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Handbook for a School-based
Risk Reduction Initiative

International Federation
of Red Cross and Red Crescent Societies

Contents

Using the handbook

This handbook presents basic content and tips for implementing a school-based risk reduction programme. What is offered here is a guide and revisions will be needed to suit a specific country context.

The handbook for trainers is organized into five modules. These modules are based on good practices from around the world, though they build on the Comprehensive School Safety model for South-East Asia. The modules are intended for implementation by National Societies to initiate the school safety programme.

The handbook was developed with the assumption that the unique relationship between a National Society and a government will be leveraged to work as implementing partners and to build on the tremendous progress being made in countries on school safety. The modules are flexible to accommodate existing tools and teaching aids that are used widely in a country. Trainers are expected to augment the handbook with activities they find appropriate and, if need be, to use locally available resources and materials for any activity.

Target audiences

The modules presented are designed for different audiences and age groups. Thus, this handbook does not lay out a self-contained workshop training course. Each module is intended to guide individual training sessions with specific groups (school staff, parents and students). Trainers are expected to customize their programme based on the target group.

The first two modules do not include suggested activities and are designed as quick, orientation sessions for National Society trainers and volunteers, local education authorities, school principals and other administrators and school teachers to discuss basic concepts and the importance of integrating a disaster risk reduction programme into school activities.

The other three modules target different age groups: (i) parents and caregivers of young children, (ii) students aged 5–17 and (iii) youth.

Use of specialists

All schools are expected to set up a school management committee that comprises community members, support staff of school, teachers and students. Additionally, the committee should then oversee the establishment of school based risk reduction team (various response teams such as an early warning and early response team, a search and rescue response team and a first aid response team can be formed under school based risks reduction team—the list can be longer as per the context of a

school and host community), which also comprise teachers, school staff and students. Each response team will require training to enhance each response team member's knowledge and ability to participate in a school-based risk reduction programme. The roles of the different response teams are explained in the different modules of this handbook.

The five modules

Module	Target groups
Module 1: The importance of school-based disaster risk reduction **Session I.** Vulnerability of children in disasters **Session II.** The Comprehensive School Safety framework **Session III.** The Red Cross Red Crescent school-based risk reduction model **Session IV.** National Society engagement on school-based risk reduction	National Society staff and volunteers Local education authorities School principals and other administrators School teachers
Module 2: Approach and process for a school-based risk reduction programme **Session I.** Disaster risk reduction and stresses in a school context **Session II.** Ensuring the safety of children against disasters: Approaches and methodologies	National Society staff and volunteers Local education authorities School principals and other administrators School teachers
Module 3: School-based risk reduction activities to benefit children up to 5 years old **Session I.** Role of parents and caregivers to ensure safety in early childhood **Session II.** Risk reduction activities to benefit children	National Society staff and volunteers Parents and caregivers
Module 4: School-based risk reduction activities for students aged 5–17 **Session I.** Concept of school-based risk reduction **Session II.** School-based hazard, vulnerability and capacity assessment **Session III.** School-based risk reduction planning **Session IV.** School-based risk reduction teams **Session V.** Mock drills in schools **Session VI.** Needs of children with disabilities **Session VII.** Psychosocial care and support	National Society staff and volunteers School principals and management School teachers Students from all grades in both the primary and secondary (lower and upper) levels
Module 5: School-based risk reduction activities for youth and volunteers aged 17–24 years **Session I.** Youth leadership and volunteerism for disaster risk reduction **Session II.** Campus safety **Session III.** Response teams	National Society trainers Youth groups and volunteers University management, staff and students

Module 1
The importance of school-based risk reduction

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Sessions

I. Vulnerability of children in disasters

II. The Comprehensive School Safety framework

III. The Red Cross Red Crescent school-based risk reduction model

IV. National Society engagement on school-based risk reduction issues

Target groups: National Society staff and volunteers, local education authorities, school principals and other administrators and school teachers

Session I: Vulnerability of children in disasters

Session objective: Develop a basic understanding on vulnerabilities, risks and hazards in schools and communities.

Concepts

The United Nations Convention on the Rights of the Child states that all children, without discrimination, have the right to live, grow, develop and participate in a secure and decent environment. From a rights perspective, it is critical that disaster risk reduction programmes factor in the needs and realities of young children by providing support to their families and by educating children from an early age about disaster risks and preparedness.

A sudden, generally unanticipated emergency event in a school negatively affects a significant segment of the school population, at times leading to serious injury or death. These events can either be a natural or human-induced catastrophe and can strike with little or no warning. Actual incidents, such as the collapse of a building in an earthquake, fires and even stampedes, have forced the global school community to understand and avert such disasters from occurring.

Many schools are not prepared to cope with a disaster. Such an approach – of not readying for a calamity – has resulted in the loss of life of many children and school staff. Teachers and staff must know how to help students and themselves through a crisis and ensure that they return home safely. Knowing what to do when confronted with a crisis can make the difference between calm and chaos, between courage and fear, and between life and death.

Not all disasters strike a school directly and immediately. But they can have several negative impacts on schools. Sometimes schools are affected indirectly through the impact on the homes of students, staff and their families. In the wake of earthquakes, droughts or communal unrest, drop-out rates of students tend to increase. It is common for students to leave school after a disaster event, either because their parents need them to work or because they are afraid of sending their children back to an unsafe school environment. Children may feel unable to attend classes or have problems concentrating because they are suffering from the psychosocial impacts of a disaster.

Schools can be affected in short- or long-term phases. Damages to school infrastructure directly relate to a reduction in school hours and, consequently, to a decrease in the quality of education.

After a disaster that impacts a school, children may either stop going out of fear or they may be forced to go to other facilities, often in shifts. Either way, their education suffers. School hours may be cancelled because teachers are busy helping their communities meet recovery needs. When students are left anxious, uprooted, out of the classroom for long periods or relocated to other facilities, their education is disrupted and their stress increases.

The vulnerability of school facilities must not be seen only in terms of the need to prevent catastrophic damage that may destroy the buildings and cause injuries. It is also necessary to prevent situations that may affect the continuity of service that schools provide.

Terminology

Vulnerability: The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard. There are many aspects of vulnerability, arising from various physical, social, economic and environmental factors. Examples may include poor design and construction of buildings, inadequate protection of assets, lack of public information and awareness, limited official recognition of risks and preparedness measures and disregard for wise environmental management. Vulnerability varies significantly within a community and over time. Specific types of vulnerabilities are discussed in the modules.

Hazards: A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihood or services, social and economic disruption or environmental damage. Specific hazards are discussed in detail in the modules.

Disaster risks: The potential disaster losses in lives, health status, livelihoods, assets and services that could occur to a particular community or a society over some specified future time period. The definition of disaster risk reflects the concept of disasters as the outcome of continuously present conditions of risk. Disaster risk comprises different types of potential losses that are often difficult to quantify.

Preparedness: The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely, imminent or current hazard events or conditions.

Prevention: The outright avoidance of adverse impacts of hazards and related disasters. Prevention expresses the concept and intention to completely avoid potential adverse impacts through action taken in advance. Examples include dams or embankments that eliminate flood risks, land-use regulations that do not permit any settlement in high risk zones, and seismic engineering designs that ensure the survival and function of a critical building in any likely earthquake. Very often the complete avoidance of losses is not feasible and the task transforms to that of mitigation. Partly for this reason, the terms prevention and mitigation are sometimes used interchangeably in casual use.

Capacity: The combination of all the strengths, attributes and resources available within a community, society or organization that can be used to achieve agreed goals. Capacity may include infrastructure and physical means, institutions, societal coping abilities, as well as human knowledge, skills and collective attributes such as social relationships, leadership and management. Capacity also may be described as capability. Capacity assessment is a term for the process by which the capacity of a group is reviewed against desired goals, and the capacity gaps are identified for further action. Different types of capacities are discussed in detail in the modules.

Mitigation: The lessening or limitation of the adverse impacts of hazards and related disasters. The adverse impacts of hazards often cannot be prevented fully, but their scale or severity can be substantially lessened by various strategies and actions. Mitigation measures encompass engineering techniques and hazard-resistant construction as well as improved environmental policies and public awareness. Mitigation is discussed in more detail in the modules.

School Management Committee: The committee is formed and strengthened for sustainability of quality education and school safety activities by anchoring the effort and providing regular inputs and actions. This committee is overall responsible for school management. The composition of the committee largely depends on the rule and regulation of respective government ministry. However; few key members are most of the time part of school management committee such as Principal; teachers; representatives from parents; local authority; Community representatives as well as representative of respective government official, civil social representative etc.

School Based Risk Reduction Team: The team is formed and strengthened for sustainability of school safety activities by mobilizing the students at school. The school based risk reduction team is responsible for awareness raising; mitigation activities and preparedness activities. The majority members of school based risk reduction team must be students but Principal; teachers; representatives from parents; local authority representative; community representatives can be as patron of the school based risk reduction team. The members of school based risk reduction team have a key leadership role for school safety before; during and after disaster. The key roles of the school based risk reduction are:

Non-Disaster Time:
- Raise resources and funds to School based Risk Reduction plan along with School management Team.
- Guide to rest of the students on mitigation and preparedness activities.
- Facilitate/co-facilitate training, lead awareness activities
- Coordinate to implementation school based risk reduction plan.
- Develop the response team like First Aid; Search and Rescue; Warning and others as needed.
- Develop the Standard Operating procedure (SoP) for effective response in case of emergency.
- Conduct mock exercise and update SoP as well as School based Risk Reduction plan annually.

During Disaster:
- Mobilize the response team.
- Take necessary actions and decisions as per Standard Operation procedure (SoP).

After Disaster:
- Review situation and response to disaster.

Framework for School based risk reduction at School level: National Societies has been implementing the school based risk reduction since long. Generic framework of those school based risk reduction initiative is illustrated in below diagram.
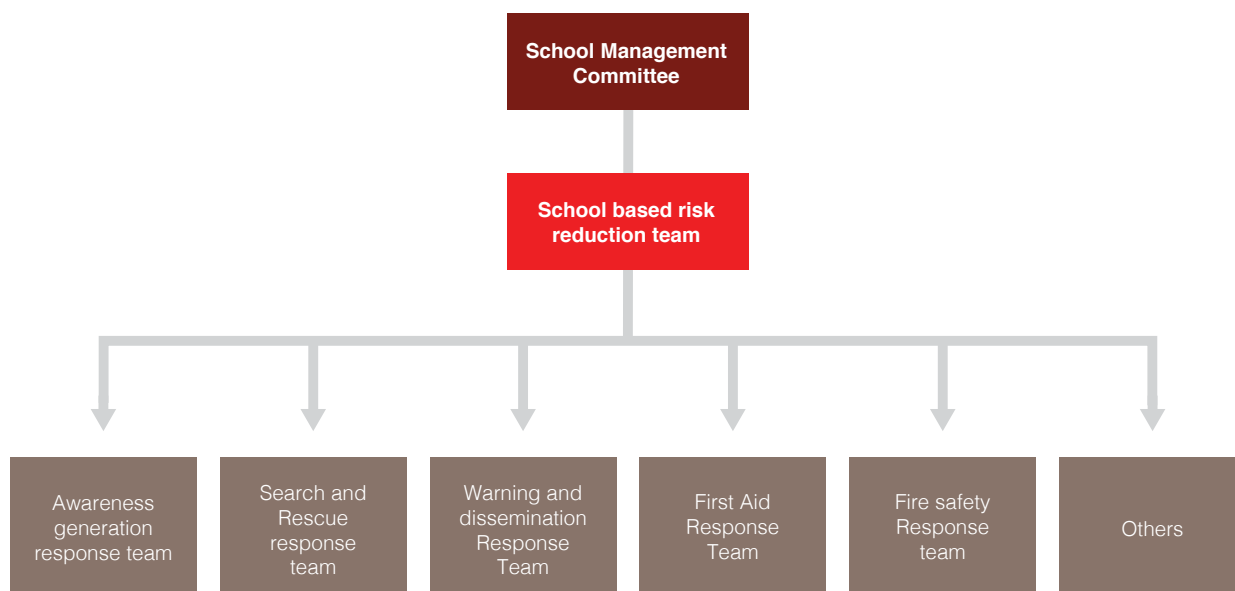
Session II: The comprehensive school safety framework

Session objective: Acquaint participants with the Comprehensive School Safety framework and its three pillars.
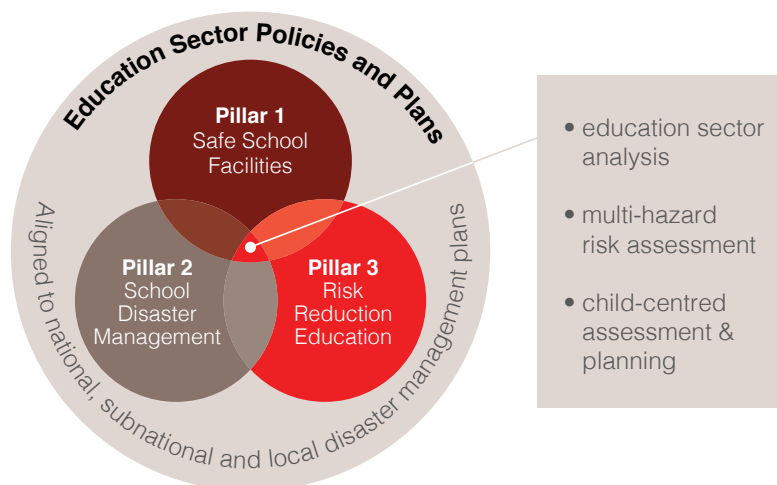
Concepts

The Comprehensive School Safety framework suggests a series of ongoing activities that includes identifying the hazards in a school and outside around it; conducting drills; preparing contingency and disaster management plans by involving parents, teachers and students; and building on the capacities of an institution and individuals to cope with the challenges during an unforeseen event.

Schools and colleges need to prepare for a major damaging event. Being prepared will improve the ability to respond to a disaster. In such an event, school administration and teachers will have to be self-sufficient, relying on their own resources to protect and care for the student population and the immediate surrounding communities until external assistance is available. It is important that all schools develop emergency plans and conduct drills for various situations and hazards that are likely to occur in their area. School children and their families need as much useful information as possible and education on safety and preparedness measures.

Additionally, schools should not be expected to prepare for disaster risks on their own. As an integral part of a community, schools should work with their community to ensure that the school is safe, students are safe and the community is safe in the event of an emergency situation.

National Societies can help liaise between communities; local authority; other stakeholders and schools in preparing both for possible emergency situations. The Red Cross Red Crescent School based Risk Reduction Initiative developed this handbook to contribute the Comprehensive School Safety Framework(CSSF) as a basis for developing a disaster risk reduction initiative for the education sector, which emphasizes alignment with national, subnational and local disaster management plans.

