Preparedness Plan. This module helps the SDMC to link more closely to the Township and Village Tract Education Heads and Committees so as to provide receive guidance, direction and resources for implementation; as also for the SDMC to provide the VT and TEO with inputs, data, requests for resources, and examples of good practice to showcase. This module is also targeted at Township level officials, in particular the TEO, and provides them with guidance on how to develop a township DM program to promote School Disaster Management in her/his township by establishing SDMCs and School DM Plans in every school in the township.

### Actions by school authorities at school level

- Become familiar with the roles of Disaster management Bodies at the Region/State, Township, Village tract and village level and the statutory provisions with respect to each level s DM Bodies.
- Check and familiarize yourself as to whether your village, village tract and township has a disaster management committee, find out who is the chair and who are the members and establish contact with them on behalf of the School DM Committee,



- Find out whether the TEO is a member of the Township DM committee and whether he is member and/or chair of any of the sub committees. So too find out which teacher or school principal has been made a member of the VT DM committee. Establish contact with her /him. Finally check about the VDMC and who from the school is a member. If the school is not a member, offer the services of the school officials to serve as member.
- Find out the contacts of the Village Tract and Village Development support Committee. From the concerned member from your village or a neighboring village, and be ready to discuss with her/him how to best advance the agenda of school safety program and unmet needs of your School DM plan as part of the township program.
- Become familiar with your village and village tract disaster management plan. Understand its structure , content, and actions that need to be taken. Check its robustness against the provisions of the Guidance.
- Promote inclusion of your school and its DM plan into the village, village tract and township level DM Plan and arrange a discussion with the school management and concerned community representatives to address greater synchronizing of plans across sectors and between the Govt and the other stakeholders.
- Ensure the school is a recipient of early warning and is placed on alert from early stages.
- Consider feasibility of harmonizing across schedules, including of training for School/VT DMCs but let us keep it at least to inviting each other for meetings.
- Meet the TEO and understand his priorities and plans, share our plans and assess whether to participate in one new activity.
- Develop clear criteria to limit the temporary use of schools as temporary shelters, and make sure these criteria are incorporated into the relevant VT, and village DM plans as well as those of the schools.

#### Actions by education sector authorities at national, sub national and township levels

- Establish version of nationally prioritized program to address DRR and Comprehensive school safety in a wide percentages .
- Support the roll out of this toolkit and its use by every school in your township to start using this handbook to improve school safety.
- Engage with the Township Administrator, GAD and RRD to promote this toolkit and establish School DM Committees and prepare plan.
- Where the school already has a DM Committee and plan, benchmark the actions taken against the guidance from this toolkit and modify/improve your plan.
- Establish clear criteria to limit the temporary use of schools as temporary shelters, and make sure these criteria are incorporated into the relevant VT, and village DM plans as well as those of the schools.
- Support action at village tract level to establish a committee of principals to promote CSS.
- Develop the township level DM action plan to operationalise plans for school safety in every school in the township.
- Incorporate all school DRR plans and develop a township level DRR plan, and use for resource mobilization at the township plan. In addition, consolidate all school DRR inputs to school improvement plans into a township level education DM plan to be used and fed into the consolidated Township Education sector improvement plan.

## What are the roles and responsibilities of the Township Disaster Management Committees?

Myanmar's Natural Disaster Management Law, 2013, under section 7 (a) requires establishment of disaster management bodies at the region and state level headed by the Chief Minister. Section 8 (a) mandates the Region/State Governments "to form DM bodies in self-administered divisions/zones, districts, townships, wards and village tracts for effective implementation of disaster management".

The roles and responsibilities of the Township Disaster Management Committee are:

- *To design and deliver information & awareness campaign.*
- *To ensure early warning dissemination to masses and regular updates of the warnings.*
- *To identify and maintain relief camps in the state of readiness.*
- *To collect and regularly update disaster related data and information.*
- *To oversee evacuation of communities to temporary shelter in case of impending disaster.*
- *To provide facilitation in the evacuation of animals to safer places.*
- *To launch search and rescue operations, medical assistance and relief functions at the earliest possible time.*
- *To maintain law and order and security in affected areas.*
- *To make sure dead bodies are disposed of properly.*
- *To properly record damages and losses including photographs.*
- *To inform the higher authority promptly and immediately of the situations.*
- *To undertake rehabilitation and rebuilding.*



Learning how to link with Govt departments for disaster preparedness plan by playing game

Similar committees are also set up at the Village tract and Village level. Since the enactment of the Ward and Village Tract Administration Law of 2012, a new position of an elected ward/VT Administrator has been created, whose undertakes a variety of functions and duties are laid down in Section 7 of the law.

Disaster Management related responsibilities include protecting fire hazard and extinguishing fire (sect 13 (r)); carrying out the prevention, in advance of natural disasters such as fire-water, wind, and earthquake and the relief and resettlement works if struck by the 'natural disaster' (sect 13 (bb)); carrying out important and direct benefited work for local people with the approval of the township administrator if emergency situation arises due to the fall of calamities that: currently injured the interests of the public (sect 13 (cc)); and coordinating and assisting the functions and duties of department organization at the level of ward or village tract (sect 13 (dd)).

## Role of Education Authorities in the Township and VT DM Committees

As can be seen from the generic structure, the Township Education Officer (TEO) is a member of the TDMC, and is assigned in some cases as the chair of information sub-committee. At the village tract level, the primary school teacher is a member of the VTDMC. The membership of these education sector officials in the township and village tract committees gives the SDMC a good basis for linkage to and support from the Township and village tract DM committees.

## What are the Township, Village tract and Village Development Committee and Development Support Committees?

Townships have a planning committee chaired by the Township Administrator, and usually with a planning official from the Ministry of National Planning and Economic Development (MNPED), and a number of other appointed members. Townships also have a Township Development Committees comprising of Government Township officials (Agriculture, Forestry, Rural Development, Police, Planning, ect.), The respective terms of reference and membership of the Township Planning and Development committees need further clarification.

A new innovation since mid 2013 is the establishment of Township Development Support Committees (MaFaAhFa) which is a supplementary 8- 12 member committee of which 2 members each are to be selected from CSOs, Private Sector, Farmers and Workers from the township. 30% should be female representatives. Township Development Support Groups are to consist of a chair person, a secretary, a cashier and an auditor and executive members. These committees are meant to make sure that local residents provide some local perspectives to township officials who are on short term limited duration postings. The Main duties of Township Development Support Committees are (a) to supervise development activities in the respective townships in collaboration with organizations concerned; (b) to organize plenary meetings in the respective townships biennially; (c) to keep township development funds and issue them as per decisions made at township development plenary meetings; (d) to call for tenders and to make contracts as per prescribed standard procedures in procuring materials for the implementation of village projects in the respective townships; (e) to organize meetings associated with the implementation of village projects to form task forces to supervise respective assignments; (f) to solve problems arise during the implementation process of village projects to deal with grievances raised by people, (g) to write progress reports on development activities in the respective townships. The TDSCs have begun functioning only since mid 2014, and have a primarily consultative and advisory role, though occasionally there is an effort to transfer responsibility onto them to mobilize additional resources. Each township is now assigned a development fund of 1,000, 000 kyat to be spent by the TDC. Also the parliamentarian's fund is supposed to be spent on a project already included in the township development plan. The World Bank Community Driven Development (CDD) Project has specific interfaces with the township, village tract and village levels. The TDSC therefore represents an important access point for the citizens, civil society groups and NGOs to influence the workings and decisions of the TDC. In addition, at the Village tract level, there are VT Development Support Committees, with a similar composition as that of the TDSC.

Similar and clearer definition is available for the role and functions of the Village Development Support Groups (KaFaAhFa). These are to be formed consisting of (5) to (9) bonafide village representatives depending on the size of the village, 2 or 3 of whom should be female. Representatives are to be selected fairly during public meetings in areas of priority organized by civil societies so as to allow villagers to choose whoever they like freely. A person who is selected by ten-household heads (and hundred- household heads from village tracts) and approved by villagers and who gets majority votes should be selected as KaFaAhFa Representative.

### How can the School DM committees link to the Township, Village Tract and Village Development committee and Development Support committees?

As explained above, the TDSC represents an important access point for the citizens, civil society groups and NGOs to influence the workings and decisions of the TDC and could be used by the school DM committees as well to seek support for funding and implementation of activities developed in the School DM Plan. It will be extremely important in the context of Safe School Program implementation in Myanmar to establish direct communication at the national level with both the Government leads and the World Bank CDD project Task team leader of the project, to understand it better and explore informally the potential for collaboration, so that the Safe School Program in the Ministry of Education undertakes in a formal communication with relevant departments in the Government with a more informed understanding and makes specific proposals to seek budgetary support for the safe school program. It will be interesting in the context of Safe School Program and implementation of the School DM Plan to explore specific benefits of linking these three levels in an appropriate manner, so that DM plans can be seamlessly connected, and the unrealized mitigation projects from the village level plans can begin to access resources from the funds available at these levels. Further, it may be good to influence the guidelines for utilization of these funds so that they include the option of priority preparedness, risk reduction and adaptation projects at school level accessing such funds.

### How can the School DM Plan be well linked to the township, village tract and village Plans for improved preparedness and response, and resources and investments in Disaster risk reduction?

As explained above, School DM Committees are well placed to be linked to the Township, VT and Village Committees by virtue of the TEO and School teacher being members of the Township and Village Tract DM committees. So too, the school DM committee must be actively linked to the Village tract and Village Development Support committee, especially for seeking support of this Committee to raise resources for needed projects and activities needed in the School Disaster Management Plan. At the operational level, it is important that the Village and Village Tract and Township Disaster Management Plans have a section listing all schools in their jurisdiction, both as a piece of critical infrastructure of the community, as well as a facility that houses a group in need of care and protection. The School DM plans should be specifically mentioned in the village tract DM plans and as important resources, capacities and vulnerabilities in the HVCA analysis of the Village and village tract DM plan. Schools should also be listed as a critical facility to be notified with early warning, and as a place in need of special assistance in case evacuation is needed. Schools can be a special community focus, and a resource when conducting programs of public awareness, not just for the school but for the entire village and village tract community. So too, they are an important resource and hub when doing the planning of emergency exercises and rehearsals. Eventually, school and community drills should be seamlessly synchronized. Even when they are not, when rehearsing a community plan, the school is an important community resource and asset at which a part of the exercise should take place.

So too, at the school level, an active effort should be made by the school principal and the School Disaster Management committee to keep close links with the village and village tract DM Committee and plan. The VDMC and plan should be referenced in the school DM Plan. Any plans for exercising the school plan should be communicated to and coordinated with the VDMC. So too any exercise involving the village plan should be used by the schools to play its part in the scenario if appropriate. Training held for the SDMC should be extended to some members of the VDMC. So too the VDMC should be requested to invite the SDMC to any training of its committee members. Exercises to review the SDMC or VDMC should make an active effort to involve the other.

### How can the Education sector organize its disaster management activities at the township and village tract level?

School Disaster Management must become an established national priority of the Ministry of Education, and its region/state and other sub national offices, especially at the district and township levels. As we have seen in the preceding section, there is a lot that can be done by local school communities (including children and parents), working in collaboration with their disaster management counterparts in the village, in order to maintain safe learning environments and plan for educational continuity, conforming to national and international standards, which has been focused on in Modules 2.3 to 2.7.

What Region and State education departments, and Township Education Officers can do is to:

- Establish national, region/state and township level committee and fulltime focal point(s) leading comprehensive school safety efforts.
- Provide policies, guidance at region/ state, township and village tract levels as well as at the school-site level for and active effort at making school disaster management especially ongoing site-based assessment and planning, risk reduction, and response preparedness as part of normal school management and improvement.
- Establish, develop capacity, train, institutionalize, and support school DM committees in every school, with full participation of staff, students, parents and community stakeholders in this work. Encourage peer exchange and lateral learning exchanges among school committees within the township schools.
- Adapt standard operating procedures as needed and integrate in school DM plans, for hazards with and without warnings, including: drop @ cover and hold, building evacuation, evacuation to safe haven, shelter-in-place and lockdown, and safe family reunification.
- Engage schools in being recipients of early warning from DMH, RRD, GAD and the MRCA, so that they can take early action according to their school preparedness plan.
- Establish region/state and township preparedness plans for the education sector, as required by the DM Law, and ensure that all school DM committees have at least a minimum standard of preparedness achieved.
- Have township and village tract level plans across all schools in the VT, its neighbours, the whole township and its neighboring townships to support educational continuity in emergencies. Identify specific alternate locations for temporary learning spaces and alternate modes of instruction.
- Develop clear criteria to limit the temporary use of schools as temporary shelters, and make sure these criteria are incorporated into the relevant VT, and village DM plans as well as those of the schools.
- Incorporate the needs of pre-school and out-of-school children, children with disabilities, and both girls and boys.



- Link education sector and disaster management sector, and public safety policies and plans at each level of social organization (national, state/region, township, village tract, village and school site level) and establish communication and coordination linkages across sectors.
- Practice, critically evaluate, and improve on response preparedness, with regular school-wide and community-linked simulation drills. Adapt standard operating procedures to specific context of each school. Where possible and consistent with the scenario under testing, conduct similar or simultaneous drills in all schools covered by the scenario.
- Consider the possibility of establishing a state/region or at least township wide drill covering all schools.

**What is the role of the Township Education Officer (TEO), Township Education Management committee and committee of principals at village tract level in advancing comprehensive school safety in the schools in the township and village tract?**

Education Officer (TEO) and Township level Education Management Committee can help in establishing a township wide program on advancing comprehensive school safety in all the schools within the township. This can include helping each school to establish a school DM committee and a School DM Plan in every school, and having a program for each school to use this MoE toolkit to help establish and implement the program in each school. The township level program should encourage establishment of a group of SDMC members from different schools in the township who are willing to serve as facilitators and motivators to other schools wanting to start up or review their CSS program. The township program should also include a monitoring and reporting effort across all schools in the township on relative performance of each school. They can also consider instituting an award for the school SDMC with the best program for each academic year. At the village tract level, the Township Education Officer (TEO) should establish committee of principals to act as a village tract guidance and monitoring group to help implement the comprehensive school safety program in the schools under the village tract, as a part of the wider Township level CSS program.

**How can the Township Education improvement Plan incorporate actions needed to improve school safety**

We have already spoken about the need for the school DM Plan to feed into the School Improvement plan and for the School DRR Plan to have a complementary document indicating costs or equipment, programs and other recurrent costs associated with the CSS program. The Township Education office needs to consolidate all the school DRR plans and develop a township level DRR plan. This township level DRR plan should be used for resource mobilization at the township plan. In addition, all school DRR inputs to school improvement plans should also be forwarded to the township education office to consolidate into a township level educationDM plan to be used and fed into the consolidated Township Education sector improvement plan.

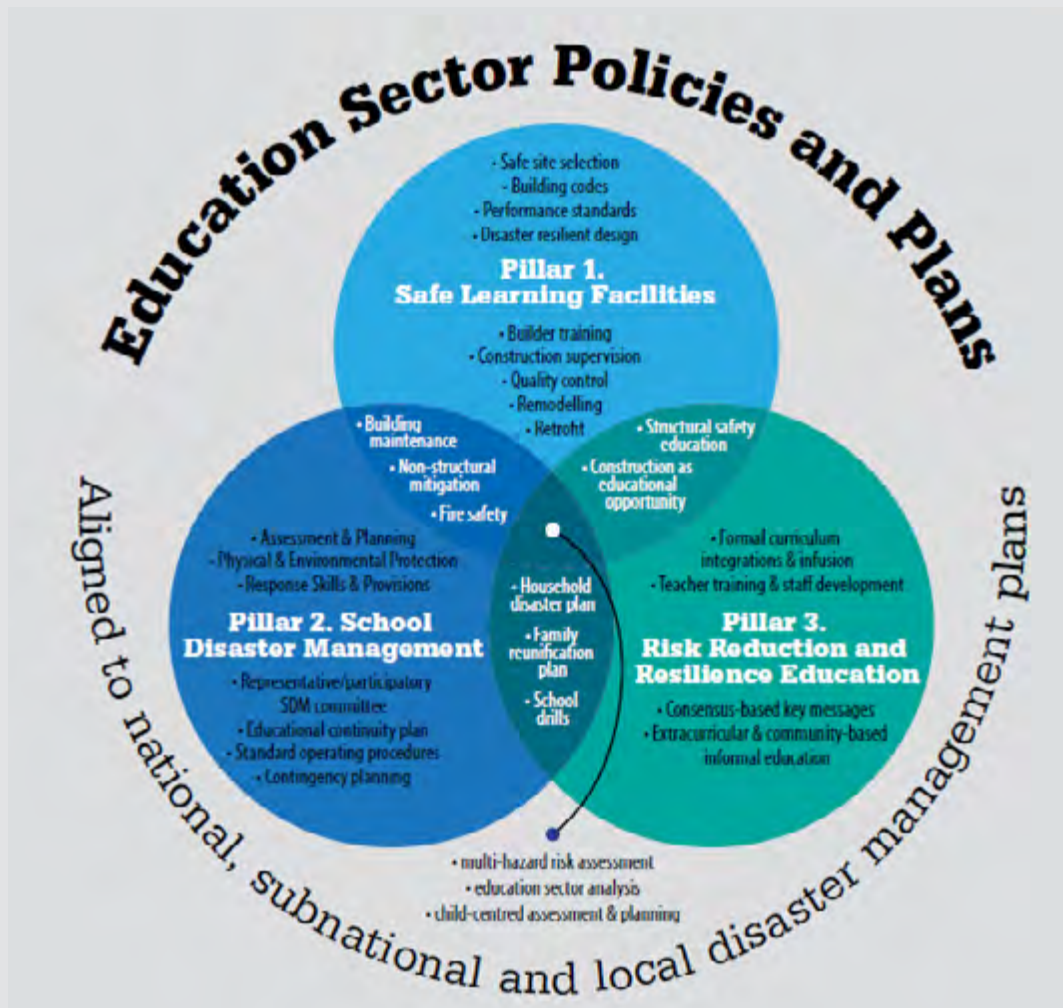
**How can the School DM committee be well linked to the Township and Village Tract Education Offices, Committees and Plans for improving preparedness and response, and resources and investments in Disaster risk reduction?**

School Principals and School DM Committees need to be well aware of the plans and programs of the Township Education office to have an education sector township DM plan and program to advance school safety. Based on this, they can plan at each school level how to best participate in and contribute to township wide activities. Similarly each school principal and senior teacher who is member of the SDMC must play an active role in the committee of principals for school safety at the village tract level.



# Module ( 3)

## Pillar 3: Risk Reduction and Resilience Education



School Based DRR awareness training

### 3.1: Teaching DRR in Classroom under different subjects of the curriculum

#### Objective of this module

The objective of this module is to give the school principal and teachers a chance to review how teachers in your school teach those modules on DRR that are already included in the curriculum. It particularly draws on the current DPRE resource pack and explain the links in using this material in teaching these modules. It will also draw attention to other DRR public awareness material available in Myanmar that can be used to strengthen classroom learning. As the curriculum expands in scope to cover more DRR, it is expected that this module will be modified.

#### Actions by school authorities at school level

- Recognise which of the subjects are being taught at your school and which teachers are teaching these subjects.
- Check whether they have received training in delivering the modules under the 4 subjects under the middle and upper secondary classes. So too, look at lesson plans for teaching under life skills subject under 4 different grades. If none exist, encourage the teachers to prepare one. Collect their lessons plans for the DRR modules under both subjects and life skills subject.
- Have other senior teachers of the school review the lessons plans and give suggestions for improvements. Look at the format used in the Philippines lesson exemplar as one example, and those used by other teachers in schools in Myanmar as similar basis. Improvements should focus on making the teaching and learning interactive, experiential and participatory, if it is to bring this knowledge to practical application, and reinforce the importance of practicing skills during school preparedness planning activities, and community level disaster management planning.
- Teaching should emphasis the reality of disasters in Myanmar and the practical value of learning both knowledge and skills that have direct practical value.
- Check availability of the DPRE Resource pack in your school and the familiarity of the teachers with the resource pack and the materials under it, particularly those under part 4 related to the teaching and learning materials.
- Check availability of the MoE UNESCO activity book for children for use by students, or at least check the availability of a single copy with one of the teachers or in the school library.
- Identify material from the resource pack and activities under the activity plan which can be included in the revised lesson plan.
- Have a senior teacher and another fellow teacher present when this module is taught in class so that teachers can suggest improvements.
- Look at practical ways to assess students learning, in addition to classroom quizzes and exams. Recognize and reward good learning.
- Plan on improving teachers training, both by sending teachers for specialized training on DRR and its instruction, as well as by holding a refresher course in the school.
- Contribute innovative examples of teaching to the curriculum development section in MoE and also to the DPRE WG so that good practices can be included in the next revision of this toolkit.

## Why do we need to teach DRR in the curriculum

The Hyogo Framework for Action (HFA), the globally agreed road map from 2005 to 2015 to build the resilience of nations and communities to disasters identified the “use of knowledge, innovation and education to build a culture of safety at all levels” as one of the five priorities for action. ‘Inclusion of disaster risk reduction knowledge in relevant sections of the school curriculum at all levels’ was one of the key indicators of progress of this priority action. The new Sendai Framework of Disaster Risk Reduction (SFDRR) calls for incorporation of disaster risk knowledge, in formal and non formal education.( Section 24(I))

Disaster risk reduction education builds students understanding of the causes, nature and effects of hazards, while also inculcating a range of capacities and skills to contribute proactively to the prevention and mitigation of hazards, while enabling them and their families be better prepared to face the consequences of disasters when they happen. This knowledge can only be used if it is accompanied by a set of values to be proactive, and be responsible and responsive when their communities, families and they themselves are at risk from disasters. When done well, good DRR education helps build children who will be proactive in protecting themselves, their families, and community members from disasters they face, actively lead school and community disaster preparedness and awareness raising activities, and eventually grow up to be well rounded and responsible citizens, capable of self protection and leading community preparedness.

**Table 1 : Elements of DRR in the curriculum in Myanmar**

DRR related lessons in the formal Lower and upper secondary school curriculum are as follows:

Grade and Subject	Topic	Disaster (Causes, types, etc)	Preparedness (Before disaster: planning, mapping, mock drills etc.	Response (During disaster: rescue, relief work, etc. )	Recovery (After disaster: reconstruction, psycho-social support, etc.)	Focus (schools, individual students, families or communities)
Grade 6: General Science	Thunder/ Lightning (Electrical charge)	√				Students
Grade 8: General Science	Storms	√	Tips on precautions			Students
Grade 10: English	Earthquakes	√				Students
Grade 11: Geography	Earthquakes, tsunamis, volcanic eruptions	√				Students

Following Cyclone Nargis in 2008, the Ministry of Education, supported by partner UN Agencies and International NGOs undertook a needs assessment involving head teachers, teachers, students and communities and identified that more practical aspects of DRR should be integrated within the life skills subject of the curriculum under a strand called “Environment and sanitation”.

**Table 2 : Life skills subjects- content and analysis of curriculum**

Grade and Subject	Topic	Disaster (Causes, types, etc)	Preparedness (Before disaster: planning, mapping, mock drills etc.	Response (During disaster: rescue, relief work, etc. )	Recovery (After disaster: reconstruction, psycho-social support, etc.)	Focus (schools, individual students, families or communities)
Grade 5	Caution in Emergency	√	Tips on precautions			Students
Grade 6	Emergency! It is flooding!	√	√	√	√	Students & family
Grade 7	Disaster Preparedness	√	√	√	√	Students & family
Grade 8	Earthquakes, landslides	√	√	√	√	Students & family
	Safety in case of fire	√	√	√	√	Students & family
	Conservation	√	√	√	√	Students & family

### Guidance on how to teach DRR in the classroom

Teachers can use supplementary learning support material as learning aids in a classroom setting. Examples from the Philippines and the DPRE resource pack and other innovations in Myanmar are given in this module. Ideas on how to teach locally relevant material based on hazards faced by a particular geographic area are covered in module 3.2, and for extracurricular learning and activities in module 3.3.

## Tools for facilitating learning used in the Philippines

Instructional materials for conveying DRR messages and concepts should be packaged in an attractive manner, and structured in a way that engages the learners. The Department of Education in the Philippines, prepared lessons exemplars on disaster risk reduction for a number of subjects to provide guidance to teachers on content, methodology and assessment. For example contained in the lesson exemplars are strategies and methods of teaching disaster risk reduction through modules on natural hazards in Science and in Araling Panlipunan (Social Studies) for Grade 7 (First Year High School), which cover 8 hazards relevant to the Philippines, namely Climate Change, Heat Wave, Fire, Landslide, Tsunami, Flooding, Tropical Cyclone and Tornado.

The lesson exemplars guide the teachers on the main hazards, subject matter, and DRR ideas that should be conveyed to the students, as well as the strategy of delivery, viz. motivation, activities, analysis, abstraction, and application, and evaluating the learning by the students. The full text of this lesson exemplar is available at

[http://www.rccdm.net/index.php?option=com\\_docman&task=doc\\_view&Itemid=215&gid=80](http://www.rccdm.net/index.php?option=com_docman&task=doc_view&Itemid=215&gid=80)

The 5 strategies of delivery and evaluation used to improve understanding on fire are:

### Motivation

Students are asked to share newspaper clippings on fire incidents. Those who have personal experience or close encounter with fire may also be asked to share in class.

Question: How would you feel if you were one of the victims of a fire?

### Activity

Film viewing (if no film is available, use newspaper clippings as bases for the discussion)

Guide Questions:

1. What caused the fire?
2. Describe the damages caused by the fire.
3. List down possible impacts of fire on the lives of the victims.
4. What are the different ways of preventing fire?

### Analysis

Have you observed peoples' reactions during fire in your place? How did they react to the incident? Describe the scenario. If you have not witnessed one, listen to your classmate who has experienced fire in the community. Considering the damages as a result of fire, how does it affect the economic condition of the family, and the lives and properties of the victims? Are there means to control/prevent fire?

### Abstraction

Are you now convinced that we have to prevent fire? If yes, then what commitment can you give/share in your school, and in your community?



## Application

What can you personally do to prevent the occurrence of fire in your homes?

During fire drills, what will you do in order that everybody will be active in joining the activity?

## Evaluation

Answer the following questions:

1. Explain the nature of fire.
2. What are the major causes of fire?
3. Suggest ways on how you can prevent fire in your home and school.

## Closure

Life skills learned:

- fire and its causes
- how to prevent fire

## Resources for teaching in Myanmar especially the DPRE WG Resource pack on DRR

The Disaster Preparedness and Response Education sub Working Group (DPRE WG under the Education Thematic Working Group which is co-chaired by Save the Children and UNICEF. The DPRE WG is co chaired by UNESCO and Plan International, and comprises 20 member agencies. The MoE is the Honorary Chair of the DPRE WG. A key specific objective of the DPRE WG is to support the Government of Myanmar in developing resource materials and best practices on DRR in Education relevant to Myanmar, and sharing information on disaster risk reduction among members. The DPRE resource pack was first developed by MoE and Save the Children in early 2009, gathers key materials developed by MoE as well as NGO resources and pamphlets on DRR, was distributed to schools in May 2009 for the first time. The resource pack was later revised and updated by UNESCO and Plan in partnership with MoE in September 2009, and re-printed a third time by UNICEF and RCC in 2010 and distributed once again to schools. The DPRE resource pack covers the following :

- Risk assessment
- Individual school disaster management plans
- Drills and practices
- Teaching and learning materials
- Recovery and support



1<sup>st</sup> Edition  
SC



2<sup>nd</sup> Edition  
UNESCO



3<sup>rd</sup> Edition  
RCC

Resource Pack from DPRE Working Group



The teaching and learning materials component of the resource pack were developed to support teachers in classroom instruction of the lessons under both the regular curriculum and the life skills subject. A related key resource is the Myanmar language version of the student activity booklet entitled “Let’s be prepared for disasters” developed by Ministry of Education, in partnership with UNESCO, and published by MoE, UNESCO and Plan, which has a range of complementary activities that can also be used in conjunction with classroom teaching, explained in more detail in module 3.3.