Education Sector Policies and Plans

Aligned to national, subnational and local disaster management plans

Pillar 1 Safe School Facilities

Pillar 2 School Disaster Management

Pillar 3 Risk Reduction Education

- education sector analysis
- multi-hazard risk assessment
- child-centred assessment & planning

The Comprehensive School Safety framework consists of three pillars:

Pillar 1 – Safe learning facilities

Pillar 2 – School disaster management
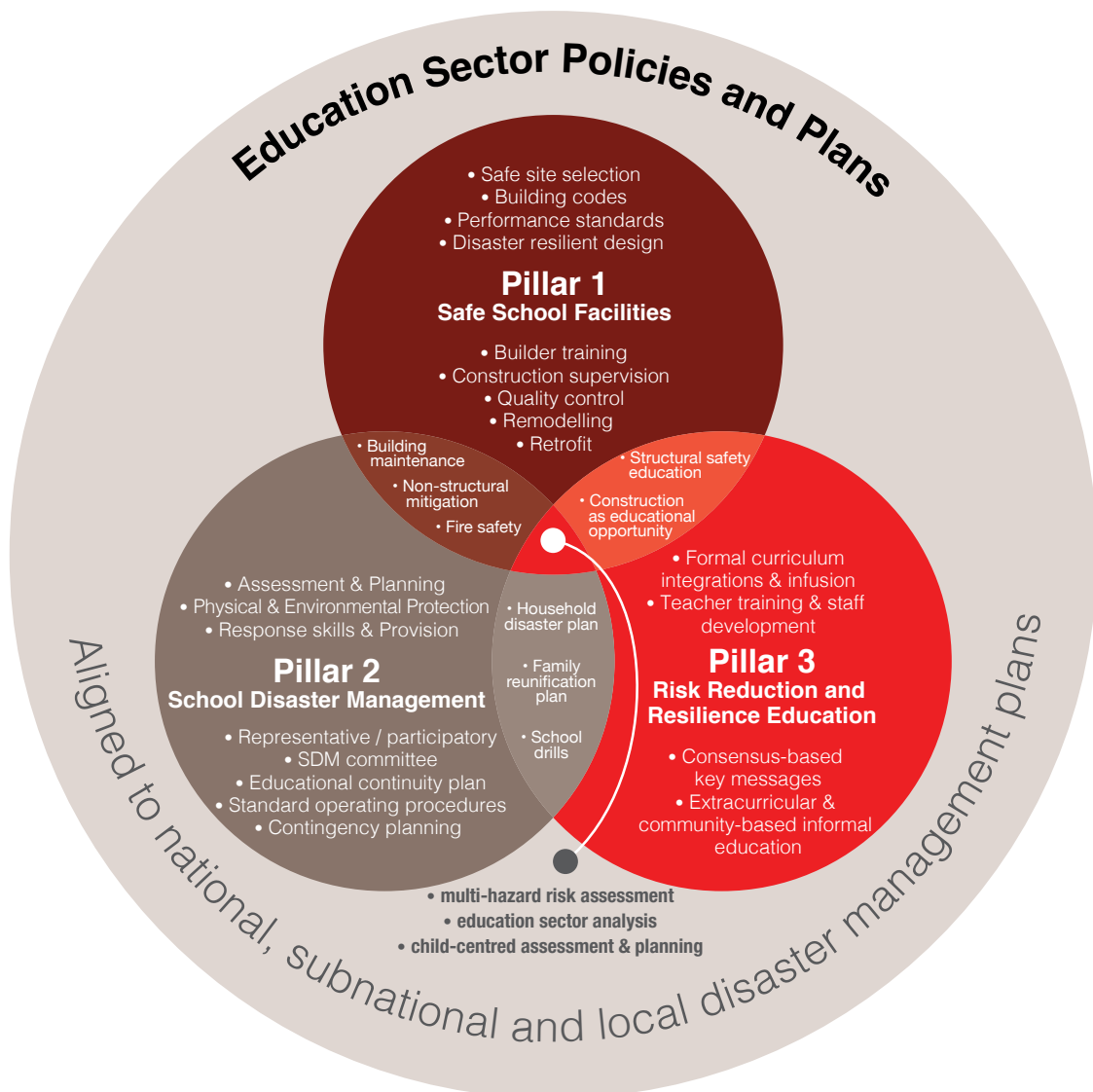
Pillar 3 – Risk reduction and resilience education

Within those pillars, the framework contains following as major elements:

Pillar-1	Pillar-2	Pillar-3
• 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 (including relocation) of unsafe schools. • Minimize building and facilities non-structural and • infrastructural risks from all sources, including design and interior layout and furnishings safe for survival and evacuation. Include disability access in these considerations. • If schools are planned as temporary community shelters, design to meet these needs. • Ensure that children's access to schools is free from physical risks (pedestrian paths, road and river crossings) • Water and sanitation facilities adapted to potential risks (rain-fed and lined latrines) • Implement climate-smart interventions such as rainwater harvesting, solar panels, renewable energy, school gardens • Plan for financing and oversight for ongoing facilities maintenance.	• Provide policies, guidance at sub- 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, roll-out, institutionalize, monitor and evaluate the establishment or empowerment of school-site disaster risk management committee involving staff, students, parents and community stakeholders. • 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. • Practice and improve on response preparedness with regular school-wide and community-linked simulation drills. • Establish national and sub-national contingency plans to support educational continuity, including plans and criteria to limit the use of schools as temporary shelters. • Incorporate the needs of pre-school and out-of-school children, children with disabilities, and both girls and boys.	• Develop consensus-based key messages for reducing household and community vulnerabilities and for preparing for and responding to hazard impacts as a foundation for formal and non-formal education. • Develop scope and sequence for teaching about hazards, disasters, and problem-solving for risk reduction. • Infuse risk reduction throughout the curriculum and provide guidelines for integration of DRR into carrier subjects. • Provide teacher training for both teachers and teacher trainees on risk reduction curriculum materials • Develop strategies to scale-up teacher involvement for effective integration of these topics into formal curriculum as well as non-formal and extra-curricular approaches with local communities.

Promotion of school-based risk reduction is an important component of Red Cross Red Crescent programming. Yet, activities vary from country to country, based on National Society capacity and the context of each country. Discussions within National Societies of Southeast Asia revealed a need for of uniform model of school-based risk reduction, which this handbook begins to provide. The handbook was designed to present a model for a school-based risk reduction initiative that reflects the pillars and elements of the Comprehensive School Safety framework.

The **Comprehensive School Safety** framework provides an approach to reducing risks from all possible hazards within the education sector. The goals of the Comprehensive School Safety model are:

- Protect learners and education workers from death, injury and harm in schools.
- Plan for educational continuity in the face of all possible hazards and threats.
- Safeguard the education sector investments and strengthen risk reduction and resilience through education.

Education Sector Policies and Plans

- Safe site selection
- Building codes
- Performance standards
- Disaster resilient design

Pillar 1
Safe School Facilities

- Builder training
- Construction supervision
- Quality control
- Remodelling
- Retrofit

• Building maintenance
• Non-structural mitigation
• Fire safety

• Structural safety education
• Construction as educational opportunity

• Formal curriculum integrations & infusion
• Teacher training & staff development

• Assessment & Planning
• Physical & Environmental Protection
• Response skills & Provision

• Household disaster plan
• Family reunification plan
• School drills

Pillar 2
School Disaster Management

- Representative / participatory
- SDM committee
- Educational continuity plan
- Standard operating procedures
- Contingency planning

Pillar 3
Risk Reduction and Resilience Education

- Consensus-based key messages
- Extracurricular & community-based informal education

• multi-hazard risk assessment
• education sector analysis
• child-centred assessment & planning

Aligned to national, subnational and local disaster management plans

An incremental approach to school safety can be considered, based on the availability of resources and existing levels of exposure to risk in a given site. At the basic level under the school safety approach, as Figure 1.1 illustrates, there is a need to create awareness among students on how to reduce disaster risks. Achieving this creates a culture wherein school communities are motivated to take initiatives on disaster management planning and working up to higher levels of safety that can be achieved.

At each step there are incremental cost implications for any implementing organization working with a school.

Figure 1.1: An incremental approach to school safety

STEP 4 — **Making school buildings safe**

STEP 3 — **Non-structural mitigation**

STEP 2 — **School disaster management planning**

STEP 1 — **Basic disaster awareness**

Do nothing!
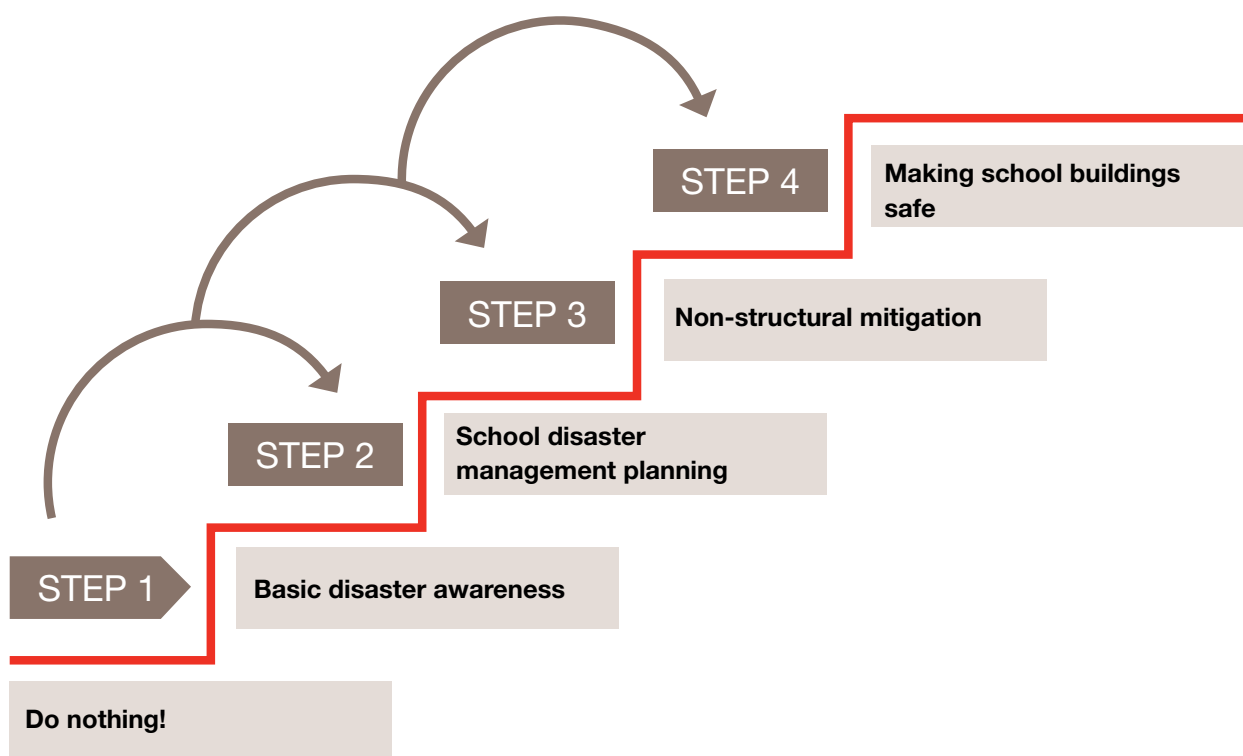
Figure 1.1 indicates that much can be done to make schools safer with minimal resources.

Awareness is a key factor in effective risk reduction. Heightened awareness helps to enhance common knowledge of risks, the factors that lead to disasters and the actions that can be taken individually and collectively to reduce exposure and vulnerability to hazards. The awareness of students, teachers, school staff, parents and the general public should be targeted and expanded with the development of useful and critical information and dissemination through media and educational channels, the information centres, networks and community action and advocacy by senior public officials and community leaders.

Session III: The Red Cross Red Crescent school-based risk reduction model

Session objective: Explain the Red Cross Red Crescent school-based risk reduction model to support the implementation of the Comprehensive School Safety framework.

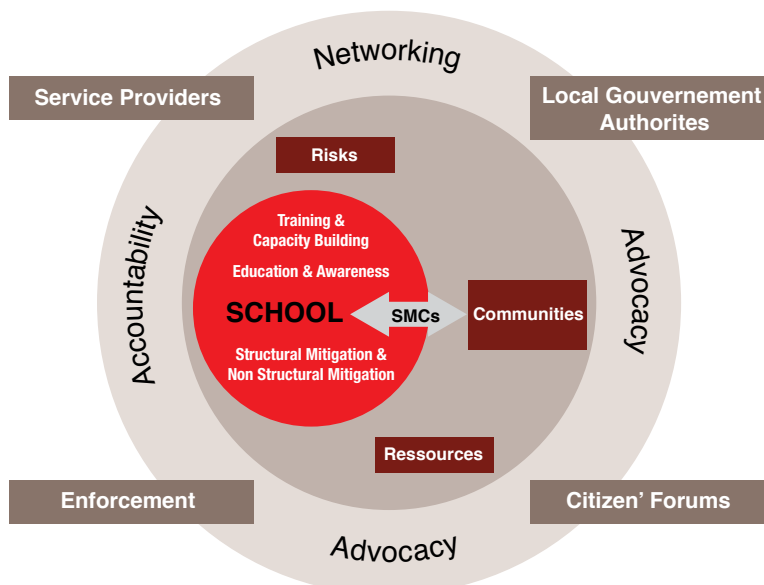## Concepts

The proposed model (Figure 1.2) for school-based risk reduction seeks to enhance the impact of the Comprehensive School Safety framework (CSSF) by leveraging the unique strengths of National Societies within the region. It is based on National Societies establishing communication and working relations within their respective branches and local education administrators and other stakeholders to carry out school-based disaster risk reduction programmes.

The Red Cross and Red Crescent model has three tiers, as illustrated in figure 1.2. The first tier emphasizes school-based activities that echo the three pillars of the Comprehensive School Safety framework (Structural issue: Safe school site; disaster-resilient design and construction schema for retrofit and reallocation etc, non-structural issues: design and interior layout and furnishings safe for survival and evacuation. Include disability access in these considerations.

The second tier covers activities to be done jointly with communities: risk assessments, multisector and inclusive planning, training and capacity building with the community and allocating shared responsibility to community volunteers, including local resource mobilization.

The third tier brings in external factors, such as government authorities, networking, advocacy and accountability, which rely on government authorities, civil society groups, service providers and enforcement for safe school.

Figure 1.2: Red Cross Red Crescent model for school-based risk reduction

Session IV: National society engagement on school-based risk reduction

Session objective: Enhance and strengthen the roles of National Societies to implement a school-based risk reduction programme.

Concepts

The proposed Red Cross Red Crescent model for school-based risk reduction reflects the Comprehensive School Safety Framework (CSSF). It leverages the unique position that National Societies have in countries and their existing relationship with national governments, supported by a large number of volunteers.

Although direct implementation of school-based risk reduction activities can best be managed by many child-centred organizations with capacity to carry out such activities, National Societies can add value in the following ways:

Establish links between a school and a host community: There are local-level disaster risk reduction committees in most countries. These committees may be formal or informal. In most cases, the local Red Cross Red Crescent branch is a member of such a committee. If a branch is not part of such committee, it should be. The Red Cross can mobilize its large volunteer base to complement a school's resources, especially where there are limitations in terms of trained human resources and outreach beyond the campus with, for example, information on early warning system.

Building networks and partnerships: Strong, mutually accountable partnerships with township offices, especially with emergency departments, are critical for a lasting impact of school-based disaster risk reduction activities. National Societies can facilitate such partnerships to ensure that schools receive all the support they require.

Maximize the unique position of National Societies with public authorities: All the National Societies of this region have unique image and relation with their public authority at all level. National Societies should be encouraged to maximize their unique image and relation to implement the Red Cross Red Crescent school-based model to complement the Comprehensive School Safety framework.

Figure 1.3 **Illustrates the possible role of National Societies in their country in a school-based risk reduction initiative**

Citizen volunteer support	Networking with local government agencies	Strong links with civil society organizations

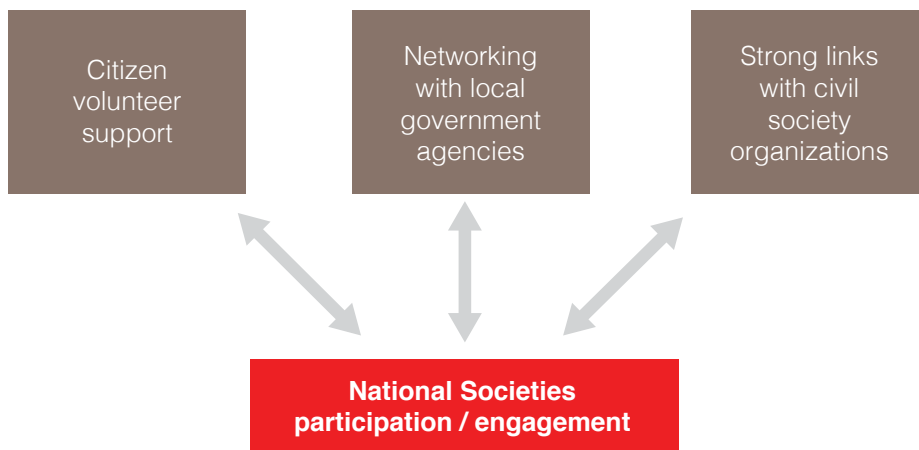**National Societies participation / engagement**

Figure 1.3: National Societies' competitive advantage in steering a school-based disaster risk reduction programme

Areas of engagement/participation of National Societies for school safety

Through a variety of consultations, National Society representatives and partners have recommended the following roles for National Societies.

- A National Society can be a member of a national committee to implement a comprehensive school-safety initiative.

- A National Society can be a member of other committees as a stakeholder implementing a school-based programme in line with Comprehensive School Safety Framework.