**Table 3 : The Teaching and Learning materials from the DPRE resource pack (Part 4) are**

Sr	Title	Type	p
1	<ul style="list-style-type: none"> <li>• Be aware of disasters</li> <li>• Let’s protect our village against natural disasters!</li> <li>• Natural disaster: When it occurs ...what to do?</li> </ul>	Posters +User Guide in DPRE Manual Book	
2	Learn about Cyclones	DPRE Manual Book	
3	Let’s Learn to Prevent Disasters	DPRE Manual Book	
4	Three Easy Questions on Tsunami	Chart +User Guide in DPRE Manual Book	
5	Risk Assessment Concept and Activity	DPRE Manual Book (see Part 1, Serial No. 2)	
6	Disaster Management for Children	DPRE Manual Book (see Part 3, Serial No. 1)	
7	Flood Safety	DPRE Manual Book (see Part 3, Serial No. 3)	
8	<ul style="list-style-type: none"> <li>• Reading Card 1- Storms</li> <li>• Reading Card 2- Earthquakes</li> <li>• Card 3- What is tsunami? ; Let’s be prepared!</li> </ul>	Reading Cards (EFA Secretariat)	
9	Community Based Disaster Management	Pamphlet (World Vision)	
10	Fire prevention	Pamphlet (World Vision)	
11	Be Prepared!	Illustrated Booklet	
	Note- See ‘Be Prepared!’ booklet that is available in school.		
12	Caution in Emergencies	Grade 5 Life Skills - Teacher’s Guide	
	Note- See Grade 5 Life Skills - Teacher’s Guide (pp. – 60-65) that is available in school.		

In addition, a number of pamphlets containing broad DRR messages have been developed and distributed by MoE to all schools over the years with support from UNESCO, Plan, UNDP, Oxfam, SeedsAsia, CARE and UNICEF, etc. The DPRE resource pack is under revision. A current version of the DPRE resource pack will be given to each school participating in the piloting of this toolkit. Once the toolkit and resource pack revisions are complete, both will be made available to each school.

## Capacity Building of Teachers

A key element of successful learning on DRR by students is the training of teachers and other education personnel on how they will teach DRR as part of the curriculum to promote the learners' physical and emotional well-being and ensure that instruction is learner-centered, participatory and inclusive. They should also receive periodic, relevant and structured training according to their needs and circumstances.



Safe School Training for Education Officials

The following checklist on Key Features of DRR Teacher Professional Development helps assess the readiness of a teacher to teach DRR as part of the school curriculum.

- Is a DRR handbook or manual available to teachers? Does the handbook offer guidance on both DRR lesson content and the facilitation of interactive learning?
- Is DRR teacher training made available covering both DRR content & practice in interactive learning?
- Is post-training after care made available to teachers in the form of trainer visits to schools, follow-up sharing sessions and structured co-evaluation of lesson facilitation?
- Is intermediate and advanced training to hone the professional skills of teacher made available?
- Is DRR teacher guidance available on a website or through a practical professional journal?
- Are principals trained in DRR curriculum and in the leadership of DRR development in their schools?
- Are school inspectors and local school system administrators familiar with DRR curriculum initiatives through training sessions so they are best placed to support in-school curriculum development?
- Is inter-sectoral training in DRR made available so that teachers, media personnel and others can reinforce DRR messages in formal, non-formal and informal learning settings?
- Is initial teacher training in DRR teaching and learning available?
- In university based in services professional development in DRR education available?

Source: Disaster Risk Reduction in School Curricula: Case Studies from Thirty Countries, UNESCO, UNICEF and SEAMEO toolkit

Recognizing that many elements of the above are not present in Myanmar, points to the need to work closely with the Teachers Training and Education Department off the Ministry in addressing this need. For successful learning by students it is also important that parents and community leaders understand and accept the learning content and teaching methods used. A program to educate parents and key community members on what is being taught in schools also needs to be planned.

### Assessment of learning outcomes by students

A key part of successful teaching and learning by students is to use appropriate methods to evaluate and validate learning outcomes. INEE recommends that continuous assessment of learners' progress towards established objectives inform teaching methods; learners' achievements are recognized and credits or course completion documents provided accordingly and that assessment and evaluation methods are fair, reliable, and non-threatening to learners and relevant to their future educational and economic needs.

Following is a suggested checklist that outlines the key features of a DRR students learning assessment.

- Is there summative assessment of students' DRR learning? Is there also ongoing formative assessment of their DRR learning?
- Is portfolio assessment of student DRR learning in place, drawing upon and bringing together a range of assessment modalities?
- Is equal assessment space given to DRR-related skills and attitudinal development as to acquisition of knowledge and understanding?
- Is assessment an interesting and welcomed aspect of student learning?
- Does the teacher feed learning from assessment into lesson revision and classroom facilitation?

Source: Disaster Risk Reduction in School Curricula: Case Studies from Thirty Countries, UNESCO, UNICEF.

### 3.2: Teaching locally relevant safety information under local content of curriculum



#### Objective of this module

The objective of this module is to give the school principal and teachers guidance on how to develop and deliver local content while teaching on DRR under the section of the curriculum that encourages teaching of local content.

#### Actions by school authorities at school level

- Understand the importance of teaching locally specific and relevant content to students in your school.
- Understand the emerging guidance on use of locally relevant content in curriculum and how it can be applied to DRR education.
- Appreciate the value and importance of local content curriculum in a culturally and geographically diverse country like Indonesia which is also prone to multiple hazards.
- Recognise the variations in hazards, their severity and exposure to them in diverse regions/states and townships in Myanmar and have a preliminary appreciation of which hazards affect which states/regions.
- Be aware of resources on local hazard, vulnerability and risk information and on local DM arrangement and early warning sources for sharing with students.
- Use exercises from student activity book to carry out group based learning on rainfall. Local hazards in surroundings and emergency response and support facilities.
- Understand local and indigenous knowledge in disasters and find out examples from your local areas, involving students in this exercise.

## Why does Myanmar encourage local relevant content in the curriculum

Myanmar's Education law and policy recognizes the need for a curriculum that gives freedom to every region and state to develop the curriculum for that region, and that curriculum should be connected to practical life and have the ability to raise each ethnic group's rich literature, culture, arts, traditions and historical heritage. There is also a recognition of the need for instruction and preservation of local, native and ethnic languages.

Local Content Curriculum (LCC) or school-based school curriculum for primary and secondary schools is adopted in many ASEAN countries and provides a significant level of independence and flexibility for schools. Under LCC, schools are able to adopt their own learning materials and tailor-fit their curriculum based on their school's disaster situation, needs or risks. LCC suits schools that are located in disaster-prone areas.

## Variations in hazards, vulnerabilities and exposure in different regions/states and townships in Myanmar as one content for local curriculum

There is a significant variation in hazard exposure across the states /regions and townships and it important and relevant to understand the specific exposure which your school is exposed to. One indicator of the comparative risk is the multi hazard risk level mapping developed by UNICEF (2014) as follows:

**Table 4 : Multi Hazard Risk Level of Myanmar's regions and states**

Rank	Region/State	Hazard level	Hazard Range
1	Rakhine	Highest	8.28
2	Ayeyarwaddy	Highest	7.01
3	Sagaing	High	6.81
4	Yangon	High	6.19
5	Mandalay	High	5.46
6	Magway	Medium	5.43
7	Bago	Medium	5.35
8	Kayin	Low	4.86
9	Kachin	Low	4.56
10	Chin	Low	4.53
11	Shan	Low	4.21
12	Mon	Low	4.14
13	Tanintharyi	Low	4.08
14	Kayah	Low	4.07

Source : UNICEF Child Centred Assessment (2015)

This risk level and rating of each state and region confirms the high hazard vulnerability of Rakhine state and Ayeyarwaddy region stemming from their extreme exposure to cyclone, storm surge, flood and tsunami risk. Sagaing, Yangon and Mandalay, three of the most populated and urbanized regions of Myanmar, also rank high in terms of hazard risk due to their location on or close to an active seismic fault line and their exposure to droughts (Sagaing and Mandalay) and tropical storms (Yangon). Magway and Bago display medium levels of hazard risk with their vulnerability to earthquakes, floods (Bago) and droughts (Magway). The other regions and states of the country namely Kayin, Kachin, Chin, Shan, Mon, Tanintharyi and Kayah all have comparable levels of hazard risk, which are substantially lower than those of Rakhine and Ayeyarwaddy.

This differential pattern of risk is presented here to make school authorities and teachers aware of the different levels of risk that each geographic region phases and draw attention to the need for teaching about locally specific disaster risk to students. National hazard maps for all different hazards are available in the hazard profile and the UNICEF CCRA. More detailed multi hazard risk analysis has been done for Ayeyarwaddy and Yangon regions in the Delta and for Rakhine state. Material for the region/state, district and township will have to be sources from Govt, UN and professional associations (MES and MGS).

### What are the possible contents of locally relevant curriculum in Myanmar related to safety, disaster preparedness and DRR and to the local DM system

Locally relevant curriculum should cover contents on specific disaster preparedness measures related to locally specific hazards. For example, preparedness and protection to cyclones and storm surges will have to be taught to all coastal area townships and have specific relevance to student and community safety. While classroom lessons on cyclones may be given in other inland states and regions it is more of knowledge than specific relevant life saving skills and knowledge.

So too, information must be given to students on the local system for disaster management, including early warnings for hazards, emergency services and arrangements and the school and village and village tract DM committees.

One way to infuse active learning approaches into locally relevant disaster related learning is to do small school based activities. The first activity in the student activity book entitled "It's raining, it's pouring" which gives guidance to teachers and student on how to set up a rain gauge and measure the amount of rainfall each day, especially during the peak rainy season. Guidance is given to displaying the results on a graph in the classroom. It is also a good idea to keep these charts over several years and compare rainfall from year to year. So too the two exercises 4 – "Map your risks" and 5- "Help next door" guide students on gathering, compiling and displaying information on everyday threats to safety that they face, and sources of help in an emergency. These exercises are a good complement to the classroom teaching on local disaster management arrangements.

Information gathering of good practices and experience on Local and Indigenous Knowledge (LINK) on DP/DRR in Myanmar was done in the context of IDDR day 2015. However, local students can be told about these examples and asked to talk to their families and communities of similar experiences and examples from their own villages. These can be compiled, and cases written up on charts as a project, to share with others in the schools and other schools in the vicinity. Gathering information on local and indigenous knowledge and harnessing it is important to us in building the case for preparedness and protection based on local and experienced wisdom and knowledge.



### 3.3: Developing DP/DRR concepts and skills through extracurricular activity

#### Objective of this module

Recognising that disaster management is a subject with practical relevance and significance for everyday life and is best learnt through experiential learning, the objective of this module is to give school teachers review of extra-curricular activities and games that can be used to supplement class room teaching and reinforce learning through practical learning by doing activities.

#### Actions by school authorities at school level

- Identify subjects being taught that will benefit from practical extra curricular activity as well as those skills that need to be reinforced by practical activity outside the classroom.
- Recognize that having additional activity around what is being taught will increase the retention by the students to make safety a habit.
- Select activities from among the list provided: printed materials, educational supplements, performing arts, games and plan on using them in the classroom.
- Prepare well the material needed to conduct each activity.
- Use materials available in the DPRE Resource Pack particularly pamphlets and booklets on risk assessment and school disaster preparedness.
- Use materials in the student activity book as is, and creatively adapt to develop and use similar exercises.
- Consider establishing after school club on disaster preparedness or link it up with the environment club.
- Conduct some activities as school wide inter class competitions (play or group song) or individual competitions (essay, drawing, speaking, poster making).
- Plan and organize for an annual community oriented exhibition and performance in the school.
- Involve parents and local community by organizing displays of student created material.
- Plan community campaigns linked to the HVCA activities and links with the village DM plans and drills. Forge a practical connection with the VDMC and the Village disaster management plan in this manner.
- Evaluate all activities and plan similar or enhanced activities in the coming academic year.



School Based DRR awareness program

## Why is extra-curricular activity important especially for disaster management

DRR needs to be taught by approaches that bring knowledge to life, practice skills, challenge attitudes and scrutinize values. It needs to be active, interactive, experiential and participatory. Knowledge can be learnt from books but if it is to be understood and internalized it needs to be tested in real life situations. Skills need to be practised if they are to be honed (one would not trust the driver who had learned to drive from a book). Attitudes and values are developed when they are challenged, tested and rethought through dialogue and debate.

These are considerations that lie behind the interactive and experiential learning approaches called for in this module. If the message of DRR education is that students should be ready to actively engage in preparing for and facing potential disaster, then the medium through which they learn should be one of active engagement. The curriculum's themes and topics are by no means the whole message received by the students; they are complemented (or detracted from) by way the learning process is structured. A curriculum that calls students to action while they listen in a passive and sedentary manner will be received as incongruent. On the other hand, a curriculum that calls students to action by having them actively participate in learning has a potentially catalytic and enabling impact.

## What are ways that can be used to creatively supplement our teaching of DRR in the classroom

Engaging students in extra-curricular activities can supplement the learning gained inside the classroom. Opportunities for hands-on learning both in and out of the classroom are a sure way of making children understand, appreciate, practice and retain DRR information. This can be done during a spare hour when bad weather does not allow students to go outside, or during specially provided slots in the timetable. This can take many forms, offering fun and engaging ways to introduce important knowledge, skills and competencies for students of all ages.



Peer to Peer Learning of DRR in Classroom

Dissemination of written materials: uses of posters, guidelines, flyers, brochures, booklets, activity books, paper models, coloring books, assembly kits and teacher resources are important ways to share disaster risk reduction messages.

Creative educational materials: whether toys and games, documentary and short videos, storybooks, comic books and puzzles also can be creative ways to transmit awareness and knowledge.

Games— card games, board games, cooperative, activities role play, generate interest and enthusiasm in learning and can be fun ways to communicate messages. The Riskland board game is one well used resource in Myanmar.



Learning DRR process from Risk Land Game

## Resources on how to conduct extracurricular learning on risk assessment, school disaster preparedness and mock drills

A practical and participatory way to learn is to promote involvement and learning of children is to engage them in developing and improving your school disaster management plan. These can be in the following three ways

- action-oriented research on hazard, vulnerability and capacity assessment
- disaster management planning
- monitoring and improving on plans through drills and simulations

The DPRE Resource pack has a number of resources materials that can be used for the above three areas, which are useful practical ways to learn in a relevant and practical context how disaster management actually works.



The 7 Modules of DRR in Education Training Module (DPREWG)

Table 5 : Risk Assessment – Part (1)

Sr	Title	Type	p
1	Basic Knowledge of Disaster Preparedness Response Education	DPRE Manual Book	
2	Risk Assessment Concept and Activity	DPRE Manual Book	
3	Disaster Risk assessment in School or Educational Institute	DPRE Manual Book	
4	Suggested Guidelines on School Disaster (Preparedness and Response) Planning	DPRE Manual Book	

Table 6 : School Disaster Preparedness and Response Plans – Part (2)

Sr	Title	Type	p
1	School Disaster Preparedness and Response Plans (Examples)	DPRE Manual Book	
2	School Disaster Preparedness Checklist	DPRE Manual Book	

Table 7 : Mock Drills for School Disaster Preparedness – Part (3)

Sr	Title	Type	p
1	Disaster Management for Children	DPRE Manual Book	
2	Earthquake Drill	DPRE Manual Book	
3	Flood Safety	DPRE Manual Book	
4	How to Do a Fire Drill in School	DPRE Manual Book	

Table 8 : Recovery and Support – Part (5)

Sr	Title	Type	p
1	Helping children recover from natural disasters	Pamphlet (Save the Children)	
2	Psychosocial Support on Disaster Aspects	Pamphlet (Action Aid)	
3	Taking care of oneself after being affected by disaster [Cyclone Nargis]	Pamphlet (Save the Children)	
4	Helping Children in Psychosocial Care	Poster (Action Aid)	

Part 4 on teaching and learning is included in module 3.1 on curricular support material

### Use of the student activity Book “Let’s be prepared for disasters”

As introduced in Module 3.1 and 3.2, a key resource is the Myanmar language version of the student activity booklet entitled “Let’s be prepared for disasters” developed by Ministry of Education, in partnership with UNESCO, and published by MoE, UNESCO and Plan, which has a range of complementary activities that can also be used in conjunction with classroom teaching. In module 3.2 we have shown how some exercises could be used for teaching on locally relevant content. Here the other exercises will be introduced.

Table 9 : Let's be prepared for disasters

No	Title	Content
1	Collage	How to make charts and messages to community using news about natural hazards
2	Puppetry	How to make puppet characters and use them in a play with disaster safety messages
3	What's in the emergency kit	A simple word puzzle to familiarize students with content of the emergency kit
4	Child Journalist	How to prepare a report on a recent disaster asking where, when, what, how and why the disaster occurred, and present the report to your school assembly
5	In Quizzitive	A multiple choice test on your general understanding of disasters in Myanmar and beyond
6	Topsy Turvy	Relate various kinds of disasters to the do and donts for them
7	Knock out the doc	Gets students to look at their personal hygiene and health behavior and then use flags to mark neat and clean behavior ( green flag) and dirty and unhygienic behavior that requires action (red flag)
8	Watch your step	Copy the simple rules of safe behaviour leaving coloured words blank. Get students to fill in the blanks.
9	Create your own traffic signal	Learn the elements of a traffic signal and the meaning of the colours of the lights
10	Know your water	Learn about water related hazards and your own water use behavior.
11	Mercury rising	Introduces impact of climate change, how to reduce carbon footprint, and principles of energy efficiency at home.
12	Becoming risk ready	Multiple choice checklist to assess how prepared the school is
13	Family wise and safe	A checklist for each individual ( student and teacher) to use to improve safety at home and on the way to school



Do these exercises appropriate to the lesson being taught. Include similar exercises, designed by the teacher to make learning fun.



## Extra curricular activities and Community campaigns

Cultural and performing arts: whether music, song, poetry, dance, puppetry, magic, street theatre, improvisation, pantomime, or artwork are appealing, engaging and creative ways to introduce disaster risk reduction messages. The use of all forms of arts to transmit essential knowledge to parents and to the wider community is especially appreciated in the informal settings of assemblies, and special events.

Competitions, awards and commendations: such as drawing competitions, writing competitions, tournaments, radio quizzes generate parent, community and mass media interest and develop enthusiasm for the messages. Voluntary drawing and writing competitions engage many children. DRR Knowledge Tournaments can involve many schools in a township and radio or television broadcast can be used to share knowledge and competencies more widely.

Involving parents and local community: through regular parent, parent-teacher association or school committee meetings, wider community fairs and “open house” are all important opportunities for informal education. Exhibitions and displays of student-created risk and capacity maps, models, art work and essays personalize this interest and make it more powerful. Communication campaigns which target community members are an important part of this school safety program and contribute to raise awareness on DRR among parents, care givers, community leaders and other sectoral representatives. There are community partners eager to assist in these efforts, including academic and scientific institutions, Red Cross, NGOs, civic and non-profit organization, local government partners and businesses ready to assist and support schools in this effort. Community members may also engage as volunteers implementing physical protection measures such as re-mounting classroom doors to open outwards, painting exit signage, and secure furnishings against earthquake shaking or digging channels to direct rainwater away from building. Projects implemented in the community reinforce the lessons learned in the classroom and provide opportunity for application in actual settings. DRR activities that can be initiated in the community include:

- Community awareness campaigns
- Service projects such as tree and mangrove planting, river and coastal clean-ups, setting up a Child Friendly Space, setting up school or community vegetable gardens, orchards, trees and compost pits. In one school in Malaysia, the school committee launched a Green Earth Campaign promoting tree planting and mobilized the students to take out the soil and rubbish from the drainage system once a month to declog the water flow. The region Governments Public Works and Environmental departments provided technical and in kind support. There is also income generation through the pineapples harvested from the school plantation and are sold to the community.



Community Awareness Campaigns



## Extra curricular activities that have been successfully used in Myanmar

A number of such approaches have been successfully used in Myanmar. These are as follows:

- (a) Poster Competition on Disaster Management theme can be organised and selected posters can be displayed on the school notice board.
- (b) Essay, Debate and Quiz are effective tools to create disaster awareness.



Essay Competition on International Day for Disaster Reduction (IDDR)

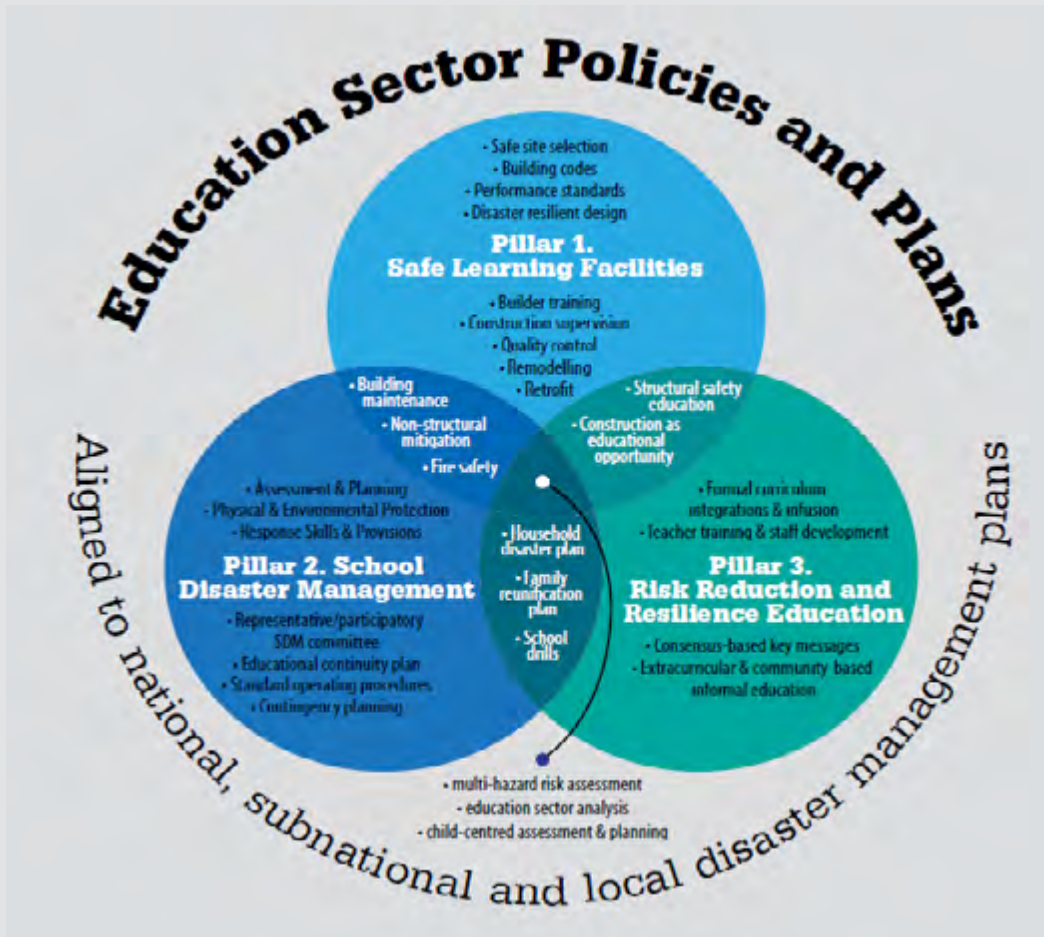


Drawing Competition on International Day for Disaster Reduction (IDDR)

- (c) "International Day for Disaster Reduction" is observed on 2nd Wednesday of October. Some awareness activities can be undertaken to commemorate this day and even disaster safety week or month can be observed to mark this day.
- (d) "Anniversaries of other recent major event such as the tsunami of 2004, Cyclone Nargis of 2008 and anniversaries of historical earthquakes can be observed as disaster safety days with similar activities.
- (e) Street play, folklore, Drama, Dance or Song which has Do's and Don'ts of disasters.
- (f) Pledge ceremony can be organised in which students and teachers can take a pledge to contribute to disaster risk reduction in school and community.
- (g) Photo exhibition or display of newspaper clipping on disaster management can be organised. These can be on disaster management in general or on specific disaster.
- (h) Day and overnight camps to other schools or locations where a good disaster preparedness system exists at school level.
- (i) Disaster Management After school Club on the lines of Nature's club or Ecoclub can be constituted to create interest and awareness among the children.
- (j) Exposure visit of the students to nearby Fire Services Department, MRCS or NGO working on disaster management can be done to create interest on disaster management among the students.
- (k) Pamphlets, wall painting, live demonstration, photo collection, etc on disaster management theme are some other means to create awareness among the students.
- (l) Experience sharing session or talks can be organised in school where disaster management expert or teacher or student can share experience on past disasters, preparedness etc.

# Module ( 4 )

## Safe Learning Facilities



Analysis School Risks

## 4.1: Introduction to Safe Learning Facilities

### Objective of this module

This module introduces the Comprehensive School Safety (CSS) pillar 1 on "Safe Learning Facilities" (SLF). This pillar focuses on building schools in appropriate locations and to the right standards of locally relevant hazard resilience and structural safety. The pillar also addresses the stock of existing schools, identifies how to assess current vulnerabilities and risks and initiate actions for repair and retrofitting of such schools to higher standards of hazard resilience and structural safety. Finally the pillar also covers non structural safety and provides guidance on how to take simple no cost, low cost measures to improve safety.

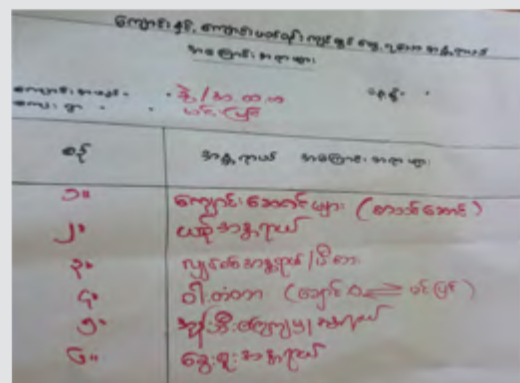
### Actions by school authorities at school level

- Understand the many dimensions of safety, both structural and non structural, and those associated with the site and the environment that need to be addressed to ensure a safe learning facility.
- Recognise the importance and benefit of building right the first time, by ensuring proper site selection and standards of safety and construction.
- Recognise the responsibility placed on the school principal as initiator of a proposal for a new school and eventual custodian of the school and understand the need for proper supervision during construction.
- Recognise the importance of assessing and reviewing the vulnerability of the school in all dimensions of safety.
- Recognise the role in initiating action for repair and retrofitting of schools.
- Recognize the special needs of vulnerable groups in access to and mobility within learning facilities

## 4.2: Assessing safety of existing schools

### Objective of this module

Recognising that many existing schools are at risk and do not meet appropriate standards of safety, this module guides the school authorities and SDMC in assessing the current status of existing schools and their surroundings, against both structural and non structural dimensions as a first step in planning and taking action to improve safety. This module builds on the assessment of hazards vulnerabilities and risks at the school level undertaken using the guidance of module 2.3, which formed a basis for the school disaster management plan.



Assessing school risks and its surroundings

### Actions by school authorities at school level

- Using the preliminary assessment done under module 2.3, this module enables the school principal, working with technical support to undertake an assessment of both structural and non structural safety and environmental safety factors in the school buildings.
- While an initial rapid assessment can be carried out by the principal and her team, a more refined and rigorous assessment requires accessing technical personnel from the township/ district/ region/ state government, or in the interim from ethical personnel from the PTA or through the school board of trustees, using a series of questions in the checklists provided.
- Do this safety assessment using checklists provided that cover location, soil, age of building, compliance with provisions of the interim MNBC, assessment of the load carrying system, height, design, detailing and water damage. A more rigorous assessment will be required in case of earthquake or tsunami risk.
- Based on the findings and in consultation with the Board of trustees of the school, in case of high risk and danger recommend to the Buildings department of DBE, using prescribed forms as elaborated in modules 4.4 and 4.5 to repair, retrofit or rebuild the building whose safety is not upto the mark.

### Purpose of a school safety assessment

A detailed vulnerability assessment of the school facilities is conducted to:

- Identify the buildings' vulnerabilities with respect to local hazards,
- Determine whether to retrofit or reconstruct the buildings, and
- Propose appropriate retrofit strategies to enhance the buildings' hazard resistance

The process begins with preliminary assessments for prioritization followed by a site assessment and detailed structural assessment . The site assessment and the detailed structural assessment can be conducted simultaneously. Ultimately the objective is to end with the design, planning and implementation of the retrofit measures elaborated further in module 4.4

### School Building Safety Checklist

To assist in carrying out an inspection and vulnerability assessment of schools and identify any structural and non structural safety concerns that may require further investigation, here is a checklist of the different factors, first introduced in Module 2.3 You may need the support of a qualified engineer or architect to undertake this assessment with you. If any of these conditions apply to your buildings, you will need to investigate further with professional engineering help. The structural safety of buildings may be at risk as a result of some of these conditions:

## 1. LOCATION and SOIL

- Marshy soil
- On top or next to fault line
- On a steep slope
- Below or on a landslide-prone slope
- In a flood plain or stream bed
- Soil not compacted prior to construction

## 2. AGE OF BUILDING and BUILDING CODES

- Constructed prior to implementation and enforcement of building codes
- Constructed without regard for compliance with building codes
- Building codes do not address the hazards you face

## 3. LOAD CARRYING SYSTEM

- Reinforced concrete building with discontinuous, uneven, or poorly connected moment frame
- Masonry, stone, and adobe without an earthquake tie beam
- Adobe with no horizontal or vertical reinforcement
- Masonry without regular cross-walls and small window and door openings

## 4. BUILDING HEIGHT

- 4+ storey poorly constructed reinforced concrete
- 2+ storey unreinforced masonry

## 5. DESIGN

- Different stories have same height, but have openings of different sizes and locations
- Different stories have different heights.
- Very long and narrow rectangular building
- "L"-shaped, "H"-shaped, "T"-shaped, or cross-shaped building without isolation joints
- Flood water cannot flow easily through or around the building

## 6. CONSTRUCTION DETAILING (Reinforced concrete construction)

- Insufficient or non-overlapping vertical steel in columns and beams
- Transverse steel not closed 135 degrees
- Unclean sand and aggregate mixed with concrete
- Concrete not vibrated to remove air bubbles
- Roof not securely fastened to structure

## 7. WATER DAMAGE

- Rainwater leaks from roof inside the building
- Interior dampness or smell

Source: School Disaster Management, Save the Children; Education Facilities Manual, Department of Education, Philippines.