- National Societies could lead and co-lead training sessions for school teachers to implement school-based risk reduction. A National Society can develop a pool of trained human resources within its country.

- A National Society can develop teaching materials and disseminate to schools in line with Public Awareness Public Education (PAPE) Guidelines and its key messages.

- A National Society can mobilize students and teachers and a nationwide volunteer network to raise awareness on school safety.

- Harmonize Red Cross Red Crescent school safety initiatives with guidelines established by the Comprehensive Framework for School Safety.

- Promote peer-to-peer collaboration among National Societies, public authorities and external partners.

- Improve knowledge and information management with consideration of new technologies and innovative approaches to implement Comprehensive School Safety Framework.

Module 2

Approach and process for a school-based risk reduction programme

© Philippine RC

Sessions

I. Disaster risk reduction and stresses in a school context

II. Ensuring the safety of children against disasters: Approaches and methodologies

Target groups: National Society staff and volunteers, local education authorities, school principals, other administrators and school teachers

SESSION I: Disaster risk reduction and stresses in a school context

Session objective: Orient participants on elements of disaster risk reduction and stresses so they understand better how to keep a school, teachers and students safe.

Concepts

Disasters

A disaster refers to a catastrophe, mishap, calamity or grave occurrence from natural or man-made causes, which is beyond the coping capacity of an affected community. 'Disaster risk reduction' is the practice of reducing hazards through systematic efforts, beginning with assessments and analysis, identifying hazardous factors and then working to eliminate or minimize them through reduced exposure, lessened vulnerability of people and property, wise management of land and the environment and improved preparedness for adverse events.

Disaster risk reduction implies a continuous and integrated process of planning, organizing, coordination and implementation of measures that are necessary or expedient to:

- **Prevent danger or the threat of any disaster at schools and community:** A culture of risk monitoring needs to be developed within students and teachers. Such a culture can be developed through the use of a seasonal calendar, which is a good tool for helping teachers and students understand potential hazards, vulnerabilities and risks at school and in the community.

- **Mitigate or reduce the risk of any disaster or its severity or consequences. at schools and community:** A culture of monitoring helps teachers and students to engage in in mitigation activities, such as the protection of water reservoir and the water supply system, planning evacuation routes and developing a warning system to reduce the impact of disasters. A mapping of school and community resources helps to implement mitigation activities by maximizing locally available resources. Additionally, a resource mapping is good tool for building confidence because it helps teachers, students and community members understand their strengths and required needs.

- **Capacity building, including research and knowledge management at community:** A regular process of building up capabilities across a community is important. Both the seasonal calendar and the resource mapping will pinpoint gaps and where capacity-building should be directed.

- **Preparedness to deal with any disaster at schools:** Every school must have an updated disaster preparedness plan. That plan needs to be tested periodically through mock exercises. The lessons learned during the mock exercises guide updates to the preparedness plan.

- **Prompt response to any threatening disaster situation or actual disaster at schools and communities:** Schools and communities need response teams to provide immediate relief and help save lives. Various response teams can be formed as per the needs. The seasonal calendar and resource mapping tools can also help strengthen the response system.

- **Assessing the severity or magnitude of the effects of any disaster at school and community:** Students, teachers and community members tend to panic during a disaster. Rumours are a typical problem as well. Having a reliable contact list, such as government officials' phone details, is critical to stay informed, up to date and aware of the scope of a situation, which will mitigate the damage that rumours can wreak, help maintain calm and help the response teams make appropriate decisions.

- **Evacuating, rescue and relief at school:** Evacuation routes, evacuation safe places and standard operating procedures for evacuating for particular types of disasters, vulnerabilities and risks must be in place. Additionally, appropriate support, such as first-aid kits, drinking water, food and psychosocial support must be stocked or on standby. Schools can form relevant response teams to provide such support in case of an emergency.

Stresses

'Stresses' are directly linked to an emergency situation and may become a cause for secondary disaster or aggravate to a level wherein it converts a manageable situation into a disaster. Some important stresses:

1. **Inadequate safe water, sanitation and hygiene.** The issue of safe drinking water is a common problem in schools during normal peace times and is likely aggravated during an emergency.

2. **Accessibility** is a major challenge that is often linked with high rates of school drop-outs. Children should be safe at school and in their community. Children with a disability need easy access within a school campus and all facilities. Common issues related to accessibility are: human–animal conflict, human-induced conflict and safety issues, distance from home to school and safe pathway or road to school. Within a school's premises, issues related to the universal design for learning (teachers performing to standards yet factoring in the unique needs of every student), clear exit designs, obstructions and protective railings are important.

3. **Health and nutrition standards** among children can contribute to high levels of stress if they are suboptimal. The healthy eating practices and balanced diets as well as food security important ways families can help reduce stress, especially among children and youth.

4. **Natural environment degradation and climate change** is adversely affecting children's lives increasingly. The strength, health and durability of the environment and surroundings are relevant to the strength, health and survivability of children. Children should be aware of their natural environment and the adverse effects of climate on that environment and other communities. Children should learn to replace harmful chemicals with environmentally friendly products and develop or maintain tree nurseries; they should walk, cycle or ride share as much as possible to reduce fuel consumption. They should learn to cut down on the amount of paper they use and learn to live without plastic bags.

5. **Road accidents** are now considered as hazards, resulting in direct losses and contributing to high levels of stress among children and parents. Children should be aware of traffic rules and always use of sky bridges to cross roads, wear seat belts while riding in a car and wearing a helmet while using a bike of any type. It is good to educate children in first aid, especially skills that can be used in the event of a road accident.

6. **Discrimination**, particularly among peer children, is also increasingly regarded as a dangerous type of stress—discrimination based on a family's economic status, a child's intelligence, disease infection or gender are common. They should not be tolerated. The International Federation of Red Cross and Red Crescent Societies (IFRC) promotes youth as agents of behaviour change and encourage harmonious relations in their communities.

Session II: Ensuring the safety of children against disasters: approaches and methodologies

Session objective: Develop an understanding of approaches for different age groups in order to implement the Comprehensive School Safety framework.

Concepts

In the event of any disaster, children and teachers in an unsafe school building are at considerable risk. A school campus is a densely populated place, and children are among the most vulnerable groups in a society. To reduce this vulnerability, it is important to consider three aspects:

1. Protect students and the staff from physical harm.
2. Minimize disruption and ensure the continuity of education for all children.
3. Develop and maintain a culture of safety.

The Red Cross Red Crescent school-based risk reduction model (figure 2.1), which has been tested in various areas of Asia, provides differential strategies to impact children and youth (up to age 24 years). A major part of the training for preparedness targets students in primary or secondary school (aged 5–17 years).

Figure 2.1: **Scope and outline of school-based risk reduction approach, by age group**

Generating awareness Stakeholders: caregivers, workers, parents	Generating awareness Stakeholders: teachers, students, school, authorities	Generating awareness, training & capacity building Stakeholders: teachers, students, school, authorities	Generating awareness, training & capacity building Stakeholders: youth volunteers, community representatives, citizen forums

AGE GROUP

Non-school-going children	School-going children primary to higher secondary	Youth volunteers
	Out-of-school children	

As noted in the introduction, the modules in this handbook speak to specific steps in a school-based risk reduction programme. Generally, such a programme should entail ten step towards preparing schools (and thus staff and students) and communities for reducing the risks associated with emergency situations and managing a disaster when it strikes. The steps begin with the trainer approaching a school to set up the programme and associated training.

The school-based risk reduction programme needs to explore the increased engagement of students, parents, teachers and school management committees. Such engagement will increase both the programme's effectiveness and community responsibility for making schools safer.

Figure 2.2: Ten steps of the school-based risk reduction approach for National Societies

Step 1	• Approach a school: Orient the management
Step 2	• Organize basic disaster awareness for teachers and students
Step 3	• Carry out participatory assesments in and around a school
Step 4	• Prepare a school risk reduction plan
Step 5	• Provide special training to school-based risk reduction teams
Step 6	• Carry out simulation exercises
Step 7	• Identify and carry out infrastructure improvements
Step 8	• Engage with parents, local community leaders and the general public
Step 9	• Create links with emergency services of the local government and line departments
Step 10	• Share learning –identify opportunities for scaling up and replicating

Module 3

School-based risk reduction activities to benefit children up to 5 years old

Sessions

I. Role of parents and caregivers to ensure safety in early childhood

II. Risk reduction activities to benefit children

Target groups: National Society staff and volunteers, parents and caregivers

Session I: Role of parents and caregivers to ensure safety in early childhood

Session objective: Develop parents' and caregivers' understanding of how to keep their children safe.

Concepts

Disasters have persistent, long-term negative impacts on human development. They can destroy lives and livelihoods and undo progress made over years of development efforts.

By linking disaster risk reduction to initiatives that support early childhood development, the risks for young children can be reduced significantly.

The right of children to survival, growth, development, protection and participation is enshrined in the United Nations Convention on the Rights of the Child. Early childhood, from conception through the first eight years of life, is a critical stage when children develop an array of cognitive, physical, social and emotional skills. The extensive brain development that occurs during the first years of life is susceptible to environmental influences, which can impact performance and achievement in school and later in life. Children's early experiences can either augment or inhibit their overall development, depending on access to and the quality of basic services, nutrition, health care, family relationships and community care.

0–5 age group

Early childhood is the critical period in which to lay the foundations for success in education and beyond. Children who are hungry, malnourished or ill are not in a position to gain the skills needed for later learning and employment. Children in rural areas and from poor households suffer more because their nutrition intake likely is not just a matter of general availability of food but also of suboptimal quality.

A key component of the continuum between child-friendly schools and local communities is linking the care of younger children who are not yet of school age with schools. Early childhood development centres provide this link. In emergencies, early childhood development centres can offer parents and children a respite from the crises, filled with activities that aim to reduce their depression and despair. Because young children provide moments of pleasure and joy that bring back a sense of normalcy, they are a source of healing for many families.

Essential elements in creating early childcare facilities include:

- activities that stimulate motor skills
- role-playing
- arts and crafts
- picture books.

For children up to age 5 years in the Red Cross Red Crescent school-based risk reduction approach (figure 2.1 and 2.2), important messages and skills are to be transmitted through parents and other caregivers and included in the process of family disaster preparedness planning. Even with limited resources, appropriately designed measures are effective in protecting children and their caregivers from hazards.

Physical structures: Action can be taken to integrate early childhood development and risk reduction by making hazard-resistant structures where children and caregivers congregate. Construction standards for pre-schools, early childhood development centres, health posts and orphanages exist in most countries; they should be revised to take into account predominant local hazards and local conditions. The areas where risk-informed action can be taken into concern: a facility's structure, its geographical location and the surroundings. In addition, safety inside a structure can be better ensured when there is an appropriate arrangement of furniture and materials, an evacuation plan, pre-determined emergency shelters and availability of basics for emergencies – first-aid kits, ladders, equipment for search and rescue and evacuation maps. Standards for young children's physical environment in kindergartens, pre-schools or wherever young children come together as a group should be integral to the quality standards for child-friendly early education.

Home-based and non-formal community-based childcare: Globally, only a small minority of young children have the opportunity to attend pre-school. Most children, especially those from poor, rural families, stay at home under their parents' care. Home-based care is also the only practical type of care for children younger than 3 years. Parenting programmes, caregiver education, home-based or community-based childcare activities and family disaster preparedness offer excellent opportunities for introducing disaster risk reduction concepts and concrete actions.

Session II: Risk reduction activities to benefit children

Session objective: Integrate risk reduction into early childhood care and development so that adults who care for young children or who provide services and support to them and their families can participate in mitigating the effects of disasters on the survival, growth and development of children in their early years.

Concepts

Numerous examples from around the globe show that children are more vulnerable than adults to disasters. At the same time, however, they can be influential and effective communicators about disasters. Lessons learned at school are often repeated at home and replicated to extended family and neighbours.

Unsafe schools are a reality in most developing countries. With the spread of education access within countries, more and more children go to schools that are vulnerable to multiple hazards, including pre-schools, learning centres and day-care facilities. Parents need to understand the potential hazards, vulnerabilities and risks of their surrounding areas, including the schools or care facilities where they send their children. If they have options, they may want to base the decision of where to send their children on safety issues. Or they may want to join school management committees or simply request safer facilities.

Nearly half of all victims of natural disasters are children younger than 15. Despite the use of schools as safe facilities for public shelter following a disaster, school buildings are often an additional liability because as a temporary shelter they deprive children of their classes.

What is a hazard?

A 'hazard' can be defined as a dangerous condition or event that threatens or has the potential for causing injury to life or damage to property or the environment. Hazards can be grouped into two broad categories:

> **Natural hazards** relate to natural phenomena (hazards with meteorological, geological or even biological origin). Examples of natural hazards are cyclones, tsunamis, earthquakes and volcanic eruptions, which are exclusively of natural origin. Landslides, floods, drought and fires are socio-natural hazards that can be both natural and man-made. For example, flooding may be a result of heavy rains, a landslide due to deforestation or the blocking of drains with human waste.

> **Man-made hazards** relate to human negligence or intentional dangers. Man-made hazards are associated with industries or energy-generation facilities and include explosions, leakage of toxic waste, pollution, dam failure, wars or civil strife, terrorist attacks and fire.

School-specific hazards are prevalent in a campus or nearby and pose a threat to students, such as an electrical transformer near the school entrance, a high-tension electrical wire running through the premises or an open well. A chemical explosion in the chemistry lab or burns in the home science class, a fire due to a short circuit or an unfortunate incident during picnic are other potential hazards that should be anticipated. These specific hazards are a definite threat to school safety but may not be a direct threat to the community.

A comprehensive list of hazards that could affect a school and community should be developed by teachers; School Management Committee; community members and the school-based risk reduction teams. It should include a comprehensive list of available resources, such as mitigation maintenance skills (design and install adequate ventilation, cooling and lighting in classrooms and general repair work), infrastructure, property and equipment that could be used either to prepare for or during an emergency situation to better lives and livelihoods.

What is vulnerability?

'Vulnerability' can be defined as the extent to which a community, structure, services or geographic area is likely to be damaged or disrupted by the impact of particular hazard, on account of their nature, construction or the proximity of that hazard. School-specific vulnerability refers to little space, no playground or no fencing. These weaknesses can aggravate an emergency situation.

Types of vulnerabilities

a. **Physical vulnerability** is a result of such factors as poor land-use planning, engineering, architecture density levels, remoteness of a settlement and/or inadequate design and materials used for critical infrastructure and for housing.

b. **Social vulnerability** is a result of factors such as illiteracy, poor-quality or no access to education opportunities, peace and security, access to basic human rights, systems of good governance, social equity, negative traditional values, knowledge, customs and ideological beliefs.

c. **Economic vulnerability** is a result of factors such as poverty, insufficient national economic reserves and inadequate socioeconomic infrastructure, communication networks, utilities, supplies, transportation, water, sewage (and sewerage) and health care access.

d. **Environmental vulnerability** is a result of factors such as the extent of natural resource depletion, the state of resource degradation, loss of resilience of the ecological system, loss of biodiversity and/or exposure to toxic and hazardous pollutants.

e. **Systemic vulnerability** is a result of factors such as the degree of networking, links and coordination among government agencies, departments and ministries and/or the mechanisms for identifying gaps in the system and strengthening the weak areas.

What is capacity?

'Capacity' can be defined as resources, means and strengths that exist in households and communities and that enable people to cope with, withstand, prepare for, prevent, mitigate or quickly recover from a disaster. Hazards are always present in any environment, but a hazard becomes a disaster only when there is great vulnerability and less capacity to cope with it. The frequency or likelihood of a hazard and the vulnerability of a community increases the risk of being severely affected. School-specific capacity needs to be assessed in every school and this can include the presence of trained human resources within a school, fire extinguishers and a first-aid box.

Types of capacity

a. **Physical capacity** refers to the infrastructure and people's skills that help to protect lives and livelihoods from disaster and crisis.

b. **Socioeconomic capacity:** In most disasters, people suffer their greatest losses in the physical and material realm. People with resources, skills and support (from family and friends) likely have the physical capacity to recover relatively soon because of their support systems. Even when everything is destroyed, they have the capacity to cope better than people with fewer or no resources, skills or support systems.

Structural and non-structural issues in schools

What is a structural hazard?