### 4.3: Improving non structural safety in school

#### Objective of this module

The objective of this module is to introduce you to the dimensions of safety that are not related to the structural stability of the building and its structure, but to other aspects of hazards prevention and preparedness; including fire safety; water sanitation and hygiene; garbage disposal; classroom exits, hallways, electrical systems, furniture and fixtures. The module will help school authorities identify these hazards and attend to them and establish a system of taking due precaution, involving students in both hazard identification and taking precautions.

#### Actions by school authorities at school level

- Understand the non structural aspects of safety, where inattention can a significant source of hazards, injuries and even deaths.
- Undertake a survey of the building and its surroundings to look at these aspects covering fire prevention and preparedness, safe storage of flammables and hazardous chemicals, safe and hygienic water supply and sanitation, prevention of garbage accumulation and periodic safe disposal, using segregation disposal.
- In areas prone to earthquakes and cyclones, recognise that furniture, cupboards, shelves and other movable or inadequately fastened fixtures are a hazard and take action to effectively secure them, including doors and cupboards.
- Involve children in the hazard identification exercise using the hazard hunt technique in groups.
- Use the checklists under this module to check completeness of the hazard identification.
- Plan action for effective addressal of all identified hazards and impress on students on all members of the school community the importance of following the precautions and systems adopted.

#### Why is non Structural Safety important and how do we improve it

Non-Structural Elements are those which are attached to or housed in a building or building system, but are not part of the main load-resisting structural system of the building.

- Architectural elements, for example, parapets, penthouses, appendages and ornamentations, veneer, cladding systems, suspended ceiling, sign boards, etc.,
- Mechanical components, for example, boilers, storage tanks, piping systems, fire protection systems, and
- Electrical components, for example, electric motors, light fixtures, computers and data acquisition systems, etc.
- Furnitures and content, for example, almirah, sofa, computer, shelves, cupboards, paintings, etc.
- Road Safety
- Water, Sanitation and Hygiene Facilities
- Wastewater and Garbage Disposal System
- Fire Prevention and Safety Measures



Risk Associated with non-structural elements are:

- loss of life or injury to building occupants
- loss of property especially in commercial buildings (high as 75% of total cost of building)
- impairment or loss of function of an important building or lifeline structure, for example, fire resisting system, communication facilities, telecom centre.

### Undertaking non-structural assessment

Module 2.3 has already identified elements of building contents that are at risk of movement and should be securely fastened to the wall. In addition to those items, these are additional items to check for non structural safety

- Identify all tall trees within the school vicinity that may attract a lightning strike, high tension-line passing through the school grounds, wooden electric poles (that may fall over due to a windstorm or flood) and open wells and ponds may cause threats to children.
- Assess the boundary/fencing of the school. In the absence of a proper boundary, animal may wander in and harm children. On the other hand, barbed wire may cause wounds.
- Assess the railings and roofs. Railing on the top floor and staircase reduce unnecessary threats and clipped CGI sheet can prevent the roof from being torn or blown away by the wind. The absence of a ramp or a ramp with no railings can obstruct the mobility of disabled people.
- Assess whether hand pumps have hand railings around them (as the area around hand pumps are often very slippery).
- Assess the playground. Muddy ground with many trenches may cause children to slip and may also attract snakes. Shrub land and the dumping of waste materials may attract mice and other pests.
- Assess the condition of windows (do they have grills?) and doors (do they open outwards?). Doors should open outward in order to facilitate evacuation during an emergency.
- Assess the placement of computer utilities, furniture, kitchen utilities, and electrical appliances and their conditions. Ensure that all are sufficiently secured to walls or placed safely to prevent their falling or sliding in times of earthquake and heavy windstorms.
- Assess whether each room has two ways in and out (to facilitate evacuation). Assess whether schools have two different gates (exit and entrance) at a distance apart. The entrance and exit should be at the far sides of a building for safe mobility.
- Assess the conditions and orientations of desks and benches. Joined desk and bench may obstruct the duck-cover-hold exercise and safe exit/evacuation from the classroom during emergency.
- Assess whether the plinth levels of school buildings, toilets, and tube wells are raised sufficiently to cope with flooding and inundation taking into consideration the extent of inundation in the past. If a suitably elevated site does not exist, modify the site by taking measures such as adding fill to elevate the building or creating floodwalls or drainage systems to block or drain water and reduce potential damage and loss.
- Assess whether ramps have constructed to allow the disabled to access to classrooms and water and sanitation facilities.
- Assess whether there are separate toilets for girls and boys.
- Assess whether there are covered pathways to reach the toilets and latrines.
- Assess whether school buildings face north to resist winds, retain heat and prevent direct sunlight from the south from entering classrooms. (source: Plan Nepal manual)

## 4.4 Planning action for repair and retrofitting of existing unsafe schools

### Objective of this module

This module enables school authorities to have an overview of structural safety and its importance, both for new schools and existing schools that are unsafe and need retrofitting. Using the assessment of structural safety developed in module 4.2, this module guides school authorities on how they can take action for repair and retrofitting, both at the school level and by pursuing requests for technical expertise and resources to bring schools up to the needed standards of hazard resilience and structural safety. In cases where the assessment reveals a building is unsafe, the module suggests action to be initiated with the TEO.

#### Actions by school authorities at school level

- Understand all aspects of structural safety, and the specific provisions of the provisional Myanmar National Building Code for features of buildings exposed to specific hazards.
- Become familiar with the guidance provided by DBE in its designs and additional provisions with respect to specific hazards, and also with the guidance given in the Safe School Construction Guidelines under development by the Ministry of Education and the School Construction Sub Working Group.
- Use the assessment done under module 4.2 and consult with the Board of Trustees to decide on how serious are the variances from safety standards and repair or retrofitting can work.
- Begin taking action with local resources and expertise available from school connected channels.
- In case the assessment shows danger and high risk, reconfirm with a second opinion from the nearest available civil/structural engineer, preferably from the Department of Public works or related department of the Ministry of Construction or related ministry at the township/district/region/state level.
- Using the DBE forms, raise a request for special grant for maintenance, repair and retrofitting or a request for reconstruction of dangerous building.
- Recognize that retrofitting is a complex task and may require special supervision and periodic inspection for which arrangements should be made.
- Pursue this request with the TEO and other educational authorities.
- Involve the community, through the Parent Teacher Association and the Board of Trustees to develop community support for corrective actions be they repair, retrofitting or reconstruction.

### Myanmar Provisions on Structural safety

Since 2012, the Ministry of Construction, with support from UN-Habitat and the Myanmar Engineering Society have developed the Myanmar National Building Code. MNBC Phase I (2011-2012) involved establishment of a Technical working group and sub groups (Ministry of Construction, Myanmar Engineering Society (MES) and UN Habitat leading the process) and starting up the drafting of the code through development of the scope and process; while Phase II (2012-2013) covered the development of the provisional code, and consultations/ review of specific sections with international partners.

The provisional code was published in 2014 and includes references to safe school construction, which will be complemented in coming months by a dedicated Section. School construction schemes should therefore be compliant with the National Building Code, which requires to increase awareness and understanding of the code within MoE and key education stakeholders and development partners. Phase 3 builds on phases 1 and 2 and is being implemented by UN Habitat MES partnership. The scope is : (a) Development of simplified guidelines for specific type of building types in critical infrastructure such as Hospital, School, under-taken through consultation with relevant Government agencies for infrastructure, (b) Initiate dialogue with Technical Universities to recommend inclusion of MNBC in their current courses, (c) Develop IEC Materials such as Posters / Pamphlets on MNBC for broader dissemination and outreach, (d) Orientation and awareness raising on provisional MNBC (2012), (e) Orientation of High level Government Officials (through short meetings to solicit their interest for department level support- or in some cases guidelines development for type design), ( f) Department specific orientation meeting (based on preceding activity of orientation of senior - officials) to identify specific needs as recommendation, (g) Orientation on MNBC at Technical Universities under MOST (targeting faculties). Phase 3 of building code development in relation to schools has been aligned with the Ministry of Education project on safe school construction Guidelines, described in more detail under module 4.5.

### Myanmar issues on retrofitting existing schools

DBE has prioritized for new school construction those schools that are of poor quality or disrepair to constitute a danger to the school occupants. While approving construction of new buildings, replacement of existing dangerous buildings is one priority. The School Construction sub-Working Group has identified "maintenance and retrofitting of existing schools and educational facilities" as one of six focused thematic areas on school construction and indicative activities for engagement of the SC Sub WG with the Government and other stakeholders in building an enabling environment and improving the school construction system.

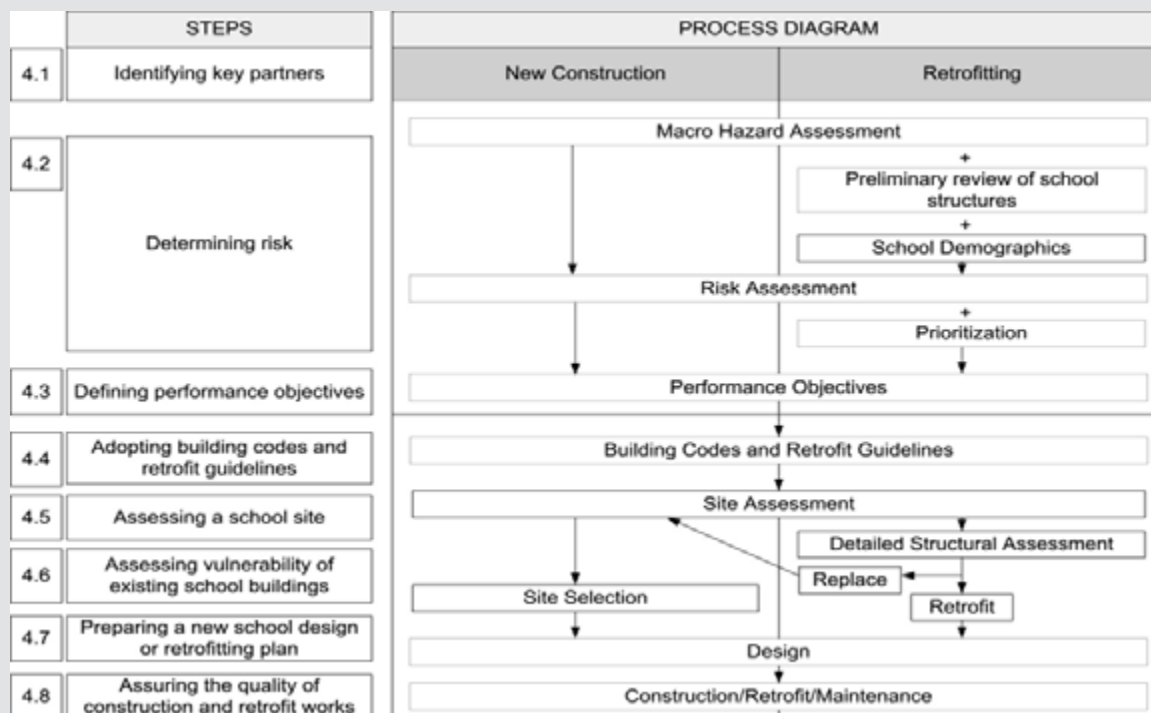
In relation to retrofitting it has identified the following activities as priority concerns to be addressed

- Using pilot vulnerability assessment report to advocate and mobilize national and international resources for retrofitting.
- Retrofitting of small numbers of existing schools and safe learning facilities to test approaches and demonstrate techniques, approaches and generate interest and needs.
- Examining issues related to relocation of unsafe schools to reduce risk and associated issues and problems.
- Planning scaling up of retrofitting.

Over time this is an issue to be addressed at the national level.

### International Guidance on Retrofitting

The INEE Guidance notes on Safer School Construction (2009) recommend a 8 step process to follow when developing national programs for safe school construction or retrofitting. This is summarized in the graphic below.



International Retrofitting Guideline

Key steps from this framework In relation to retrofitting are described below

Step 4.2 Determining Risk aims to understand those existing schools in need of urgent intervention. Determining a measure of risk for a given geographical area will allow you to Identify those schools which are at greatest risk of damage, harm and loss and set priorities for action, create a basis for conducting more detailed site and building assessments, and develop programs and policies to execute these measures in the immediate and long-term.

Such large scale assessment lays the basis for discussing the more detailed vulnerability (structural and site)assessment of existing school buildings to determine whether a building should be retrofitted and what retrofitting measures can be implemented. Such type of assessment has already been discussed under module 4.2 of this toolkit and refers to assessments discussed in step 4.6 of the above process.

Step 4.3 on Defining performance objectives – addresses the issue of how to determine the maximum amount of damage or disruption that can be tolerated. This is the basis of assessing and identifying schools that are at high risk because they do not meet these performance objectives under step 4.2, and also becomes the basis for more detailed vulnerability assessment under step 4.6. This will also inform the establishment of retrofit guidelines (4.4) and plans (4.7). The minimal performance objective to aim for is Life safety where Damage to the structural and nonstructural components is acceptable so long as it does not endanger human life. Repairs may be expensive and interfere severely with school operations in the medium and even long term.

Step 4.4 aims to establish retrofit guidelines to ensure that repaired buildings will meet performance objectives. These retrofit guidelines, will detail tested techniques to enhance the hazard resilience of a building, will help guide the design of an effective retrofit solution and techniques to increase the hazard resistance of existing schools.