The structural elements of a building carry the weight of that building, the people who use it and the things inside. The structural elements should be able to weather the forces of nature. These 'load-bearing' elements include the frame (columns, beams), masonry and construction. Administrators need to check their school's structural ability to withstand hazards like earthquakes, floods; cyclones, tsunamis or whatever is prone in their area (by calling in experts). School facilities should be certified by the relevant government authority and engineers in terms of established safety standards.

What is a non-structural hazard?

A school is prone to non-structural hazards onsite and offsite. The non-structural elements of a building do not carry the weight of the building and include windows, doors, stairs, partition walls, pipes and ducts. They also include 'building contents' that users bring with them, such as furniture, appliances, coolers and water tanks. Non-structural elements are those that are either attached to a building or kept in a building.

There are other elements that are not actually part of a building – attached to it or placed in it – but within the school campus and are hazardous, such as an open well, no fencing or poor-quality fencing and no hand rails. These elements are not necessarily a seismic hazard, but they can increase the threat to students and staff by increasing the structures' vulnerability. These threats should be dealt with appropriately. Removal of them also removes their purpose, so it is important to learn what safety measures can be adopted so that all threats are removed from needed elements that are otherwise a non-structural hazard.

Hazards within school buildings include:
- narrow dimensions of halls or stairways (in case of a mass evacuation)
- smoke in the hallway (from a science laboratory)
- doors and windows opening inward
- glass panes
- electrical wires
- tall bookcases or cabinets not properly secured to a wall
- areas where flammable liquids are stored (science laboratory)
- other movable, falling or blocking items.

Hazards outside the school building include:
- power lines
- trees
- parapets, roof tiles, chimneys, glass
- concrete walls along routes to buildings
- rivers, sea coast, main roads, market place, inflammable goods storehouse, a bus stand, railway tracks
- open well
- inferior-quality fencing
- lack of ramps or hand rails.

There are five important ways of reducing the risks posed by non-structural hazards:
1. Relocate the furnishing and contents.
2. Secure non-structural building elements and furnishings.
3. Corrective action for non-structural hazards in the immediate vicinity of the school campus, such as bolstering a book case or cabinet to a wall.
4. Regular consultation with engineers and maintenance personnel to monitor the wear and tear of the school facility.
5. Encouragement of behavioural changes among users. It is vital and indispensable that users of a building develop a culture of safety, such as using a dustbin to avoid blocking drains with debris or washing hands before a meal; burning dry garbage away from home, school or infrastructure; encouraging students to plant trees; learning how to handle a fire with care.

What can be done for school-based risk reduction?

A designated management committee should be formed to assess the safety of pre-schools, learning centres and any other facility (including homes) where children congregate along with representative of parents and local authorities. The committee should first engage community leaders and other residents who can help set safety as a priority. Then the committee should oversee the development of action plans, the mapping of goals and objectives to promote school safety and community preparedness. This will also require managing positive change in and around the learning centre environment and evaluating the effectiveness of improvements, with the support of:

- baseline study
- audit of materials
- tools for identifying gaps and
- the integration of a risk reduction programme.

The following activities could be considered as non-structural mitigation:

- regular building and grounds assessment
- regular building maintenance (especially from water and pest damage)
- attach roof securely to the base structure
- reassign the use of classrooms
- develop floating classrooms (include bar rails to prevent falling in)
- site selection (for new facilities) and analysis
- hazard-resistant designs appropriate for site
- hazard-resistant construction
- netting and cordon around construction site
- retrofit to prevent old components from collapsing
- replace unsafe structures
- relocate a structure to a safer location
- raise the floors or foundation above the flood level
- retain wall construction
- establish safety bunkers or trenches
- follow green construction practices
- develop and rehearse evacuation plans
- plan for reuniting families
- plan for children with disabilities.

Suggested activities for parents and caregivers

Parents and caregivers in the home or in a pre-school or some other learning or day-care centre should be informed of what to do in the event of a disaster to protect young children. The following two activities are used in South-East Asia to benefit the improved safety of young children. Trainers are welcome to use other activities and locally available resources and materials as long as they meet the intended objectives of the module.

ACTIVITY A: GROUP ACTIVITY FOR ADULTS
(parents, caregivers and other staff personnel in a pre-school or early childhood development centre)

Activity objective: Identify hazards, vulnerabilities, risks and resources that will positively or negatively affect school safety.

Time required: 25 minutes

Materials needed: A white board can be used to highlight primary points.

INSTRUCTIONS

1. Divide participants into groups.
2. Ask participants to discuss within their group the following questions:
   a. What are the hazards in your pre-school or early childhood centre and surrounding area that could exacerbate the impact of a natural disaster or accident?
   b. What are the vulnerabilities in your pre-school or early childhood centre and surrounding area that could exacerbate the impact of a natural disaster or accident?
   c. What skills and resources are available within your community and school or centre that could be utilized to help make the premise safer?
   d. Is there an action plan to reduce the vulnerabilities or risks?
3. Give 10 minutes for discussion.
4. Reassemble the participants and ask each group to present in front of the larger group.
5. Add any point that may have been left out and thank participants for their work.

ACTIVITY B: SCHOOL-BASED RISK REDUCTION PLANS

Activity objective: Assist parents and caregivers in understanding what is required to develop:

- a plan for evacuating children in a childcare centre (or in a home)
- a plan for reuniting families after a disaster strikes
- a plan for children with disabilities and those with functional needs
- a plan for responding to multiple hazards.

Time required: 40 minutes

Materials needed: A white board can be used to highlight primary points.

INSTRUCTIONS

1. Divide participants into two groups.

2. Using the list of hazards, vulnerabilities and risks and available resources, ask one group to first consider how they can maximize those available resources to improve the environment at their school or learning centre in response to multiple disaster possibilities. Ask them to also draft an evacuation plan for their school or learning centre, and ask them to consider how they would care for children with disabilities.

3. Ask the other group to develop a risk reduction plan considering multiple types of disasters, based on the list of hazards, vulnerabilities and risks from the previous activity and using information from the seasonal calendar and resource mapping exercise. Ask them to also consider how they reunite families after a disaster strikes during school hours.

4. Ask each group to make presentations, allowing for questions.

5. Reassemble the participants into one group. Ask a few participants about their learning reflections and how they can carry out a similar but more thorough activity in their school or learning centre to produce the four types of plans every facility should have.

Module 4

School-based risk reduction activities for students aged 5–17

Sessions

I. Concept of school-based risk reduction

II. School-based hazard, vulnerability and capacity assessment

III. School based risk reduction planning

IV. School-based risk reduction teams

V. Mock drill exercises in schools

VI. Needs of children with disabilities

VII. Psychosocial care and support

Target groups: National Society staff and volunteers, school principals and management, school teachers, students from all grades in both the primary and secondary (lower and upper) levels

Session I: Concept of school-based risk reduction

Session objective: Orient participants on the concept of school-based risk reduction and the key stakeholders.

Concepts

School-based risk reduction is gaining recognition as a critical component of community-based risk reduction. School-based risk reduction is a child-centred community-based framework that fosters the agency of children and youth, both in groups and as individuals, to work towards making their lives safer and their communities more resilient to disasters.

The approach entails the ethical and meaningful participation of all children in assessing, planning, implementing, monitoring and evaluating disaster risk reduction programmes. It is underpinned by the recognition of children as rights holders who, together with the support of adult duty-bearers, can and must have significant roles in their communities. Thus, children are seen both as holders of basic rights (to survival, development and protection) and as actors whose knowledge and active efforts are needed in preparedness, relief and recovery disaster programmes (and beyond).

The key stakeholders of a school-based programme:
- school-based risk reduction teams
- school management committee
- school authorities
- local authorities
- local education authorities
- students
- community members
- parents
- others, such as NGOs and community-based organizations.

Elements of school-based disaster risk reduction:
- hazards
- risks
- vulnerabilities
- school premises
- school location
- quality of school infrastructure
- size of school and number of students
- disaster risk reduction plan
- response plan
- resources and partners.

Session II: School-based hazard, vulnerability and capacity assessment

Session objective: Prepare a list of the school-based and surrounding community hazards, vulnerabilities and resources.

Concepts

What is a hazard?

A 'hazard' can be defined as a dangerous condition or event that threatens or has the potential for causing injury to life or damage to property or the environment. Hazards can be grouped into two broad categories:

Natural hazards relate to natural phenomena (hazards with meteorological, geological or even biological origin). Examples of natural hazards are cyclones, tsunamis, earthquakes and volcanic eruptions, which are exclusively of natural origin. Landslides, floods, drought and fires are socio-natural hazards that can be both natural and man-made. For example, flooding may be a result of heavy rains, a landslide due to deforestation or the blocking of drains with human waste.

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A comprehensive list of hazards that could affect a school and community should be developed by teachers and the school-based risk reduction teams. It should include a comprehensive list of available resources, such as mitigation maintenance skills (design and install adequate ventilation, cooling and lighting in classrooms and general repair work), infrastructure, property and equipment that could be used either to prepare for or during an emergency situation to better lives and livelihoods.

What is vulnerability?

'Vulnerability' can be defined as the extent to which a community, structure, services or geographic area is likely to be damaged or disrupted by the impact of particular hazard, on account of their nature, construction or the proximity of that hazard. School-specific vulnerability refers to little space, no playground or no fencing. These weaknesses can aggravate an emergency situation.

Types of vulnerabilities

a. **Physical vulnerability** is a result of such factors as poor land-use planning, engineering, architecture density levels, remoteness of a settlement and/or inadequate design and materials used for critical infrastructure and for housing.

b. **Social vulnerability** is a result of by such factors as illiteracy, poor-quality or no access to education opportunities, peace and security, access to basic human rights, systems of good governance, social equity, negative traditional values, knowledge, customs and ideological beliefs.

c. **Economic vulnerability** is a result of such factors as poverty, insufficient national economic reserves and inadequate socioeconomic infrastructure, communication networks, utilities, supplies, transportation, water, sewage (and sewerage) and health care access.

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e. **Systemic vulnerability** is a result of such factors as the degree of networking, links and coordination among government agencies, departments and ministries and/or the mechanisms for identifying gaps in the system and strengthening the weak areas.

What is capacity?

'Capacity' can be defined as resources, means and strengths that exist in households and communities and that enable people to cope with, withstand, prepare for, prevent, mitigate or quickly recover from a disaster. Hazards are always present in any environment, but a hazard becomes a disaster only when there is great vulnerability and less capacity to cope with it. The frequency or likelihood of a hazard and the vulnerability of a community increases the risk of being severely affected. School-specific capacity needs to be assessed in every school and this can include the presence of trained human resources within a school, fire extinguishers and a first-aid box.

Types of capacity

a. **Physical capacity** refers to the infrastructure and people's skills that help to protect lives and livelihoods from disaster and crisis.

b. **Socioeconomic capacity:** In most disasters, people suffer their greatest losses in the physical and material realm. People with resources, skills and support (from family and friends) likely have the physical capacity to recover relatively soon because of their support systems. Even when everything is destroyed, they have the capacity to cope better than people with fewer or no resources, skills or support systems.

Structural and non-structural issues in schools

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A school is prone to non-structural hazards onsite and offsite. The non-structural elements of a building do not carry the weight of the building and include windows, doors, stairs, partition walls, pipes and ducts. They also include 'building contents' that users bring with them, such as furniture, appliances, coolers and water tanks. Non-structural elements are those that are either attached to a building or kept in a building.

There are other elements that are not actually part of a building – attached to it or placed in it – but within the school campus and are hazardous, such as an open well, no fencing or poor-quality fencing and no hand rails. These elements are not necessarily a seismic hazard, but they can increase the threat to students and staff by increasing the structures' vulnerability. These threats should be dealt with appropriately. Removal of them also removes their purpose, so it is important to learn what safety measures can be adopted so that all threats are removed from needed elements that are otherwise a non-structural hazard.

Hazards within school buildings include:

- narrow dimensions of halls or stairways (in case of a mass evacuation)
- smoke in the hallway (from a science laboratory)
- doors and windows opening inward
- glass panes
- electrical wires
- tall bookcases or cabinets not properly secured to a wall
- areas where flammable liquids are stored (science laboratory)
- other movable, falling or blocking items.

Hazards outside the school building include:

- power lines
- trees
- parapets, roof tiles, chimneys, glass
- concrete walls along routes to buildings
- rivers, sea coast, main roads, market place, inflammable goods storehouse, a bus stand, railway tracks
- open well
- inferior-quality fencing
- lack of ramps or hand rails.

There are five important ways of reducing the risks posed by non-structural hazards:

1. Relocate the furnishing and contents.
2. Secure non-structural building elements and furnishings.
3. Corrective action for non-structural hazards in the immediate vicinity of the school campus, such as bolstering a book case or cabinet to a wall.
4. Regular consultation with engineers and maintenance personnel to monitor the wear and tear of the school facility.
5. Encouragement of behavioural changes among users. It is vital and indispensable that users of a building develop a culture of safety, such as using a dustbin to avoid blocking drains with debris or washing hands before a meal; burning dry garbage away from home, school or infrastructure; encouraging students to plant trees; learning how to handle a fire with care.

Suggested activities

The following activities can be used as needed. Trainers are welcome to use other activities and locally available resources and materials as long as they meet the intended objectives of the module.

ACTIVITY A: Q&A WITH DISCUSSION ON ASSESSING HAZARDS, VULNERABILITIES AND CAPACITIES

Activity objective: Participants understand the concepts (hazards, risks, capacity and facility) for conducting a hazard, vulnerability or capacity assessment.

Time required: 30 minutes

Materials needed: A white board or flip chart.

Note to trainer: This activity focuses on identifying and analysing hazards, vulnerabilities, capacities and risks, especially in the context of a school. Identification and assessment of hazards, vulnerabilities and capacities is the first step towards school safety and disaster risk reduction.

INSTRUCTIONS

1. Begin by asking the following questions:
   - Have you heard about hazard, vulnerability and capacity assessment and techniques?
   - Have you participated in any hazard, vulnerability or capacity assessment in your school?
2. Encourage the participants to share their views and experiences about such an assessment and techniques.
3. If participants are not aware of the hazard, vulnerability and capacity assessment, elaborate on what each entails.
4. Write the comments on the white board or flip chart.
5. The identification and analysis of hazards, related vulnerabilities and associated risks should be done with participation from students. This exercise should be conducted in every school on a regular basis to keep children safe and studies uninterrupted.
6. After the Q&A session, the trainer should explain the following (40 minutes):

Hazard assessment
The purpose of a hazard assessment is to specify the nature and behaviour of all potential hazard and threats to a school and its occupants. A hazard assessment helps to identity threats and to understand their scope, such as:
- force
- warning sign and signals
- forewarning
- speed of onset
- frequency
- time of year likely to occur
- duration.

It is important to know that some hazards also cause secondary hazards. For example, cyclones can cause landslides, drought might cause epidemics and pest infestation and earthquakes can cause fires. An assessment should first identify which hazards are prone in the school or community. There are several tools that can help in the hazard assessment, such as a hazard assessment form.

Vulnerability assessment

A vulnerability assessment is the process of estimating the weakness of 'elements at risk' (people, school facilities) to various hazards and analysing the root causes that place these elements at risk. The unsafe conditions that result in people and school property and buildings to be vulnerable to a disaster make the school vulnerable to a particular hazard.

Useful activities in a vulnerability assessment include:

- Hazard hunt – to locate all potential hazards on a school premises or in a home.
- Role play – to demonstrate both good and inadequate behaviours and responses during an emergency situation and the potential impact.
- Seasonal calendar – to determine the potential time of year when disasters or crises, like floods and fires and related public health threats such as cholera and dengue, could affect a community and school.
- Problem tree and ranking – to rank vulnerabilities and enable a school to determine vulnerabilities and issues to address.

Capacity assessment

A capacity assessment is essentially a mapping of the human resources, infrastructure and equipment that could be used to better protect or save lives and livelihoods as well as reduce the impact of disasters and crises.

A capacity assessment involves

- understanding peoples' previous experiences with hazards and the coping mechanisms or skills they have developed; and
- analyzing which resources are available and used by a school to reduce disaster risk and who has access to and control over the resources.

ACTIVITY B: CLASSROOM HAZARD HUNT[1]
(for children aged 10–18 years)

Activity objective: Refresh students on potential hazards in a classroom and within the school premises.

Time required: 20 minutes

Materials needed: Prepared checklist instructions.

Note to trainer: Hazards are all around us. Some hazards results from exposure to a virus, parasite or fungi. Some hazards exist in the form of gases and liquid. Fire is one of the most common hazards at school or in a community. It is recommended that students identify all potential hazards in a school and to consider the potential hazards in the community that could affect the school.

INSTRUCTIONS

1. Explain the exercise and that students are to work with the handout (checklist). Pass out the handout checklist.
2. Tell the students to identify and take appropriate steps for each of the tasks mentioned in the list.
3. Tell the students that as they complete each task they are to put a tick mark in the box.
4. Have the students check their classroom safety score at the end.

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1. This activity can be modified and used while working with youth and communities.

CHECKLIST FOR THE HAZARD HUNT

☐ 1. We have discussed the disaster risk reduction plan with our teacher and classmates.

☐ 2. Using the probability of occurrence form, we have identified possible disasters that can affect our school and its surroundings:

Disasters	Probability of occurrence		
	High	**Medium**	**Low**
Earthquake			
Flood			
Cyclone			
Landslide			
Industrial disaster			
Fire accident			
Road accident			
Other (explain)			

☐ 3. We have learned about do's and don'ts to be followed before, during and after any disaster.

☐ 4. We have identified hazards around our school (tick each applicable category).

Hazards	Very close to our school (less than 1 km away)	Close to our school (1–2 km away)	Far from our school (more than 2 km away)
Hazardous factory			
Busy road			
High-rise building			
Shop using and/or selling inflammable material			
Open, blocked or unclean drains			
Other (explain)			

☐ 5. We have complete details about the following:

	Name & address	Distance from school	Telephone numbers
Emergency operation centre (state, district and town levels)			
Helpline (public utility lines)			
Local hospital			
Nearest pharmacy			
Fire station			
Police station			
Others			

☐ 6. We will follow road safety rules.

☐ 7. We know where to assemble in our school in case of an emergency.

☐ 8. In case of an emergency, we know that we have to evacuate the school building by walking fast and covering our heads with our hands instead of running to avoid a stampede.

☐ 9. We know the location of the safest staircase in our school that can be used in case of an emergency.

☐ 10. When using the staircase, we should move in a queue towards open ground.

☐ 11. We have identified safe escape routes from our classroom.

☐ 12. We have identified the safest places in the classroom (away from windows and large or heavy objects that can fall).

13. We have a first-aid kit ready, with the following materials for our classroom. (We check the expiry date of the medicines and change them from time to time).

    ☐ Antiseptic and cotton

    ☐ Bandage

    ☐ Emergency medicines, such as painkillers

    ☐ Burn-related medicines

14. We have an emergency kit ready with the following materials for our classroom. (We check the expiry dates of the objects for effective use).

   ☐ Torch with batteries

   ☐ Medicines and bandages

   ☐ Dry food, such as biscuits

15. We have completed the hazard hunt and mitigated hazards from our school:

   ☐ We have removed heavy objects from high walls.

   ☐ We have placed objects (like cupboards) away from the doors so that they don't fall and obstruct an exit.

   ☐ We have secured the materials in our laboratory to prevent breakage or leak of chemicals.

   ☐ We have secured books and cupboards in our library to prevent them from falling and causing damage or injury in case of a disaster.

   ☐ We have fastened all loose movable objects properly.

☐ 16. We know how to turn off the electricity in our classroom.

☐ 17. We have practised 'duck, cover, hold' in case of an earthquake.

☐ 18. We have practised 'stop, drop and roll' in case of fire.

☐ 19. We spread awareness on disaster management wherever we go.

Name _____

Class _____

School _____

Address _____

Date _____

Safety score of my classroom

Count the total number of tick marks and check how safe your class is.

15 or more ticks	10–15 ticks	10 or fewer ticks
Our class is well equipped to face any disaster. We are a prepared class!	We are learning about safety. We need to work hard to make ourselves, our classroom and school safe!	Our class has a long way to go. We need to work much harder to make ourselves and our school safe!

ACTIVITY C: FAMILY HOME HAZARD HUNT

Activity objective: Refresh students on potential hazards in the home.

Time required: 20 minutes

Materials needed: Prepared checklist instructions.

Note to trainer: Hazards are all around us. Some hazards results from exposure to a virus, parasite or fungi. Some hazards exist in the form of gases and liquid. Fire is one of the most common hazards in a community. It is recommended that students identify all potential hazards in their home and consider the potential hazards in the community that could affect their home.

INSTRUCTIONS

1. Tell the participants to discuss each of the points in the checklist with their family.
2. Tell the participants to identify and take appropriate steps for each of the tasks mentioned in the list.
3. Tell the participants that as they complete each task they are to put a tick mark in the box.
4. Have the participants to check their family safety score at the end.

HANDOUT: CHECKLIST FOR THE FAMILY HOME HAZARD HUNT

☐ 1. I have discussed our family disaster preparedness plan with all my family members.

☐ 2. Using the probability of occurrence form, I and my family members have identified possible disasters that can affect our city, town or village.

Disasters	Probability of occurrence		
	High	**Medium**	**Low**
Earthquake			
Flood			
Cyclone			
Chemical disaster			
Fire accident			
Tsunami			
Earthquake			
Others (explain)			

☐ 3. We have learned about dos and don'ts to be followed before,
during and after any disaster.

☐ 4. We have identified hazards around our home
(tick the applicable category.)

Hazards	Very close to our house (less than 1 km away)	Close to our house (1–2 km away)	Far from our house (more than 2 km away)
Hazardous factory			
Busy road			
High-rise building			
Shop using and/or selling inflammable material			
Open, blocked or unclean drains			
Huge or bushy tree with overgrown branches			
Other (explain)			

☐ 5. We have complete details about the following resources in case
of any emergency.

	Name & address	Distance from house	Telephone numbers
Emergency operation centre (state, district and town levels)			
Helpline (public utility lines)			
Local hospital			
Nearest pharmacy			
Fire station			
Police station			
Neighbour 1			
Neighbour 2			
Relative			
Other (explain)			

☐ 6. All members of our family use helmets or seat belts while riding or driving a vehicle.

☐ 7. We follow road safety rules.

☐ 8. We have decided to purchase a fire extinguisher and learn how to operate it.

☐ 9. We have ensured structural validation of our house or building against any disaster by a qualified structural engineer.

☐ 10. My parents or guardians have taken the responsibility to identify safe places in and around our house.

☐ 11. We have identified the safest places in the house and in each room (away from windows and large and heavy objects that can fall or objects like heaters that can cause fire).

☐ 12. We have identified safe escape routes from our house or building.

☐ 13. We have made sure that doors open towards outside so that exit becomes safer.

☐ 14. We keep our water tanks clean.

☐ 15. We store fresh water in containers every day.

16. We have a first-aid kit ready with the following materials (we check the expiry dates of the objects for effective use).

    ☐ Antiseptic and cotton

    ☐ Bandage

    ☐ Emergency medicines, like painkillers

    ☐ Burn-related medicines

    ☐ Prescribed medicines used by any family member

17. We have an emergency kit ready with the following materials (we check the expiry dates of the objects for effective use).

    ☐ Water bottle filled with fresh water

    ☐ Important documents

    ☐ Money

    ☐ Torch with batteries

    ☐ Clothes

    ☐ Dry food, such as biscuits

    ☐ Blankets

    ☐ Matchbox and candles

18. We have completed the hazard hunt and reduced hazards from our home:

    ☐ We have removed heavy objects from high walls.

    ☐ We have placed object (like cupboards) away from the doors so that they don't fall and block exits.

☐ 19. We know how to turn off the main power supply of our house.

☐ 20. We know how to turn off gas cylinders after use.

☐ 21. We practise 'duck, cover, hold' in our home.

☐ 22. We keep shoes and torches near our beds.

☐ 23. We spread awareness about disaster management wherever we go.

Name _____

Class _____

School _____

Address _____

Date _____

Safety score of my family preparedness

Count the total number of tick marks and check how safe your family is.

15 or more ticks	10–15 ticks	10 or fewer ticks
Our family is well equipped to face any disaster. We are a prepared family!	We are learning about safety. We need to work hard to make ourselves and our home safe!	Our family has a long way to go. We need to work much harder to make our home safe!

ACTIVITY D: Q&A WITH DISCUSSION OF NON-STRUCTURAL ISSUES IN SCHOOLS

Activity objective: Students are sensitized to the structural risks, know where to look for solutions and are equipped to identify non-structural hazards and the know-how to address them.

Time required: 15 minutes

Materials needed: A white board or flip chart, chart paper and enough markers for each participant.

Note to trainer: This session talks about structural and non-structural risks and vulnerabilities. These risks and vulnerabilities go beyond school premises. Structural safety is mainly related with the building and its construction and non-structural safety is related with all things present in and outside the school.

INSTRUCTIONS

1. Begin by asking the following questions:
   - What do you understand by structural and non-structural safety?
   - Have you ever participated in any such assessment?
2. Write down the questions on the white board or flip chart.
3. Give each participant a chart paper and ask them to write their answer on it.
4. Give them 5 minutes to complete the task.
5. Ask each to read out their answer to the group.
6. If necessary, ask participants to elaborate on their answers for the benefit of the group.

ACTIVITY E: GROUP EXERCISE

Activity objective: Students are sensitized to the structural risks, know where to look for solutions and are equipped to identify non-structural hazards and the know-how to address them.

Time required: 45 minutes

Materials needed: Prepared handout of the non-structural assessment form for each group.

INSTRUCTIONS

1. Divide participants into 6 groups, depending on the number of participants (each group should not be very large).
2. Give one non-structural assessment form to each group.
3. Give a different location to each group, such as within the school, campus or community.
4. Ask each group to discuss the form in relation to their assigned location.
5. Give them 20 minutes for filling in the form.
6. Ask for feedback and reflection about the form.

HANDOUT: NON-STRUCTURAL ASSESSMENT FORM

Area or location	Item (full description)	Risk			Priority high, medium or low (or 1, 2, 3)	Weight (including contents) in kg	Mitigation measure
		Threats to life	Threats to property	Threats to operational continuity			

Guide to filling in the non-structural assessment form

Area or location: Note the particular room or indoor or outdoor space in which the inventory is being taken.

Item: Note the closest detail of each non-structural hazard of that particular area or location.

Risk type: There are three types of risk associated with non-structural elements – threats to life, threats to property and threats to operational continuity. Tick the appropriate associated risk.

Priority (high, medium or low): If the risk is of life, the priority is always high and requires a focus on mitigating or reducing the risk of that element. If it is a property loss, the priority is medium and becomes secondary to loss of life. If it is a functional or operational loss, the priority is lowest. It is essential to prioritize the risk and prioritize action accordingly because schools will have a limited budget and time may be a constraint. These prioritizations should help schools to use time and funds effectively.

Weight: Technically, it is essential to quote the approximate weight of an object because it will help to decide upon dimensions and material required for mitigation measures. For example, if a cupboard weighs 70 kilograms, what should be the size, dimension, material or device to fix it to a wall? The weight allows for a better technical solution.

Mitigation measures: Most mitigation measures can be locally judged by school teachers and administrators or other staff. In a few cases, it may require a technical specialist. The solution should address the risk with local feasibility and acceptance rather than something that is difficult to replicate or the materials are not locally available.

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HANDOUT: EXAMPLE OF A NON-STRUCTURAL MITIGATION ITEMIZED INVENTORY FORM

Area or location	Item (full description)	Risk			Priority high, medium or low (or 1, 2, 3)	Weight (including contents) in kg	Mitigation measure
		Threats to life	Threats to property	Threats to operational continuity			
Room No-1	Computer	X	X	X	H	3 kg	Fixing by hook or loop
	Glass Window Pane	X	X		H	5 kg	Filming
Room No-2	Door Opening inward	X			H	8 kg	Outward opening
	Sharp edge on exit door	X			H	4kg	sloping
Room No-3	Copier Machine with roller		X	X	M	15 kg	Fixing/ locking
	Telephone exchange board			X	L	7kg	Relocate/ fixing

Session III: School-based risk reduction planning

Session objective: Develop the knowledge and skills for drafting a disaster risk reduction plan.
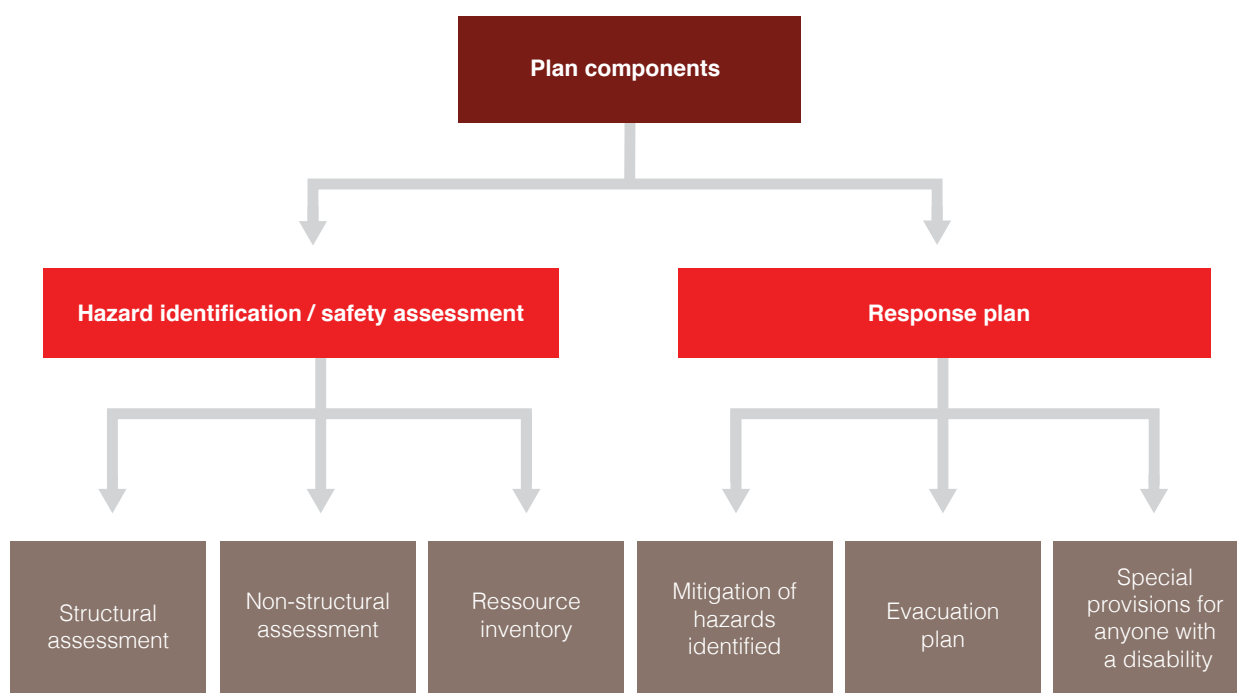
Concepts

School based risk reduction planning is the process of assessing and determining the physical protection available and the response-capacity development needed. To reduce vulnerabilities, particularly for schools, it is important to have a school disaster management plan. Because a school has many resources and is an essential component of a community, school staff have a responsibility towards their immediate locality, just as the community has a responsibility for tending to a school's needs.

Not all emergencies of course can be prevented. A risk reduction plan needs to describe arrangements for responding to any possible emergency, both those known to occur and any that have chance of occurring. It should describe roles and responsibilities, including who will be responsible for coordination, control and communication when responding to an emergency. A risk reduction plan must have a holistic approach for dealing with any disaster. A written description of the school and its surroundings can provide a basis for identifying hazards to which the school might be exposed. Once the hazards have been identified, it becomes possible to develop preparedness and prevention activities and a response programme to minimize them.

There is a fundamental link between day-to-day emergency readiness and disaster preparedness. Schools that are well prepared for an individual emergency involving a student or staff member are more likely to be prepared for complex events, such as community disasters.

Figure 4.1: A school-based risk reduction plan

Plan components

Hazard identification / safety assessment	Response plan

| Structural assessment | Non-structural assessment | Ressource inventory | Mitigation of hazards identified | Evacuation plan | Special provisions for anyone with a disability |

What is a school-based risk reduction plan?

A school based risk reduction plan comprises the actions that need to be taken by students and staff at various stages of an emergency situation – during normal time, immediately before, during and after. The plan document contains details of the school, including the number of students, teachers and other staff; the assessed risks and capacities; important contact details, including the various risk reduction team members and government authorities. It also includes the school's evacuation plan as well as the mitigation plan, a preparedness plan and a response plan.