Step 4.7 will spell out the design considerations for a retrofitting plan, address who should be involved in the design process, what trade offs might need to be made, and what are the special considerations when retrofitting a school. Some particular considerations recognized when designing retrofit solutions are that a retrofit plan, unlike a new school design, must take into account the conditions and characteristics of an existing building and the demands of integrating new components into its structural system. As the existing system may not have been constructed to meet building codes, retrofitting plans should begin with the minimum performance objective of life safety, and only when feasible should other performance objectives be considered. As it may not be possible to accurately assess the resistant capacity of all of a building's materials and components, the development of effective retrofit solutions may rely largely on the design team's experience and judgment in applying appropriate techniques. This is particularly the case when retrofitting buildings to resist earthquake forces. Therefore, consideration should be given to other design criteria, but no safety measure should be forfeited at the cost of incorporating other non-safety related features. At the same time, repairs and renovations which meet identified needs of the school community and enhance the aesthetic quality of the building, without jeopardizing its safety, can help to foster community support for retrofitting.

## 4.5: Locating and building new Safe Schools

### Objective of this module

This module provides school authorities, particularly the School Principal with guidance on requirements for selection of a site for a new school and on ensuring that the new school is constructed to adequate standards of locally relevant hazard resilience and structural safety, including emphasizing the need for proper supervision and periodic inspection during the construction process.

#### Actions by school authorities at school level

- Recognise the responsibility placed on the school principal as initiator of a proposal for a new school and make sure that the proposed site meets criteria for safety and child friendliness.
- Become familiar with the guidance provided by DBE in its current designs and additional provisions on siting and orientation with respect to specific hazards, and also with the guidance on site selection given in the Safe School Construction Guidelines under development by the Ministry of Education and the School Construction Sub Working Group.
- Recognize that site selection includes soil quality and stability, appropriate distances from hazard sources such as rivers that get annually flooded or unstable hillsides, is sanitary, hygienic and safe, free from streams or bodies of water, and source of polluted air, and situated far from a volcanic site or other establishments that could be a potential source of fire or explosion.
- Apart from structural safety standards referred to in module 4.4 and herein, compliance with local (city) building and sanitation codes and specifications for requirements of local fire department for prevention of fire hazards, sufficient ventilation, optimum lighting, flooring and WASH facilities needs to be ensured.

- Recognize that construction to appropriate structural standards in high risk areas is a complex task and will require effective supervision to ensure proper materials, quantities and techniques are used and periodic inspection for which arrangements should be made.
- Recognize and convince the Board of Trustees that building a school to the right standard, even if more costly will ensure safety of school children and is a wise investment.
- Recognise the responsibility placed on the school principal as eventual custodian of the school and therefore the need to take due care during inspection and handover.

## MoE designs for new construction of Basic Education Schools

MoE Myanmar has developed standard school designs for different types of school buildings and types of construction. The types of buildings vary by number of classrooms and number of storeys, types of construction, and materials used include brick nogging, RCC and timber for frame and truss. For each type of material there are 20 similar designs based on one or two storey construction. Designs ( Plan, front and side elevation) have different numbers of classrooms (2, 3, 4, 5 and 6) with two different classroom sizes, 30'x24' and 20'x24', and details of windows, verandah, roof and truss. In addition there are specifications of furniture including desks (single and for multiple students), Benches, teachers table, cupboard, Blackboards, toilets, septic tanks and soak pits. Layout and planning specifications are provided including orientation of buildings ( 'to reduce direct exposure to sunlight construct school buildings in East west direction'), location ('not to face or be parallel to entrance of village main road and waterways'), separation distances and maximum size ('shouldn't be more than 150' to withstand natural disasters and strong winds' )

In addition, there is indicative guidance given for features to be incorporated to protect against natural hazards accompanied by sketches for several features as follows:

### “Sample School Buildings for Mountainous/Hilly regions”

- Retaining Walls should be constructed as necessary
- Drawings should be constructed to prevent erosion
- Handrails should be installed at edge of steep slopes
- Plantation of trees are highly recommended to prevent erosion

### “Sample School Buildings for Coastal/Riverside/Flood prone Regions”

- Floor of the classroom should be higher than high flood level
- Car tyres or tubes, and ropes for rescuing should be available
- Locally available trees should be planted



## Safe School Construction Guidelines

The Ministry of Education, Government of Myanmar is implementing a project titled "Promoting Construction of Safe Schools in Myanmar through Development of National Guidelines, Identification of Improvements Needed in the Enabling Environment and Initial Implementation" in partnership with SC Sub WG'S5 Safe School Construction Guidelines Task Force (SSCTF). This is a harmonised project being supported technically and financially by projects implemented by SC SWG/SSC TF members, SDC- Government of Switzerland, World Vision- DFAT, Australia and UN Habitat-MNBC Govt of Norway funded projects in collaboration with IOM led USAID funded IDM RAND Project in Rakhine, UNICEF, Plan led EU funded ASSI Phase 2, and Handicap International.

The project has 9 priority components as follows : ( 1) Review and stocktaking studies of construction practices and identification of needs, (2) Develop outline of guideline through consultations,( 3) development of guidelines through consultation,(4) Planning for advocacy, dissemination and awareness raising,(5) Identifying and developing improvements needed in school construction systems, (6) Dissemination and capacity building on the guideline and advocacy on investment and safe schools , (7) Pilot use of guidelines,( 8) Coordination within MoE, Other Ministries, TWG, Advocacy links and engagement with National and international agendas, ( 9) Convening of SC Sub WG and TF, Coordination with MoE, and SWG and TF members and ETWG.

The project is expected to have 4 Key outputs

- National Safe and Child Friendly School Construction Guidelines
- Training courses on use of Guidelines
- Action Plan on improvements needed in School Construction Systems
- Pilot use of guidelines in new school construction

The purpose of the guidelines are (i) To serve as a Planning, Implementation and Management Tool during the process of planning and constructing new school, (ii) To provide a basis for revising standard school designs for different types of hazard exposure in Myanmar, (iii) To develop revised designs for selected high risk areas which can be used in specific new construction under component 9 of Project.

The working outline for the Guidelines for Safe and Child friendly School Construction is

- ( i ) Introduction and rationale,
- ( ii ) Starting the planning and process of school construction—committees, location and site selection, clearances –step by step with key principles for the school safety (also linking with non-structural measures)
- (iii) Principles for architectural design and planning standards, with specific reference to hazards and needs for increased safety . Given Myanmar's specific hazard profile, specific technical guidance on design elements for specific hazards
- (iv) Principles for structural design standards for different hazard types , ( Floods, Cyclone/ storm surge, earthquake/tsunami , Landslide)
- ( v ) Implementation process of school construction –materials, quality, inspection, etc
- (vi) Child friendly features of layout and design
- (vii) Social inclusiveness especially for children with disabilities and female students.

<sup>5</sup>In cooperation with relevant associated Ministries (GAD, RRD, MoC, MoST, MoRA)

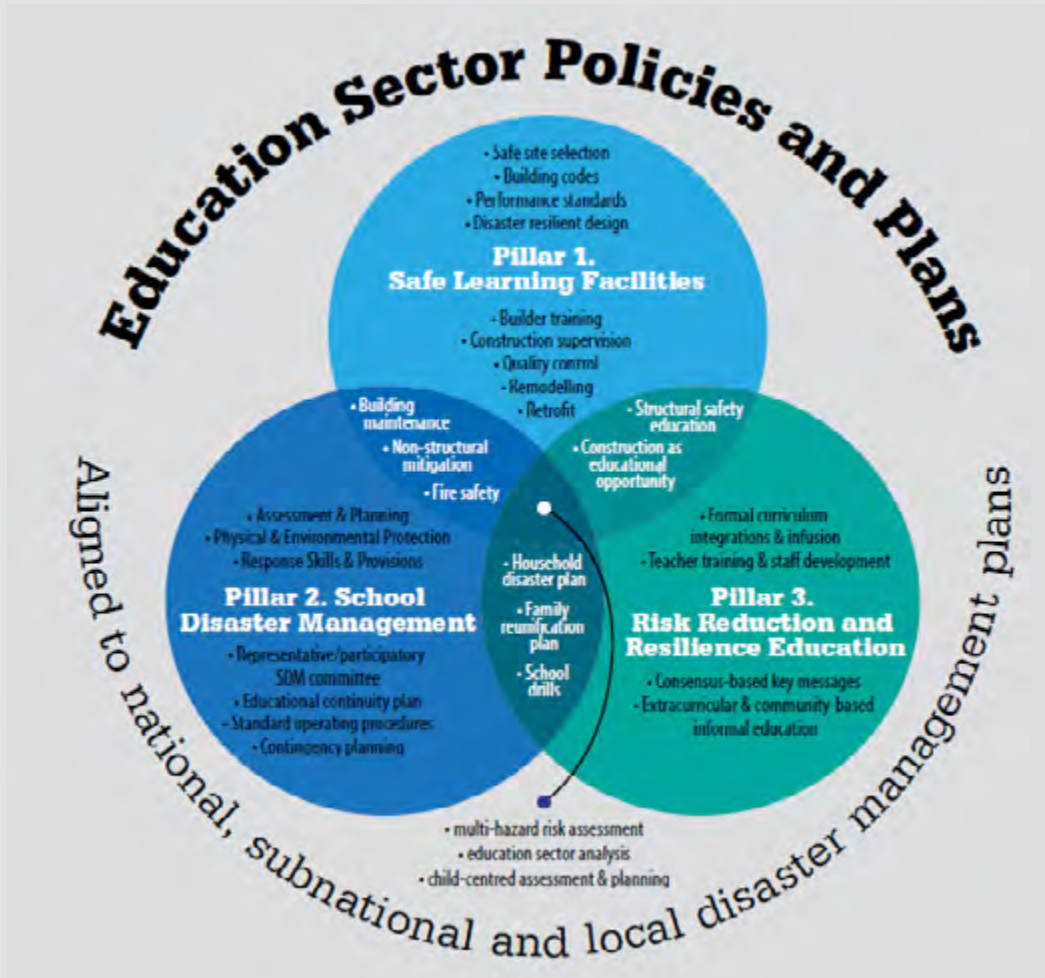
<sup>6</sup>One of eight sub Working groups of the Education Thematic Working Group (ETWG).

- (viii) Safety and risk reduction measures (DRR), including safety of construction workers during the process of construction, and school children in case of construction/extension work in existing schools
- (ix) Facilities including water and sanitation and hygiene (WASH), Kitchens, adult toilets, additional rooms if to be used as emergency shelter
- (x) Operational and maintenance policies,
- (xi) Cost benefit analysis and estimates of incremental costs of resilience compared with costs of retrofitting and reconstruction,
- (xii) Monitoring and evaluation,
- (xiii) Notes, references, Annexes. Guidelines will consider technical aspects of site selection and construction

The guidelines will be ready in mid 2016 and will form the basis for an update of this section.

# Module ( 5 )

## Addressing Cross Cutting themes while Implementing School Safety Programmes



Safe your Environment for your future Generation

## Introduction

The objective of this module, is to addressing important cross cutting issues related to school safety, especially in relation to girl children, children with disability and issues of environmental protection and climate change.

(Reworded slightly, please note in translation) The module has three sub sections as follows:

- 5.1: Addressing special needs of girl children in schools and dealing with special challenges they face
- 5.2: Adopting principles of universal design for access and addressing special needs of children with disability
- 5.3: Linking environment and climate change adaptation to safe schools

### 5.1: Addressing special needs of girl children in schools and dealing with special challenges they face

When disaster strikes, women and girls often suffer the most. After floods, earthquakes or cyclones, they aren't just left without shelter and food. When food relief is made available, often women and girls are the last to eat in families. They also go without special medical care or defense against dangers like human trafficking.

In unlit, unprotected camps or settlements for displaced persons, teen girls walking in the evening may be at risk for harassment or rape. After a crisis destroys a family's livelihood, domestic violence can increase dramatically. Catastrophes may make it impossible for children, and especially girls, to go to school. When clinics are wiped out by storms, pregnant women may face dangerous deliveries.

In disasters, children, particularly adolescents, may be forced to take on adult roles just at the point where the people and structures that are normally in place to advise and protect them are absent. They do not have the cognitive, emotional or psychological maturity to cope in the same way that adults can – although they do have energy, enthusiasm and ideas that may be crucial to helping their families and wider community recover after a disaster. Understanding this duality, helps us understand the special challenges children face, and the energy they can bring to the table in the context of disasters.

What happens to a girl in times of disasters is directly related to wider attitudes to women and girls and the political, economic, social and cultural context in which they live. It is also affected by the family a girl comes from, as well as her status, age, ability, material well being and a range of other factors linked to the country she lives in and the social groups to which she belongs. Different stages of a disaster can affect girls' rights in many different ways. However, while girls are uniquely vulnerable in a disaster, they can also be extremely resilient during all its phases.

Working with communities hit by natural disasters, it is important to keep women and girls healthy and safe, put a special focus on girls and women when distributing food and emergency supplies, and making an extra effort to make sure girls go to schools and temporary learning spaces. It is also important to raise awareness about violence against women and girls, provide health services for women and girls and teach older girls and mother's skills they need to rebuild their family's lives. As communities start to recover women and girls should not lose out – but instead fulfill their potential. This kind of leadership role is valid at all stages of disaster management, preparedness, response and risk reduction as well.

Gender inequality has an impact on girls in disasters that may put their lives at risk, more particularly experienced by adolescent girls. There are psychological effects of disasters on adolescent girls, and related needs, including sexual and reproductive health, are often not attended to. Inadequate sanitation facilities and lack of provision for menstruation cause specific problems. Family planning and maternity services and issues arising in disasters from sexually transmitted diseases and HIV, must also be dealt with. The risk of violence, including sexual violence, both in and outside the home, increases during disasters, and adolescent girls may be particularly vulnerable because of their age and sex. Girls often find it difficult for to speak out about abuse and some coping strategies actually make things worse for girls, such as child marriage or transactional sex.

Disasters cause disruption to schooling in a number of ways not just through damage to infrastructure but also teacher absenteeism and damage to access routes for students wishing to attend. The loss of school uniforms, books and other supplies may be a key barrier for returning to school if parents cannot afford to replace these. When schools are inaccessible children cannot attend school and girls are particularly vulnerable to missing out on their education, as sending girls to school is far more strongly determined by income and the broader costs of education, than is the case for boys. There is an opportunity cost to leaving girls in school and they could be withdrawn from education either to take the place of their mothers if they have died or migrated, to take over housework if their mothers need to go out to work or engage in reconstruction activities, or to help with housework and childcare given the difficult circumstances makes these tasks more hazardous and time consuming. The negative impact on their performance from their reduced time for learning due to post-disaster chores may be compounded by stress and trauma. Girls may be forced to leave school to help support their families, and there is an increased fear that they will enter unsafe employment such as sex work and begging.

It is important to recognize that there are special needs even in normal times and to address the special needs of girls, and the risks to safety they face in their daily lives, as well as to play leadership roles in school safety activities including in the school disaster management committees. Girls, especially adolescent girls can be involved in activities that build better health and enhance their survival by learning about prevention and protection. School authorities can also take specific action to protect girls and increase the safety they experience both during normal times and during disasters. These can include addressing some of the key risks that can lead to increased exposure to protection threats such as gender-based violence (GBV) and sexual violence in schools and in the community. For example, improving the lighting, location and privacy of latrines and other sanitation facilities can contribute to keeping girls safe and secure. Such measures include : adequate physical distance between sex-segregated latrines, locks on latrines and showers, protection around water points, lighting to and from and around shower blocks and latrines, culturally suitable menstrual hygiene facilities (safe spaces and facilities for washing clothes) and products available for adolescent girls are all actions to reduce risks that vulnerable groups' face when trying to access WASH services.



“Send your girls to school. This is the best you can do for their future.”

Education by itself is important for girls, both formal schooling, but also learning about disaster risk reduction and skills that will protect them. Practitioners recognize a small window of opportunity, just after a disaster, to ensure that adolescent girls continue to have access to education, training, and more choice in their lives. This window quickly closes, and should be used by the humanitarian community to take disaster work beyond ‘do no harm’ to develop new skills to adapt to a more disaster-prone future.

Participation in disaster risk reduction (DRR) work can give adolescent girls and their communities many benefits as follows:

- Increases a girl’s self-esteem, confidence and resilience
- Improves communication, negotiation and teamwork skills
- Builds more positive relationships with adults and boys
- Ensures that they are aware of who to go to if there is a problem
- Gives them the confidence that someone in authority is looking out for their needs
- Encourages better educational performance for the girls themselves
- Improved disaster preparedness for themselves, their peers and their community
- Contributes towards gender equality – adults and adolescent boys see that they are capable; more respect for girls’ ideas and girls’ rights.

While there are too many girls whose experience of disasters has led to a downward spiral of violence, poverty and discrimination, and we must take action to prevent and reduce these, it is also clear that girls have strength (mentally and emotionally) and stamina, having had to adapt to their circumstances and find positivity through their friends, family, and contentment for each day.”

The 2012 International Day for Disaster Risk Reduction highlighted the need for women and girls “to be at the forefront of reducing risk and managing the world’s response to natural hazards” and the spirit of that day must live on, particularly during the next 15 years of working on implementing the Sendai Framework on Disaster Risk Reduction (SFDRR) which specifically recognizes that participation of ‘women and (girls) are critical to effectively managing disaster risk and designing, resourcing and implementing gender-sensitive disaster risk reduction policies, plans and programmes and calls for capacity building measures be taken to empower women for preparedness and for alternate livelihoods in post-disaster situation.’ So too the SFDRR recognizes that ‘Children and youth are agents of change and should be given the space and modalities to contribute to disaster risk reduction, in accordance with legislation, national practice and educational curricula.’

*“Thank God we’d already had that preparation at school, so we knew more or less how to lead a committee, to organize ourselves to get people out of their houses. I was one of the people who had to leave their houses... I think that we put into practice everything we had learned in school and that helped us a lot.”*



## 5.2 : Adopting principles of universal design for access and addressing special needs of children with disability



Addressing Special needs of children with disability

This section explains why we need to take action for people with disability.

- 15-20% world population are persons with disabilities
- 650 million persons with disabilities in Asia-Pacific
- 90% children with disabilities in Asia-Pacific not in school
- 63% persons with disabilities need assistance evacuating
- 58% persons with disabilities have never been involved in any DRR/response activities
- 57% persons with disabilities face barriers accessing DRR information

Schools buildings should be places where children can develop freely, without constraint, and which a geographical and social environment free of barriers, allowing all occupants, whoever they are, to develop freely and safely. For this to be achieved, schools should be designed to be universally accessible keeping all people in mind, regardless of who they are, especially those with reduced mobility, such as people with disabilities, the elderly, pregnant women, overweight people, short people, young people, people who carry heavy loads, people with temporary limitation, etc. Particular attention be paid to children with functional difficulties and disabilities, who are particularly vulnerable to environmental obstacles. Failure to pay attention to this is a significant barrier to attending a regular school, especially in Myanmar, where the tendency is to organize special schools for children with disability. School Accessibility should be about making sure that all students and their families can get to school, get in school, interact with students, teachers, staff, and administration at school, access the curriculum at school, participate in all activities at school, including extra-curricular activities.

Physical accessibility to school requires taking care of road safety, pedestrian risks from traffic, risks while coming by boat, care while parking, exit at kerbs and movement from there to school. Once children have reached school, physical access issues have to be considered in regard to entering the school buildings, and ease of movement around the teaching and recreation areas. A crucial dimension of access is walkways and ramps to the school, whose surfaces along accessible routes must be stable, firm, and slip-resistant under all weather conditions. The slope of a ramp should not be too steep and the maximum should be 1:12 or 1 inch of vertical rise for every 12 inches of horizontal distance and have a landing with a 5 foot turning radius at the top and the bottom. Handrails painted with contrasting colors should be provided on both sides on sidewalks and ramps. Accessible entrances must be visible/clearly marked from the accessible parking. There should be a smooth transition to the closest accessible building entrance.

The physical safety and comfort of children is also be a major concern in the schools. Learning will be more accessible for all when the children feel safe and comfortable. Key areas where accessibility, ease of movement and safety are to be addressed includes entrances, corridors, school offices, classrooms, cafeteria and in bathrooms. Accessible rooms and spaces should preferably be centrally located in the facility to prevent unnecessarily long travel for children with mobility or visual impairments. Floors must be non-slip, level, and negotiable by children in wheelchairs or with other mobility aids. There should be adequate space for seating children with wheelchairs, within easy viewing of the presentation area, preferably placed near accessible exits and aisles between tables should have adequate width. Accessible bathrooms for each gender should be provided.

Alarms, warning systems and evacuation should address the special needs of children with disability. There should be visual as well as audio alarms School Staff and students should be designated and trained in advance to be in charge of children with reduced mobility in case of an evacuation.

During the next 15 years we must use the guidance of Sendai Framework on Disaster Risk Reduction (SFDRR) which specifically calls for participation of 'Persons with disabilities and their organizations (being) critical in disaster risk assessment and design and implementation of plans tailored to specific requirements, especially principles of universal design' while working on implementing the school safety framework in schools.

### 5.3 : Linking environment and climate change adaptation to safe schools



Planting Tree around the School

This section helps explain what we mean by environment and how to promote schools that are environment friendly and active in tackling climate change. Such action is an important complementary set of actions to comprehensive school safety.

Man's presence and industrial revolution has caused serious degradation to our environment. Pollution has increased which has led to global warming. Melting of the polar ice the water increases water level causing floods, severe hurricanes etc. due to extra water evaporations from the oceans. Disruptions to regular monsoon seasons occur. It rains more intensive over shorter period of time. Pollution and excessive usage of ground level water for agriculture reduced the water sources. The soil dries out and plants die. The rains are heavier and shorter and wash away the nutrients in the top-soil.

Children need to be involved in environmental education and action activities, learn what causes the change in the environment and learn how to protect themselves from the impacts. By understanding the risks they can mitigate them. By teaching the children to select environmentally friendly and sustainable materials for the future, choose bio-degradable materials over non-biodegradable, use good waste management etc. will have an impact on the parents and community as well.

In order to prepare for the climate change impacts and reduce or negative impact on the environment we should always to a self-assessment and ask the questions: "Do we do the right things and do we do the things right"?

Climate change is the development issue for this generation and future generations of children in our region, and represents a real and urgent threat to vulnerable children and their communities. Children are often more vulnerable to impacts of climate change than adults, but they are more than passive victims. As powerful and engaged members of any community, it is essential that girls and boys participate and contribute to decisions and planning around climate change. In 20, 30, 40 and 50 years' time, it will be children studying today and their own families who will be affected by the decisions made today. By supporting children now to explore the issue of climate change, they will be better placed to face the challenge in the future.

Climate change generally refers to any significant long-term changes in climate patterns that have occurred over an extended period of time. The climate can become warmer or colder. Annual levels of rainfall or snowfall can increase or decrease. Fertile areas can become more arid and drier, such as Myanmar's dry zone. Climate change may be caused by natural factors, or human activities (e.g. land-use change, pollution etc.) that alter the composition of the atmosphere. Climate change may be caused by natural factors, or human activities (e.g. land-use change, pollution etc.) that change with changes in the atmosphere's composition. The term "climate change" generally now refers to the climatic changes that are a direct result of human activities.

Globally climate change is rapidly accelerating. We know this because we can see the following effects and consequences of climate change

- The average annual temperatures are increasing. The average global temperature has risen by 0.8°C since the Industrial Revolution.
- Polar ice is melting at an increasingly rapid rate;
- Average rainfall and seasonal distribution is changing;
- Sea level is rising due to the thermal expansion of water and the melting of continental glaciers (especially at the two poles and polar ice caps);
- The extent of spring and summer sea ice in the Arctic has decreased by 10-155 since the 1950s;

Natural disasters & extreme weather events (heat waves, cold surges, storms, floods, droughts) are occurring with more frequency & intensity, and becoming more difficult to predict

Climate change has specific impacts on various sectors. These include Agriculture: Productivity and Food Security, Water resources, Fisheries, Health, Biodiversity/Ecosystems, Infrastructure

### Impact of climate change on children

Children's understanding of Climate change was well developed under the 4CA project pilots implemented by Plan and Lanthit Foundation in Rakhine state of Myanmar during 2013-2015. FGD discussions during the project highlighted the following learnings from children on the consequences of climate change :

- " Climate change effects are untimely rain, lots of rain, floods, very hot in summer because of global warming, results in drought and destroys the soil (earth cracking, nourishment of the earth depleted) ..." ( children from Moe Kyauk Kyi Kwin village, Rakhine state during focus group discussions)
- " Climate change effect include floods, water scarcity, landslide and storms ..." (children from Tae Moe village, Rakhine state )
- " ... another Climate change effect is forest fire, deforestation, drought and cyclones ..." (children from Moe Thar Ywar Kone village, Rakhine state )

Children from the project area clearly understand some of the sectoral impacts of climate change. Learnings from children include:

- " Climate change impacts our food security, causes water scarcity and health problems.." ( child from Tae Lai Phyin village, Rakhine state)
- " .... Because of this effect the people get health problem "( children from Moe Kyauk Kyi Kwin village, Rakhine state during focus group discussions)

Table 1 : Climate Change Impact ( Courtesy Plan Indonesia graphic pg 4 below)

Climate Change (CC) effects	Extreme weather events (disasters) frequency and severity affected by CC	Impacts on Sectors
<ul style="list-style-type: none"> <li>• Temperature increases</li> <li>• Rainfall pattern changes</li> <li>• Frequency and severity of extreme weather events (see next column)</li> <li>• Sea level rise</li> </ul>	<ul style="list-style-type: none"> <li>• Cyclones</li> <li>• Floods</li> <li>• Landslide</li> <li>• Drought</li> <li>• Sea temperature rise</li> <li>• Heat wave</li> <li>• Forest fire</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Agriculture:</b> Crop Failure</li> <li>• <b>Health :</b> Disease Outbreak</li> <li>• <b>Fisheries :</b> Fish catch decrease</li> <li>• <b>Natural resources :</b> Availability of clean water</li> <li>• <b>Infrastructure :</b> Buildings damaged by storm surge or flooding</li> <li>• <b>Biodiversity /Ecosystems:</b> Coral bleaching</li> </ul>

There are 2 basic strategies to combat climate change

- Mitigation: Efforts to reduce and minimise green house gas emissions directly from the source
- Adaptation : Natural or human system adaptation in response to climate change phenomenon or its impact which has already taken place or will take place in the future, with the objective to reduce/ minimize negative consequences or to take advantage of the possible positive consequences.

National Adaptation Programmes/ Plans of Action (NAPAs) are a process within the UN Framework Convention on Climate Change (UNFCCC) for Least Developed Countries (LDCs), to identify priority activities that respond to their urgent and immediate needs to adapt to climate change.

Myanmar's NAPA Report was prepared over the period 2011-2012. The Myanmar NAPA preparation process followed the 7 generic steps outlined by the United Nations Framework Convention on Climate Change (UNFCCC) Least Developed Countries (LDC) Expert Group and described in detail in section 6 of the NAPA. Myanmar's NAPA to Climate Change has 32 urgent and immediate Priority Adaptation Projects for effective CCA in eight main sectors/themes which include: (i) Agriculture; (ii) Early Warning Systems; (iii) Forest; (iv) Public Health; (v) Water Resources; (vi) Coastal Zone; (vii) Energy and Industry; and (viii) Biodiversity. Sectors (i) to (iii) have been identified as first level priority sectors.



## Students Responding to climate change : What you can do

Governments, business, NGOs and communities all over the world are already taking leadership in mitigating and adapting to climate change. All of us need to act to combat climate change, by acting responsibly, being disciplines, and creative. Here are the some of the tings which students and children can do to make a difference.

**EDUCATE YOURSELF:** Keep yourself well informed on the problem, how it manifests itself in your country, region/ state and your community. Be aware of how the country and its stakeholders are tackling the problem. Keep abreast of latest cleaner technologies. This will help you develop and appropriate idea of how you can make a contribution to tackling and addressing this pressing problem.



**BE THE CHANGE:** Taking action on climate change starts with you. Greenhouse gas emissions are a direct result of human activities and the choices we make- the way we use energy, travel to school or work and our shopping habits. Whether at home or at work, on the road or when shopping, you an use your awareness of climate change to reduce your emissions and encourage and motivate and inspire others to do the same. Here are some simple tips to help you save energy in your home:

### AT HOME

- **Lights :** Use natural light whenever you can during the day. At night, use energy saving light bulbs.
- **Electronics:** Unplug your TV, computer and mobile phone charger, as they still use power, even when not in use. Unplugging these devices helps both to save electricity and lengthen their life span.
- **Hot Water:** turn the water heater to medium rather than high and be aware that water heaters consume a lot of electricity. Where possible use solar water heaters.
- **Air Conditioning:** Avoid using Air conditioning on cooler days– use fans and natural ventilation wherever possible. If you do not use air conditioning, set it at 26 degrees C or warmer.
- **Keep your house green :** Refrain from using chemicals harmful to your health and that of the environment. Replace these with plant based products and environmentally friendly alternatives.





- **Change your diet:** Include more vegetables in your meal. This is both better for your health and helps reduce greenhouse gas emissions.
- **Reduce Waste:** When it breaks down, waste releases methane. Use recyclable packaging and buy long-lasting products. Compost organic waste or use it as fertilizer.