What is an evacuation plan?

An evacuation plan lays out how to exit a building safely during an emergency. Every student and staff should be familiar with several ways to leave the school and know a safe meeting place outside the building.

What are mitigation measures?

The adverse impacts of hazards often cannot be prevented, but their scale or severity can be substantially lessened by various strategies and actions. These strategies and action are called mitigation measures, and they encompass engineering techniques and hazard-resistant construction as well as improved environmental policies and public awareness. There are two different types of mitigation measures for school-based disaster risk reduction: structural and non-structural, as the following table explains.

Structural mitigation measures	Non-structural mitigation measures
• regular building and grounds assessment • regular building maintenance (especially from water and pest damage) • attach roof securely to the base structure • reassign the use of classrooms • develop floating classrooms (include bar rails to prevent falling in) • site selection (for new facilities) and analysis • hazard-resistant designs appropriate for site • hazard-resistant construction • netting and cordon around construction site • retrofit to prevent old components from collapsing • replace unsafe structures • relocate a structure to a safer location • raise the floors or foundation above the flood level • retain wall construction • establish safety bunkers or trenches • follow green construction practices	• repair ceilings and lighting • repair roofs, floors and windows • turn external doors so they open outwards • create emergency exits • place signage on exits and evacuation routes • move furniture to prevent anything from blocking an exit or falling on people • secure the heating, ventilation, air conditioning, water tanks, fans and lighting • fasten tall and/or heavy furnishings and equipment • elevate shelves and waterproof containers for flood protection of equipment, learning materials and documents • keep fire exits clear • maintain fire suppression equipment • install ramps for accessible entry • install handrails on stairways • design and install classroom lighting • design and install adequate ventilation and cooling in classrooms.

What is a response plan?

A response plan should help school authorities make appropriate decisions during an emergency situation. Warning from government departments will be received for such events as a flood or cyclone. However, a fire or earthquake will happen without warning. All possible major disasters should be covered in the response plan. The following example illustrates a response plan; the example considers the actions to be taken by various people when a disaster warning is received.

Figure 4.2: **Example of a response plan**

Step	Condition	Action	Assistance
0	Warning received		
1		Principal to verify information.	Check with police, education department, district authorities.
2	Students are in school	Principal to call emergency staff meeting. Discuss whether to evacuate or secure the school. Evacuate school – go to step **3** Secure school – go to step **4**	
	Students are arriving	Principal to discuss with coordinator of the warning and awareness team whether to close the school or not If close the school – go to step **5** If keep school open – go to step **6**	
3	Decision to evacuate school	Activate warning and awareness team.	Inform local police and district control room. Instruct school telephone operator what to reply to parents' calls.
		Warning and awareness team members to inform classrooms; psychosocial aid team to assist them.	
		If earthquake, students in classes duck, cover and hold.	Class monitor and teacher to supervise.
		If fire in a classroom, extinguish. If fire in the building, evacuate as instructed.	
		Evacuation begins.	Evacuation team, search and rescue team and first-aid team are alerted and prepared.
		Make arrangements to send students home.	

Step	Condition	Action	Assistance
4	Decision to secure school	Warning and awareness team inform all classrooms and psychosocial aid team to assist them.	Inform school security to lock the gate and keep vigil. Instruct school telephone operator what to reply parents' calls. Inform local police and district control room.
5	Decision to close school	Principal to declare closure of school.	Inform local police and district control room.
		Make arrangements to send home students who have already arrived.	
6	Decision not to close school	Warning and awareness team to inform all classrooms. Psychosocial aid team to assist them.	Inform school security to allow arriving students and keep vigil. Instruct school telephone operator what to reply to parents' calls. Inform police and control room.

Who prepares the school-based risk reduction plan?

The school based risk reduction team from the support of school management committee prepares the school-based disaster risk reduction plan, possibly with help from an external agency, such as a community-based organization or an NGO working in the field of school safety. The following steps are suggested for developing the school based disaster risk reduction plan.

1. If not already in place, form a school management committee. The administrative head of the school should be nominated as the chair of the school management committee. Other members should be drawn from the following categories:

    - representatives of government agencies, such as disaster management, education, police, fire service, health service;
    - representatives from school such as school management, teaching faculty, non-teaching staff, team coordinators, student representatives; and
    - representatives from community such as parents, leaders, youth clubs, resident welfare association and local NGOs.

2. The school management committee may engage an external agency to facilitate the development of the school risk reduction instead of disaster management plan.

3. The agency shall organize a workshop for the school management committee and discuss the importance of a school management plan and guide them to develop the plan in a systematic way.

How to prepare a school-based risk reduction plan

The following steps are suggested for developing a school-based risk reduction plan for a school.

1. If not already in place, set up a school-based risk reduction team for the school. Collect contact details of all its members.

2. Specify the roles and responsibilities for students, teachers and other staff.

3. Define the objectives of the school-based risk reduction plan and the overall scope.

4. Identify hazards (dangers) threatening the school; identify potential external problems, such as an uncovered drainage line, an open water reservoir and or nearby petrol station, and prepare a risk map for the school.

5. Consider the problems one by one and think how each of the problems can be solved or reduced. Prepare an action plan for solving external problems.

6. Identify useful resources outside the school and prepare a resources (facilities) map, such as open space for an evacuation, the health post and medical professionals.

7. Identify existing equipment and tools for any disaster response. Prepare an action plan for acquiring more equipment and tools, as needed.

8. Identify existing awareness materials. Prepare an action plan for acquiring more awareness materials, as needed.

9. Prepare an action plan for capacity-building activities, such as first-aid skills, psychosocial support, basic disaster risk reduction and basic pandemic preparedness

10. Advocate hiring an expert to carry out a structural safety audit of the school buildings and identify structural problems. Prepare an action plan for solving structural problems.

11. Identify non-structural problems. Prepare an action plan for solving non-structural problems.

12. Prepare a response plan.

13. Prepare an evacuation map for each potential disaster situation.

14. Set up school-based risk reduction teams and designate a coordinator for each. Select student members for each team. Collect contact details of all team members. Organize relevant training for each team.

15. Organize emergency mock drills to practise the evacuation plan.

16. Compile all plans into the master school disaster management plan.

What elements should a school-based risk reduction plan contain?

The following are suggested elements in a school-based risk reduction plan:

- Basic details of the school and its contact information.
- Contact information for each school management committee member.
- Contact details of each school-based disaster risk reduction team
- The number of students in each classroom (girls and boys) and the number of students with a disability and details of each disability.
- Objectives of the school disaster management plan.
- Methodology used when developing the plan.
- Various phases of disaster management, such as relief, early recovery and recovery to development considered.
- Hazards (dangers) threatening the school.
- The mitigation plan
    - problems outside school and solution
    - risk map
    - structural problems and solution
    - non-structural problems and solution.

- The preparedness plan
    - facilities outside school
    - facilities map
    - evacuation plan and evacuation map
    - vaction plan for equipment and tools
    - action plan for awareness materials
    - action plan for capacity building.

- The response plan.
- Record of the annual review of the school risk reduction plan.
- Articulated roles and responsibilities of local authorities, police, community leaders, school teachers and students.
- Important contact information for government agencies and other service providers.

Review the school based risk reduction plan

The school based risk reduction plan should be reviewed every year. The following sections of the plan should be reviewed.

Figure 4.3: **Example schedule for reviewing a school-based risk reduction plan**

Section reviewed	Date of review
School disaster management committee	
List of persons responsible for managing disaster situations in the school	
Numbers of students, teachers, staff (by sex and year level)	
Dangers (hazards) threatening the school	
Problems outside the school, risk map and solutions	
Problems inside the school – structural and solutions	
Problems inside the school – non-structural and solutions	
Physical facilities outside the school and facilities map	
Evacuation map	
Equipment and tools	
Awareness materials	
Awareness activities and training	
Warning and awareness team members	
Search and rescue team members	
Evacuation team members	
First-aid team members	
Psychosocial aid team members	
Site security team members	
Fire safety team members	

ACTIVITY B: DESIGNING A FAMILY OR HOUSEHOLD PREPAREDNESS PLAN

Activity objective: Enhance the skills and knowledge need for developing a family preparedness plan.

Time required: 30 minutes

Materials needed: Prepared handout of the where, when, how student activity guide.

INSTRUCTIONS

1. Explain to the participants that designing a preparedness plan is a critical risk reduction activity. It gives each individual some guidance on what do in case a hazard strikes. Remember, some hazards come without warning or leave little reaction time (such as an earthquake or a tsunami). Having a plan helps a family or a classroom make the right decisions quickly.

2. Explain the steps for making a family or household preparedness plan. Tell participants to adjust them to suit their needs and circumstances.

   a. **Get together**
   - Take your time together as a family or household and make sure that everyone offers some input.
   - Get to know what a typical day looks like for each family member.

   b. **Identify hazards and warnings**
   - Think of the possible hazards that may strike at the places where each individual performs their daily activities.
   - Think of whether each individual will get proper warning before a hazard strikes.
   - Write down the information as follows (this is known as a 'where, when, how student activity guide').

Note to trainer: The following example provides an idea of how to teach children the ways of tackling emergency situations in different locations at different times. Pass the prepared handout example to participants.

Figure 4.4: Example of the where, when, how student activity guide

Place	Time	Hazard	Warning	Action
School	8 am – 2 pm	Earthquake	Most likely no warning	• Duck, cover and hold • When shaking is over, calmly and cautiously leave the school building • Meet up with my classmates at designated evaluation point
Home	2 pm – 4 pm	Tsunami	Tsunami warning sirens, radio, TV, text message	• Evacuate to hill closest to my house
Sports ground	4 pm – 6 pm	Floods	Sirens, word of mouth, text message	• Evacuate to higher ground on the northwest side of sports ground
Grandma's house	6 pm – 8 pm	Landslide	Neighbours, fire fighters; monitor hill next to grandma's house in case of very heavy rain	• Evacuate through back door of grandma's house as soon I spot warning signs for landslide • Warn neighbours and call Fire Department • Grab my and grandma's preparedness bag • Help grandma to evacuate

Source: UNESCO: Stay Safe and Be Prepared: A Parents' Guide to Disaster Risk Reduction, Paris, 2014.

Session IV: School-based risk reduction teams

Session objective: Orient participants on school-based risk reduction team formation tips, possible teams and their potential roles and responsibilities.

Concepts

It is important for the success of any school-based risk reduction plan that students are part of the development of that plan and are active participants in all the planned activities. In a disaster scenario, schools may need to fend for themselves; if an entire community is affected and thus unable to address the immediate needs of the school. Students need to feel empowered to act to protect themselves. A plan plants that sense of empowerment, or agency. This can be done by setting up various types of response teams in a school under school based risk reduction team, each comprising students as members. Each response team is focused on one component of school safety, and each response team devises its own emergency plan and has specific roles and responsibilities during an emergency (or a drill).

Administrators, teachers and school management committee members along with school based risk reduction team should lead in preparing a school for responding to an emergency situation and setting up whatever type of response teams they consider imperative. However, various persons and institutions (including National Society partners) outside the school can help to prepare schools and develop an emergency preparedness plan.

Guidelines for risk reduction teams

When establishing school based risk reduction teams in a school, consider the following guidelines.

Lower secondary school and above

- School based risk reduction teams should be created in schools.
- Members must include students (in grade 8 or above or older than 14 years), school staff and teachers.
- Coordinator can be one among the student as agreed by team for one year.
- Criteria for member nomination to each team should be established.
- Members should be nominated, but with each person's consent.
- A gender balance should be maintained within each team.
- Each team should be inclusive, encompassing a child with a disability.
- Focus on search and rescue, so young students can make a safe place.
- Team members should be trained in the respective team focus, and training must be provided at the school.
- Training should be in accordance with the learning and retaining capacity of the students.

- Once the team members master the basic information, then specialized training can be provided.
- Practice of skills and test of basic information by each team member should be compulsory during all training sessions.
- Adequate refresher training should be scheduled.

Primary school

- School based risk reduction teams should be created in schools.
- Team members should be youth from a nearby secondary school and community member near the school who can be present during school hours.
- Coordinator can be senior teachers.
- Criteria for member nomination to each team should be established.
- Members should be nominated, but with each person's consent.
- A gender balance should be maintained within each team.
- Each team membership should be inclusive of special groups.
- Practice of skills and test of basic information by each team member should be compulsory during all training sessions
- Adequate refresher training should be scheduled.

Types of response teams under school based risk reduction team

The number of risk reduction response teams that a school establishes under School Based Risk Reduction Team depends on the context and need. But a basic set of five types of teams are recommended.

1. Awareness-generation team

Role and responsibilities include:

- Disseminate materials, posters, pamphlets, simple tips on dos and don'ts in different disasters and use interactive media, such as plays.
- Conduct awareness-generation activities systematically in the whole school, targeting different classes and also staff and teachers.
- Conduct awareness-generation activities in the neighbouring communities, at the local police station and with any local NGO.
- Organize innovative activities and exercises for students and teachers on disaster management to ensure their continuing interest on the issue during normal times.

2. Warning and information dissemination team

Role and responsibilities include:

- Regularly monitor information from television, radio and the internet on a potential hazard that may affect a school, such as weather updates in the case of floods, landslides, cyclones, etc.
- Inform the school authorities of any impending hazardous situation.

- Maintain contact with township authorities, and communicate any directions to the school authorities.
- Post warning signs or flags of appropriate colours for different warning levels at prominent and designated places in the school.
- Disseminate the warning information to all classrooms and teachers.
- As a disaster situation unfolds, coordinate with the other teams and inform them about the latest weather or warning situation.

3. Search and rescue team

Role and responsibilities include:

- Check exits in a school building.
- Identify the open areas where students and staff can assemble after evacuation in an emergency.
- Make sure there are no hazards present for evacuating to the designated area.
- Make sure that necessary supplies are accessible.
- Assist in developing options in the event an evacuation is required during stormy weather.
- Be prepared for special equipment needs for mobility-impaired students.
- Any special response procedure for special needs students must be tested during drills.
- Conduct regular drills in coordination with the other teams and practise the different evacuation procedures used in different emergency situations. Separate drills should be conducted for each emergency situation, and the procedures must be disseminated to the entire school in advance of a drill.

4. First aid team

Role and responsibilities include:

- Make sure that first-aid supplies are up to date and always complete.
- Keep emergency cards (checklist) and health cards up to date.
- Provide training for all new team members and refresher training for existing members (every year).
- Be aware of special medical requirements of students or employees and ensure that some stock medication (maybe 1–2 days' supply) are kept in the school and regularly updated.
- Participate in regular drills.

5. Fire safety team

Role and responsibilities include:

- Make sure firefighting equipment (extinguisher) are in working order and that staff have been trained on how to use them.
- Ensure that all non-structural earthquake hazards that can cause fire (science laboratory, cafeteria kitchen, hot water tank) are properly secured.

Training of student members in the risk reduction teams

The following are examples of the types of training that teams should consider. If there is need for basic training materials for teams, they could be developed by the National Society.

For search and rescue:

- Training should be in accordance with the learning and retaining capacity of the student team members.
- Only basic techniques are to be taught, such as:
  - fireman lift method, crawl to drag, blanket drag, pick a bag, stretchers (2-hand, 3-hand, 4-hand seat method, blanket, rope, bamboo);
  - training should use materials that are available in a school or the community.
- No training on ropes (knots), rappelling, climbing, water rescue, pulleys, high-rise locations or other difficult techniques.
- Hailing search and rescue method to be taught because it will help the experts identify the location for a search to reduce the time until a rescue.

For first aid:

- Training should be in accordance with the learning and retaining capacity of the student team members.
- Only basic techniques to be taught.
- Techniques are to use gloves, mask, etc. and include details on proper disposal:
  - demonstrate how to bandage wounds, make a sling and tend to fractures and burns;
  - demonstrate how to respond to local medical conditions, such as snakebites, dog bites, heart attack and stroke; and
  - do not demonstrate to anyone younger than 15 how to perform CPR or apply a tourniquet or triage.

For fire safety:

- Training should be in accordance with learning and retaining capacity of the student team members.
- The focus should be more on precaution than dealing with a fire.
- Students should practise what is taught and not be limited to observing demonstrations by the expert training them.
- Provide details on the class of fires.
- Instruct students on the use of fire extinguishers and their appropriateness.
- Use only locally available fire extinguishers.
- Teaming up with the search and rescue team is recommended, even during the mock exercise
- Instruct students on other mechanisms to use in the absence of a fire extinguisher.

Session V: Mock drills in schools

Session objective: Refresh skills and knowledge on the school-based risk reduction plan of the participants and update a school based risk reduction plan.

Concepts

A mock drill helps to test the efficacy of a risk reduction plan. Much preparatory work is needed to prepare a plan and then conduct a mock drill. A mock drill is a participatory method to practise the safety-related measures and evacuation of a building during an emergency situation.

Drills should be treated as if an emergency is occurring. For example, for fire-related evacuation mock drills, the fire alarm must be activated and the building evacuated as though a real fire had occurred. Generally, the time it takes to evacuate is measured to judge the efficiency and effectiveness of the disaster management plan.

To ensure proper execution of a mock drill exercise, the roles and responsibilities of the designated staff, teachers and students as well as fire services, home guards and civil defence should be precisely defined and the standard operating procedures (SOPs) should be clearly understood by everyone.

The objectives of conducting mock drills in schools:

a. Educate and train staff, teachers and students to react appropriately to any unforeseen emergency situation, specifically earthquake and fire, mainly because such emergencies have little warning signs and quick onset.

b. Build courage and confidence among staff, teachers and students.

c. Teach life-saving and rescue techniques to school staff, teachers and students to enable them to engage in life-saving duties in an emergency situation.

d. Test the efficacy of the school disaster management plan and improve it further.

e. Achieve clarity and better understanding of the roles and responsibilities of all actors involved in disaster management.

The mock drills can be classified into two types

a. **Announced drills** are scheduled and thus expected by staff, teachers and students. The objectives of the announced drills are to:

- ensure that everyone has read and understands the evacuation procedures;
- test how everyone reacts to a more specific hazard (like a prearranged blocked exit route); and
- determine people's ability to locate and operate fire extinguishers.

b. **Unannounced drills** are a good way to test people's ability to react to a hazardous situation they were not expecting. Schools should conduct unannounced drills once the understanding about mock drills is clear and a certain level of proficiency has been attained. The objectives of unannounced drills are to

- ensure that everyone in the school premises can clearly hear the alarms;
- discover if staff, teachers and students know the exit routes to take and determine whether staff and teachers with special roles (in the case of an emergency) know what steps to take; and
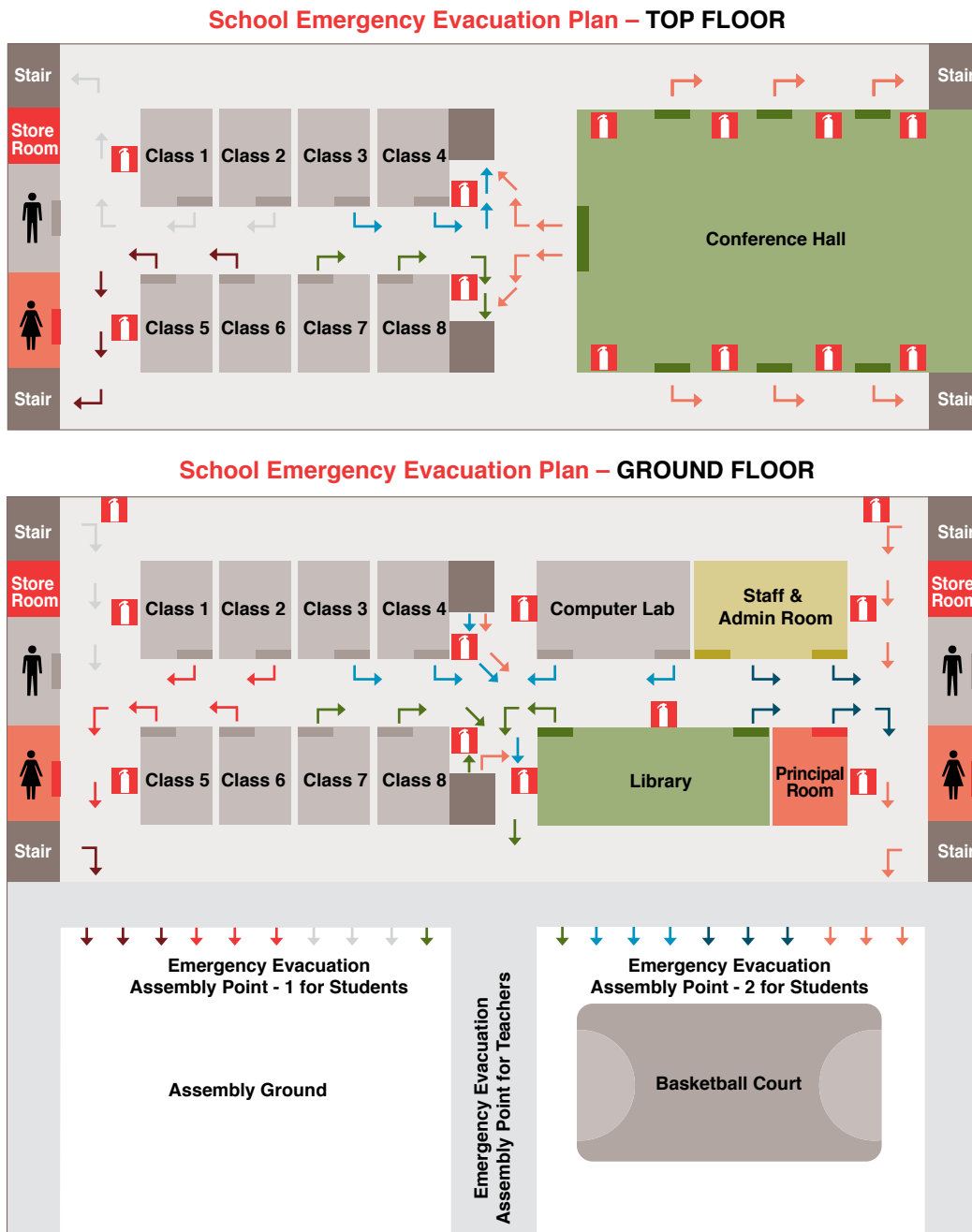- determine how long it takes to move everyone out of a building.

Figure 4.5: Steps for organizing a school fire drill
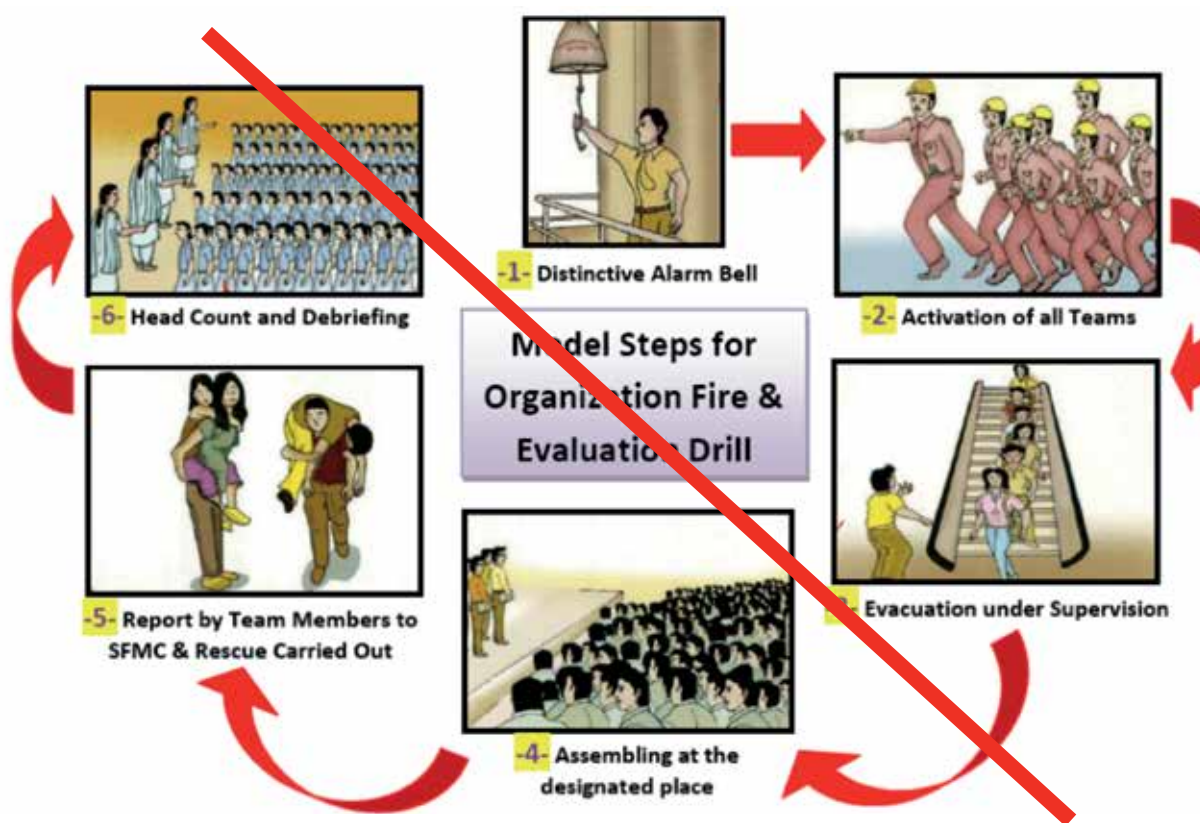
Emergency evacuation plan

The school disaster preparedness process and thus the management plan should include identifying the evacuation assembly area and the evacuation route.

Figure 4.6: **Example school evacuation plan**

School Emergency Evacuation Plan – TOP FLOOR

School Emergency Evacuation Plan – GROUND FLOOR

Suggested activity

The following activity can be used as convenient. Trainers are welcome to use other activities and locally available resources and materials as long as they meet the intended objectives of the module.

ACTIVITY A: MOCK DRILL FRAMEWORK ACTIVITY
(evacuation plan)

Activity objective: Develop skills and knowledge for drafting a school evacuation plan.

Time required: 20 minutes

Materials needed: A white board or flip chart.

INSTRUCTIONS

1. Post evacuation route maps depicting the school and neighbourhood with designated routes and locations in strategic and conspicuous places (preferably in each classroom, with the room marked on the map).
   - Depending on the hazard, the school should identify safe evacuation areas.
   - Open areas are needed in the event of an earthquake or fire.
   - A shelter is needed for windstorms or heavy rainfall.
   - Higher ground is needed for floods and flash floods.

   Evacuation routes should avoid potentially hazardous conditions and elements.
   - Avoid routes where there could be toppled cabinets, broken glass, fallen trees or cut electrical wires, which may hinder the evacuation.
   - Avoid flooded areas.
   - Avoid storage areas of combustible or hazardous chemicals.

   Teachers must stress upon students a few simple rules for an evacuation:
   - Do not push, run, talk or go back during an evacuation.

2. Create a buddy system to ensure the safety of the children with disabilities. School administrators must pay attention to the needs of children with physical disabilities (especially during an emergency situation). Persons with a disability may not be able to evacuate without any assistance. It is strongly advised that each student with a disability be accompanied by an able-bodied student. This practise is known as the 'buddy system'. Ideally, the school administration should arrange for children with disabilities to make acquaintances with a designated buddy at the beginning of the academic session so they can build up trust and friendship. Teachers should encourage students to assist their physically challenged peers during an emergency situation or a drill.

3. Contextualize and link this session with the type of drill that will be conducted (typically on the following day).

4. Explain the steps to follow for the specific drill that will be conducted.

Example of steps to follow when conducting an earthquake drill

- Sound the alarm – let it continue for 40–50 seconds.
- Duck, cover and hold wherever you are.
- Incident commander (the leader of the school-based disaster risk reduction team) takes charge of the situation.
- Prepare students and staff for the evacuation.
- Ground floor classrooms evacuate first, followed by other floor classrooms in order.
- Teachers evacuate with their attendance register.
- Assemble at a safe evacuation point.
- Teachers conduct head count through the attendance register.
- In case of absence of the attendance register, rely on students to check if anyone is missing.
- Head count the teachers and non-teaching staff (by the designated staff member).
- Missing person list to be reported and handed over to incident commander.
- Incident commander calls coordinators of the search and rescue, first-aid and fire safety teams.
- All 3 teams take up their designated station.
- Coordinator of the search and rescue team and team members devise a plan to enter the building if it is safe to do so.
- Fire safety team assists the search and rescue team.
- Coordinator of the first-aid team prepares a medical first-aid responder station.
- Search and rescue team moves into building and evacuates victims and takes them to the medical first-aid responder station.
- First-aid team provides first aid to victims and arranges to move them to nearest hospital.
- Second alarm goes for fire.
- Incident commander calls upon fire safety team to ambush the fire.
- Fire occurs in class A and class B and fire safety team extinguishes the fire.
- Search and rescue team prepares to search victims in a 'NO-GO' building.
- School management team invites a professional search and rescue expert. Search and rescue team reaches collapsed building site and evacuates victims through a chair knot.
- Incident commander ends the drill when the successful evacuation of all students and other school community is declared.
- Search and rescue, first-aid and fire safety teams (and any others) discuss their experiences.

5. Soon after the drill is over, call upon all participants for a feedback session. This session will provide insights for fine-tuning the disaster management plan.

Session VI: Needs of children with disabilities

Session objective: To impress upon participants the importance of inclusion of all students in disaster risk management.

Concepts

Students are the most vulnerable segment of the society, but among them are even more vulnerable groups, such as students with special needs and students with disabilities. The needs of students with disabilities should to be included in the disaster preparedness process and mitigation planning in schools. Involving students with disabilities in all facets of disaster risk reduction and providing them a platform based on equality and non-discrimination helps in overcoming their possible additional vulnerabilities. After all, they will know better than almost anyone else what potential hazards or difficulties could affect their safety.

Students with special needs are always the centre of any relief operation. If they are not, the school management committee must ensure that the students with special needs are well considered in any relief operation. It is also imperative to integrate provisions for students with special needs in the school-based disaster risk reduction plan, which should cover:

- students who have been exposed to ill-treatment, such as physical, emotional or sexual abuse or neglect;
- students with developmental disabilities, such as blindness or a visual impairment, hearing impairment, mobility impairment, mental illness, brain disorder or injury, chronic illness, drug and/or alcohol dependency or a dual diagnosis of mental illness and substance abuse;
- students with special psychiatric needs;
- students with psychosocial and psychiatric problems that can be exacerbated by the stress of an emergency situation;
- students who experience cultural or ethnic-based disparities or live in geographic isolation;
- students with limited language proficiency, such as refugees, immigrants or irregular or undocumented foreign migrants (or whose parents are);
- students who live in economic disadvantage;
- students with special medical needs; and
- others, such as juvenile offenders or homeless youth.

Suggested activity

The following activity can be used as convenient. Trainers are welcome to use other activities and locally available resources and materials as long as they meet the intended objectives of the module.

ACTIVITY A: Q&A WITH DISCUSSION

Activity objective: Participants can identify and prepare an inclusive school based risk reduction plan.

Time required: 15 minutes

Materials needed: A white board or flip chart.

INSTRUCTIONS

1. Ask participants the following questions:
   - What do you understand about an 'inclusive approach'?
   - Do we value all children equally?
   - Is inclusion a culturally relevant process?
   - Are there some children for whom inclusion into a regular school might be inappropriate?
   - Should children with disabilities be included in school-based risk reduction teams?

2. Ask one question at a time and give time for responses, then move to the next question.
3. Make notes of all relevant comments from the participants.
4. Encourage participants to share their experiences and information.

Session VII: Psychosocial care and support to students

Session objective: Understand psychosocial problems of students from different dimensions and the need for special attention during a disaster situation.

Concepts

The term 'psychosocial' refers to a person's psychological and social world. It implies that the two worlds are interrelated and interdependent and are continually interacting with and influencing each other.

Psychological processes include thoughts, emotions, feelings and behaviours. These have a significant impact on a person's social world, including their relationships, environment, community and culture.

The psychological processes are also greatly influenced by the social environment. Although the concept of well-being seems fairly simple, achieving a state of psychosocial well-being is complex. Psychosocial well-being depends on many elements and on the fulfillment of a range of

- different needs, including:
- biological (food, water, health care)
- material (shelter, clothes).
- social (relationships, belonging to a community, access to basic services)
- psychological (emotional well-being, cognitive development, personal competence, ability to learn)
- spiritual (sense of meaning and purpose)
- safety.