### ON THE STREET

- **Go green:** Walking or cycling short distances saves fuel and helps to reduce greenhouse gas emissions.
- **Share rides with friends and colleagues** ( to work and go out, etc) where possible.

### AT SCHOOL/WORK

- **Cut down on paper:** Paper currently accounts for 70 %of office waste. If you do have to print or photocopy, remember to do it double sided.
- **Create a green culture:** put signs reminding people to save water and electricity in wash-rooms, classrooms and workplaces. Let people know how much energy and water they can save through these simple changes.



### WHEN YOU SHOP

- **Don't use plastic bag :** As they can accumulate in the environment and take decades to break down, choking waterways and damaging wildlife. Always remember to bring your own shopping bag.
- **Choose energy-saving devices:** Many electrical appliances such as refrigerators, air-conditioners and computers now carry energy-saving labels.
- **Buy locally produced products:** The manufacturing process for everything we buy and consume , and the waste we generate, results in greenhouse emissions. By purchasing locally produced goods you support local industry and reduce transport emissions.



### Good Practice for Safe Environment

Plan has been running its program on Child Centred Climate Change Adaptation (4CA project) in South East Asia including in Myanmar, with 3 components, increasing awareness and capacity, participatory implementation of community and /or school projects and advocacy. A 4CA Toolkit is being developed and can be used for teaching and involving children in climate change.

## Module ( 6 )

### Institutionalizing the Implementation of School Safety by school authorities in a sustainable manner



Safe School Training for Education Officials from States and Regions



Opening Speech of DG (DBE) in Safe School Toolkit Consultation workshop in Nay Pyi Taw

#### Introduction

The objective of this module, as explained in the introductory Section, is to provide guidance on how to sustainably implement school safety and make it a routine part of school management and administration. The module provides some action points on how to institutionalize the practice of school safety in schools in Myanmar. The module has four subsections as follows:

- 6.1: Linking School Safety and work of SDMCs with regular work of School Board of Trustees and Parent Teacher Associations
- 6.2: Linking School Safety Improvements with Educational Quality improvement and School Improvement Planning
- 6.3: Reporting, Monitoring and Evaluation of School Safety and its links to the Educational Management Information System
- 6.4: Actions to be taken by school and Educational authorities on an annual basis during the school year to ensure sustainable implementation of Safe School Program

#### 6.1 : Linking School Safety and work of SDMCs with regular work of School Board of Trustees and Parent Teacher Associations

As explained in the introductory Section, it is intended that this toolkit be used by school authorities with minimal external support to develop, implement and maintain a school safety program for all time to come to achieve the eventual goal of making "Every school in Myanmar a safe school". The primary audience of the toolkit has been identified as the School Principal and senior teachers, working through the School Disaster Management Committees and their members working and in partnership with School Board of Trustees, Parent Teachers Associations and MRCS branches.

Myanmar has a long and rich tradition of Parent Teacher Associations (PTA) in each school. Their role, as mandated in the recent Basic Education Bill approved by the Amyotha Hlutaw, is to serve as "an organization formed of parents or guardians and teachers in basic education schools to improve the effectiveness of the education of learners and their physical, verbal, and character development." The School Principal is the chair of the PTA.

School Board of Trustees is another well established mechanism in most basic education schools and by the newly enacted law is expected to serve as a school support organisation mandated as “an organization formed of educationally and socially respected people in basic education schools giving assistance to the Parent-Teacher Association for the development of the school system.”

Particularly in rural schools, parents are very close to the schools and as active community members, are actively involved with the school activities, especially those on the PTA. So too, the School Board of Trustees, normally headed by the Village tract or Village administrator (elected) is a locally influential person and well connected on all issues.

It is important that the entire issue of Comprehensive School Safety is well addressed by the school authorities with the direct involvement of these two mechanisms, and preferably under them. As per the guidance in module 2, the principal and teachers should constitute a separate School Disaster Management Committee (SDMC) as per module 2.2, particularly to develop the School Disaster Management Plan comprising both preparedness for response (Module 2.4) and disaster risk reduction (Module 2.7). Parents are identified as important members of the SDMC. However it is beneficial to more formally link the SDMC to the PTA, certainly by reporting on it at least one of the PTA meetings during a school year, and by making sure that at least some PTA members are actively involved in the SDMC.

SDMCs have been developed in Myanmar and elsewhere out of the body of work on School Based Disaster Risk Reduction (SBDRR) done by various INGOs, national NGOs and MRCS. They have developed consistent with principles outlined in the School Safety manual developed and published by ADPC and UNDP in 2009, and by more detailed guidance developed by the relevant INGO or consortium, and by the experience and practice of doing what works well on the ground. The SDMCs work very well during their phase of establishment and the development of the SDMP Plan and in the context of a project where external facilitator support and resources are available. The level of activity by these SDMCs in years after the project ends are varied, and it is only a few that continue to maintain a regularly functioning SDMC and a periodically updated plan and exercises. Very few have developed a educational continuity plan and instead improvise temporary learning approaches when a new disaster strikes, rather than follow a plan developed during peace time. Given the workload on the principal, and periodic turnover, this is not unexpected. Some projects have tried to more formally integrate the SDMC as a sub-committee of the PTA, while others are doing the School SM/DRR work as an additional responsibility of the PTA.

Looking ahead, either of these two approaches will work, of constituting the SDMC as a PTA sub committee, or to put this as a subject under the responsibility of the PTA. Taking the second option would require that this subject be put on the agenda of at least every alternate meeting of the PTA, and that specific members are tasked with responsibility for delivery and implementation of tasks.

School construction, extension, maintenance and repair are addressed by the school principal under the overall guidance of the School Board of Trustees. Guidance on how to address the questions of repair and new school building construction are covered in Module 4 and the involvement of the School Board of Trustees and the PTA have been advocated in these tasks under modules 4.4 and 4.5. So too it is beneficial to have the subject of the DRR section of the SDMP (module 2.7) as well as under 4.4 and 4.5 to be periodically reported to the School Board of Trustees for information, support and decisions, as well as advocacy with higher authorities, both in the village, village tract, and township, as well as with the TEO.

Some suggestions on how to do this are given in section 6.3 and 6.4.



## 6.2 : Linking School Safety Improvements with Educational Quality improvement and School Improvement Planning

At present, if a school requires significant repairs or an additional building, the school principal is required to fill in a form explain the rationale for such a request, provided photographic evidence of damage or poor building quality and submit the same to the Township Education Officer (TEO) who in turn submits with her recommendations to the Region/State Director of Education for transmission with recommendations to the Ministry. This form can be filled up any time in the year.

As part of school and educational quality improvement, and as noted in module 2.7, every school in Myanmar is required to prepare a school improvement plan in each academic year. This plan is intended to be used for resource requests for periodic operation and maintenance before the start of the new academic year. The School Board of Trustees are involved in scrutiny and approval of the plan. This is an important document, which becomes the basis for budget allocation for school facilities and educational instruction improvement.

As mentioned in Module 2.4 on School DEPR Section of the Plan, a companion document or integral part of the School DM plan is an assessment of the capital investments to ensure that needed repairs and retrofit are done and needed equipment and systems are in place. Recurrent costs arising from conduct of awareness activities, supplies, training should also be budgeted. It will be useful if the form for repair and items identified for regular operations, the requests for repair, retrofitting or new school construction and for new investments in the school DM Plan are linked to and featured as a regular item and integral part of the school improvement plan. Then regular allocations from Government resources will become the basis of school safety improvements and major school renovations. Such steps will ensure the sustainability of the School DRR Plan and sustained resilience of the school.

## 6.3 : Reporting, Monitoring and Evaluation of School Safety and its links to the Educational Management Information System

In the first year (and more if needed) of use and operation of this toolkit by a particular school, effort should be made to follow the areas outlined under the three pillars of Comprehensive school safety and to build all the recommended elements of School Disaster Management (Module 2); Risk Reduction and Resilience Education (Module 3) and Safe Learning Facilities (Module 4). Putting school disaster management systems - committees, plans, exercises in place (Module 2) and teaching DRR and resilience both in and outside the curriculum as practical knowledge and skills may take the better part of twelve months or so. Achieving safety of learning facilities may take even longer.

A useful way of review is to report progress made and outputs achieved to the school PTA and Board of Trustees, as well as to the Township Education Officer. Review by the PTA and School BoT serves a dual purpose, it focuses attention to the undertaking of tasks by the SDMC and teachers (Modules 2 and 3) and also enables outputs of the process to be shown and consulted with them. This helps in buy in, and also helps in addressing bottlenecks and resource gaps experienced during implementation.

Outputs in context of module 2 on school disaster management include the establishment of the SDMC, the development of risk and resource maps, the development of disaster management plans including evacuations, plans for educational continuity, and the holding of regular drills. Outputs in the context of module 3 on risk and resilience education include lesson plans, and classes taught to children in both life skills and subject curriculum, local content and extra curricula activity to practice and learn the practical aspects of disaster management.

Outputs in the context of module 2-7 on DRR and Module 4 and on safe learning facilities include assessments on school safety, identification and reporting on school repairs needed, maintenance and repairs funded and carried out, submission of applications for new and improved school facilities and their implementation.

Preparation of an annual report (2 page summary) by the school principal signed off by some PTA members and the school Board of trustees and submission of this report to the TEO will motivate implementation, and facilitate easy monitoring by township authorities. Over time this should be integrated into the Education Information Management System (EMIS), so that region and state directors of education and senior officials in the Department of Basic Education at the national level can monitor progress in a particular schools as well as trends across townships and states/regions, particularly those subject to high risk.

#### 6.4 : Actions to be taken by school and Educational authorities on an annual basis during the school year to ensure Sustainable implementation of Safe School Program

Putting systems into place is a challenge, but an interesting one, that keeps people engaged, especially if there is a special project to get a safe schools project started. But what happens after a project is over? How do we sustain and routinised interest in the subject for all time to come? And who should custodians of this process be? How do we keep their interest?

Experience with experiments at upscaling school safety to all schools at risk show us that directives from national authorities, and the establishment and maintenance of a national program and campaign is one way to go. In maintaining systems once set up emphasis needs to be on establishing and maintaining an "ongoing annual participatory planning and review process". These can be around themes similar to the key elements of the CSS as follows, each to be followed for one to two months at a time during the 9 months or so of the active school year. This covers both introducing these elements to those who are new to school (teachers, parents, students) and reviewing them against what is currently in the plan and school safety program. Each theme will be reviewed during the time during a meeting of the SDMC or PTA during that period. The suggested themes are



1. Know your Risks (or Dangers if this term is more easily understood).
2. Reduce your Risks (where the actual risk reduction comes in, as distinct from response-preparedness).
3. Prepare to Respond (SoP/Drills in the skills area, and also provisions and system for post-disaster organization).
4. Plan for Educational Continuity (made ahead of time, a revolutionary idea that has not been done in the past, and reduces need for EiE).
6. Share, Reach out, Advocate for safety in the wider community where the school is located.

Key elements of each of these themes are elaborated in the following subsections

### 1. Know your Risks ( Months 1-2)

Review and renew the reassessment of risks especially the hazard calendar, compendium of natural, manmade and environmental risks in and around your school , including the school grounds and dangers encountered by children on the way to school, as well as the school resource maps, especially facilities in the school and community that will be of use during an emergency. Renew acquaintance with the people in these facilities ( hospital, ambulance service, fire service, Red Cross and village/village tract DM Committee.

### 2. Reduce your Risks (months 3-4)

Review the risks identified, and the implementation of actions for risk reduction planned and identified in the plan. These include mitigation of structural and non structural risks, infrastructure and environmental risks and reducing personal risks. Where actions have not yet been started or finished, find ways to expedite, and bring to the attention of the school PTA and BoT. Add new risk reduction measures that are identified during the review. Keep on the list those which are completed, but require effort to maintain.

### 3. Prepare to Respond (Months 5-6)

Review and update evacuation plans, membership and assignment of roles of task forces, emergency contact information for students and teachers and safe family reunification plans. Check early warning equipment and test warning devices ( radios, batteries, megaphones) Review the status and contents of the student go bags, administration Evacuation go boxes, school emergency supplies bin, and classroom shelter in place bucket. Conduct a simulation exercise/drill review performance and update the plan. Consider organizing drills in a particular township over a particular fortnight, so that there is an impact felt by the community.

#### 4. Plan for Educational Continuity (months 7).

Look at the plan for educational continuity and review how it was used in an actual emergency. If none has occurred, look at how you handled other unforeseen or unusual events, such as conducting classes in the open during classroom cleaning or repair. Did the teaching /learning at the alternate location work well? Is there another place we could try? If the disaster that happens is different from the one we planned for (earthquake instead of flood) evaluate whether the alternate location identified will still work. Review your plans for alternate modes of instruction and flexible learning, and update your plan accordingly.

#### 5. Share, Reach out, Advocate for safety in the wider community ( months 8-9)

Undertake partnership with the village community and promote actions at home, develop/update - family disaster plans, conduct campaign on safety and disaster reduction begins at home, improve safety on the road and in the surroundings including during access to school.

As emphasized in the introduction, implementing all 3 pillars of school safety is needed by every school and its authorities for all time to come. Continuing these themes during every academic year with the SDMC and the PTA, year in and year out is a effective way to do this after the first year or so when systems are to be set up. It is only through sustained and routine implementation and review of the systems for school safety that will realize the national objective of "Making every school in Myanmar a safe school".

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# School Safety Toolkit for Myanmar

Make Every School a Safe School in Myanmar

“School Safety Toolkit for Myanmar” is a resource for school authorities working at the school level (school principals and teachers), to develop and implement a systematic program of school safety.

The Toolkit serves as simple, concise and coherent guidance material on school safety based on the global ‘Comprehensive School Safety Framework.’ This Toolkit provides guidance for actions to be taken by school authorities in implementing all three pillars of school safety, namely in assessing impact of potential hazards specific to schools; repair and retrofitting, building safely in the first place, identifying local resources available to respond to disasters, formulating and implementing school disaster management plans, and teaching disaster risk reduction through the curriculum and through extra-curricular activity.

It is hoped that school principals, senior teachers and School Disaster Management Committees will develop, implement and maintain effective school safety programs for years to come.

This toolkit is part of ASEAN Safe School Initiative (ASSI) under AADMER work program (2010 – 2015) developed with the leadership of Ministry of Education (Department of Basic Education), in cooperation with DPRE working group and implemented by AADMER Partnership Group Plan International Myanmar (ASSI Lead), World Vision International and Save the Children International with the financial support of ECHO.