As recognized by the Inter-Agency Standing Committee's 2007 *Guidelines on Mental Health and Psychosocial Support in Emergency Settings,* education is a key psychosocial intervention in emergency situations. It provides a safe and stable environment for young people and helps restore a sense of normalcy, dignity and hope by offering structured, appropriate and supportive activities.

Students are affected differently, according to their individual differences, by disasters and other stressful events, such as inaccessibility to facilities and discrimination.

The effects of disaster on students who are directly exposed to danger and trauma are different from those of children who witness but do not directly experience traumatic events.

Differences in age, experience, maturity level and personality, for example, lead to varying reactions to the same incident. With knowledge about how children may react, parents and adults can feel more confident when talking with children and responding to their needs in a specific emergency situation in ways that better enable children to cope and recover.

Students respond to trauma or disasters in many different ways. Some may have reactions soon after the event; others may seem to be doing fine for weeks or months and then begin to show worrisome behaviour. A child's age and development level, current physical and mental health and past experiences all influence how a child will react to disaster. Some children will show a greater degree of resilience and some children will require greater support. The experiences children have as a result of a disaster depend on the kind of disaster it was, whether there was warning and time to prepare, the extent of the impact on the community and how much direct exposure the children or their families might have had.

There are two types of experiences that children who live through a disaster have:

1. The trauma of the disaster event itself; and

2. The changes and disruption in day-to-day living caused by the disaster.

3. Some children may have sought shelter or prepared for the disaster but didn't experience any direct impact of the disaster. These children may still feel fear and anxiety. Some children may have had their home, school, child care programme or community heavily damaged. Adults who care for them may no longer be able to provide that care because of damage to their own home or business. Even if a child's basic physical needs are being met after a disaster, experiencing multiple life changes will cause children to feel emotional distress. Life might not return to normal quickly following a disaster.

There may be changes in living conditions that cause changes in day-to-day activities, including strains in the relationships between family members or between friends, changes in expectations that family member have for each other (along with changes in responsibilities). These disruptions in relationships, roles and routines can make life unfamiliar or unpredictable, which can be unsettling or sometimes frightening for children.

Suggested activity

The following activity can be used as convenient. Trainers are welcome to use other activities and locally available resources and materials as long as they meet the intended objectives of the module.

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ACTIVITY A: CLAY AND POTTER GAME

Activity objective: Inform participants about psychosocial problems of school children from different dimensions and the need for special attention for them during disaster. The participants understand the emotional reactions of children of different ages and the persons to refer to for psychosocial interventions. The participants can internalize the role of teachers in the provision of psychosocial care for students.

Time required: 40 minutes

Materials needed: Prepared handout of psychosocial issues.

INSTRUCTIONS

1. Pair up the participants. One person will be the 'clay' and the other is the 'potter'.
2. Ask the potter to shape the clay into a statue of their interest.
3. Reverse the roles.
4. Give each person 5 minutes to shape their 'clay'.
5. Ask each participant to explain what they have made with the clay and why. Most of the shapes likely will have a positive outlook.
6. Sum up their comments: School children affected by a disaster are like clay. It is in the hands of teachers who can shape the children to have a positive outlook for their future.
7. Next, divide the participants into four groups.
8. Give each group a topic of emotional reactions by age group: 0–5 years, 6–12 years, 13 years and older boys and 13 years and older girls.
9. One representative of each group will present the outcome of the discussions. Sum up the brief comments: The psychosocial caregiver should understand the different impacts at different age level to formulate interventions accordingly. For children aged up to 5 years, the intervention should be mainly by parents, with some referral interventions. For children aged 6–12 years, the intervention should be by both parents and teachers. Peer groups should be used positively; discuss adolescent issues through peer group meetings.
10. Add the following psychosocial issues of school children as part of presentation.

HANDOUT: PSYCHOSOCIAL ISSUE INDICATORS

0–5 years	6–12 years
• Fear • Crying • Overly dependent on parents • Refusing food • Lack of appetite • Disturbed sleep • Stubborn attitude • Bed wetting, thumb sucking, nail biting • Irritation • Aggressive behaviour • Anger • Refusing to go to school • Lack of energy • Lack of concentration • Feeling insecure • Numbness	• Change in behaviour • Fear, anxiety, tension • Anger, irritability • Lack of interest • Lack of interest in studies • Disturbed sleep • Dreams • Repeated thoughts about disaster • Change in behaviours • Loneliness • Fear towards the future • Confusion • Not respecting others • Pretending to work • Aggressive towards classmates • Use of dangerous substances
13 years and older boys	**13 years and older girls**
• Poverty • Fear, insecure feelings • Lack of interest in education • Lack of sleep • Changes in behaviours • Forgetfulness • Changes in mental status • Antisocial behaviour • Suicidal thoughts • Loneliness • Depression • Engaging in child labour • Early marriage • Fear towards the future • Dependency • Easily influenced by peer group • Lack of interest • Stress • Lack of acceptance • Drug abuse	• Fear • Emptiness • Lack of interest in studies • Loneliness • Changes in relationships • Tension • Insecure feelings • Unreasonable anger • Lack of sleep • Bed wetting • Lack of interest towards the future • Becoming orphan or single parenthood • Loss of memory • Anger • Aggressiveness • Believing others immediately • Lack of appetite • Lack of self-care • Verbal, physical or sexual abuse

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Module 5

School-based risk reduction activities for youth and volunteers aged 17–24 years

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Sessions

I. Youth leadership and volunteerism for risk reduction

II. Campus safety

III. First-responder teams

Target groups: National Society staff and volunteers, school principals and management, school teachers, students from all grades in both the primary and secondary (lower and upper) levels

Session I: Youth leadership and volunteerism for risk reduction

Session objective: Enhance the role of youth and volunteers for risk reduction.

Concepts

The social and economic challenges of recent years have focused attention on the availability of skills and learning opportunities for young people. Young people regularly encounter great hurdles in having their opinions heard, while research and practice in the disasters and climate change. Consequently, their capacities to inform decision-making processes, communicate risks to their communities and take direct action to reduce risks have been neglected. Community which is represented by passive young people requires protection.

Young people's participation in risk reduction and adaptation can be conceptualized in multiple ways, including:

- providing context-based knowledge, using analytical tools and helping to prioritize actions;
- helping to advocate and mobilize resources and helping to build coalitions with parents, community members and other stakeholders;
- helping to conceive, design and implement projects that tackle climate and disaster risks pertinent to children's lives; and
- helping to communicate risks, sharing and contextualizing knowledge, building credibility and trust and persuading others to take action.

The emergence of youth-centred approaches to disaster risk reduction and climate change adaptation has drawn heavily from theory and practice around children's participation (Hart, 1997; Francis and Lorenzo, 2002; Hill et al., 2004; Sinclair, 2004). Many early models of youth participation were both functional and universal, negating the socially and culturally constructed nature of such processes.

In contrast, the nature and mode of participation are usually influenced by the point and scale of entry, community and institutional dynamics, livelihood strategies, living standards and cultural factors.

Young people are often seriously affected when disasters strike and can face severe difficulties in coping with the unexpected and traumatic interruptions to their lives. Even so, the world's youth are capable of teaching their communities – and the wider world – how to reduce risks and impacts of disasters. Young people are unmatched by any other demographic group in their ability to bring about meaningful change in social behaviour and attitudes. We must not underestimate their potential to make a real difference in the time of disasters.

Suggested activity

The following activity can be used as convenient. Trainers are welcome to use other activities and locally available resources and materials as long as they meet the intended objectives of the module.

ACTIVITY A: HOW SAFE ARE WE Q&A DISCUSSION
(for youth aged 18–24 years)

Activity objective: Analyse and asses the vulnerabilities, hazards prone to an area and availability of resources.

Time required: 60 minutes

Materials needed: A white board or flip chart.

INSTRUCTIONS

1. Begin by asking participants the following questions:
- What is your understanding of 'safety'?
- How do you describe 'being safe'?
- What are the factors responsible for an individual's safety?

2. After the Q&A session, elaborate and explain the following:

Even if you have never experienced a disaster, you know how devastating its effects can be. The media disseminates lots of information on the impact of disasters: people dead or displaced, infrastructure damaged livelihoods disrupted and extensive grief. It seems that television, radio, newspapers and the internet deliver more and more disaster coverage into the comfort of our living rooms. This is maybe not surprising, given that disasters have indeed occurred more frequently in the past couple of decades.

With disasters happening more frequently, it is even more important that we take steps to reduce disaster risk. We need to understand the components of a disaster. When we talk about disasters, we often focus on hazards alone. We tend to only look at the earthquake, the volcano eruption, the storm, the drought, the flood, the landslide or the tsunami. We forget that a hazard by itself doesn't cause a disaster. When a cyclone hits an area where nobody lives, it's not a disaster. In other words, what matters is human's exposure to hazards.

We need to keep in mind that our own actions as individuals, families, communities and societies determine if, and how, hazards will turn into disasters. It is therefore inaccurate to talk about 'natural disasters' because each disaster has a human component. The extent of impact depends on how vulnerable and how prepared we and our communities are.

3. Add notes and references from standard literature to supplement the discussion.

Session II: Campus safety

Session objective: Participants are sensitized to structural risks and to know where to look for solutions and equipped to identify the non-structural hazards and the know how to address them. Understand structural and non-structural issues in campuses and institutions.

Concepts

This session talks about structural and non-structural risks and vulnerabilities. These go beyond institutional premises. Structural safety is mainly related with the building and its construction and non-structural safety is related with all things present in and outside the institution. The structural and non-structural mitigation measures are discussed in Module 3. Considering youth, below are potential activities for environmental safety and natural resource conservation and personal/social safety:

Environmental safety and natural resource conservation activities	Personal and social safety activities
• Regular maintenance of school grounds • Debris removal • Solid waste segregation, recycling and management • Reducing resource use (such as water energy) • Reduce waste • Use of cleaner and safer energy (such as solar and low emission cook stoves) • Composting • Cordon off and cover open rubbish pits • Remove hornet nests • Remove tree branches near buildings • Remove mosquito breeding environment • Plant trees (erosion control, flood prevention, shade, food) • Plant mangroves • Post danger signage (such as UXO) • Close or cordon off unsafe areas • Plant a school garden • Develop and maintain a tree nursery • Set up a grain bank • Set up a seed bank • Set up fodder silos • Use natural light during the day and energy-saving light bulbs after dark • Unplug electronics when not in use to save energy • Set cooling temperature to 26°C or warmer • Replace harmful chemicals with environment-friendly products • Replace animal protein with plant foods in the family diet • Walk, cycle or ride share to reduce fuel use • Cut down on paper use • Don't use plastic bags • Buy local items to promote local livelihoods.	• Practise hand-washing and good hygiene habits • Learn standard operating procedures for disasters and emergencies • Learn to use a first-aid kit for injury response • Prevent bullying and violence • Promote social cohesion (especially diversity and inclusion) • Promote household safety and make a disaster preparedness plan • Promote health skills (such as malaria and dengue prevention) • Wear protective gear • Maintain evacuation supplies in a safe haven • Improvise response equipment • Wear bicycle helmet for safety • Ask for seat belts to be installed in school vehicles

Youth should focus on infrastructure mitigation as well because they have influence in different groups. The following are examples of activities for infrastructure mitigation:

- Protect water supplies (cover, don't contaminate)
- Use ceramic water filters to provide clean water
- Monitor rainfall and water level
- Harvest rainwater
- Assess road safety
- Create or maintain a safe haven and evacuation route
- Post evacuation route signage
- Maintain water supplies
- Install a drainage system in the school yard
- Elevate walkways
- Install guttering and keep gutters clean
- Cover open drainage channels
- Prepare fire suppression materials
- Install early warning communication equipment (such as a gong, alarm bell, megaphone or loudspeaker)
- Create elephant crossings
- Create and monitor pedestrian crossings
- Install speed bumps and signage near schools and crossings
- Post danger signage (such as warnings for road safety, road-crossing landslides and children crossings)
- Use mirrors for road safety
- Draft and install back-up transportation and communication plans and systems
- Strengthen and widen embankments
- Build bridges to cross inundation areas
- Maintain roads
- Monitor roads to document upgrade needs
- Clear tree extensions and strengthen power and phone line supports
- Use solar lighting and wind energy
- Recycle grey water.

Suggested activity

The following activity can be used as convenient. Trainers are welcome to use other activities and locally available resources and materials as long as they meet the intended objectives of the module.

ACTIVITY A: Q&A WITH DISCUSSION

Activity objective: Develop knowledge and skills on hazards, vulnerabilities and risks in general and related to mitigation measures.

Time required: 30 minutes

Materials needed: A white board or flip chart, enough chart paper for all participants, markers for each participant.

INSTRUCTIONS

1. Begin by asking the following questions:
    - What do you understand about 'structural and non-structural safety'?

2. Have you engaged in any such assessment previously?
3. Write the questions on the white board or flip chart.
4. Give each participant a paper to write their answers.
5. Give them 5 minutes to complete the task.
6. Ask each to read out their answer to the group.
7. If necessary, ask participants to elaborate on their answers for the benefit of the group.
8. After the Q&A, explain the following concepts.

Structural and non-structural issues in schools

What is a structural hazard?

The structural elements of a building carry the weight of that building, the people who use it and the things inside. The structural elements should be able to weather the forces of nature. These 'load-bearing' elements include the frame (columns, beams), masonry and construction. Administrators need to check their school's structural ability to withstand hazards like earthquakes, floods; cyclones, tsunamis or whatever is prone in their area (by calling in experts). School facilities should be certified by the relevant government authority and engineers in terms of established safety standards.

What is a non-structural hazard?

A school is prone to non-structural hazards onsite and offsite. The non-structural elements of a building do not carry the weight of the building and include windows, doors, stairs, partition walls, pipes and ducts. They also include 'building contents' that users bring with them, such as furniture, appliances, coolers and water tanks. Non-structural elements are those that are either attached to a building or kept in a building.

There are other elements that are not actually part of a building – attached to it or placed in it – but within the school campus and are hazardous, such as an open well, no fencing or poor-quality fencing and no hand rails. These elements are not necessarily a seismic hazard, but they can increase the threat to students and staff by increasing the structures' vulnerability. These threats should be dealt with appropriately. Removal of them also removes their purpose, so it is important to learn what safety measures can be adopted so that all threats are removed from needed elements that are otherwise a non-structural hazard.

Hazards within school buildings include:
- narrow dimensions of halls or stairways (in case of a mass evacuation)
- smoke in the hallway (from a science laboratory)
- doors and windows opening inward
- glass panes
- electrical wires
- tall bookcases or cabinets not properly secured to a wall
- areas where flammable liquids are stored (science laboratory)
- other movable, falling or blocking items.

Hazards outside the school building include:
- power lines
- trees
- parapets, roof tiles, chimneys, glass
- concrete walls along routes to buildings
- rivers, sea coast, main roads, market place, inflammable goods storehouse, a bus stand, railway tracks
- open well
- inferior-quality fencing
- lack of ramps or hand rails.

There are five important ways of reducing the risks posed by non-structural hazards:
1. Relocate the furnishing and contents.
2. Secure non-structural building elements and furnishings.
3. Corrective action for non-structural hazards in the immediate vicinity of the school campus, such as bolstering a book case or cabinet to a wall.
4. Regular consultation with engineers and maintenance personnel to monitor the wear and tear of the school facility.
5. Encouragement of behavioural changes among users. It is vital and indispensable that users of a building develop a culture of safety, such as using a dustbin to avoid blocking drains with debris or washing hands before a meal; burning dry garbage away from home, school or infrastructure; encouraging students to plant trees; learning how to handle a fire with care.

ACTIVITY B: GROUP EXERCISE

Activity objective: Enhance participants' skills and knowledge on conducting a non-structural assessment.

Time required: 45 minutes

Materials needed: Prepared handout of the non-structural assessment form.

INSTRUCTIONS

1. Divide participants into 6 groups, depending on the number of participants (each group should not be very large).
2. Give one non-structural assessment form to each group.
3. Ask them to discuss the form.
4. Give different locations for each group; it can be within the venue campus.
5. Give them 20 minutes for fill in the form.
6. Ask for feedback and reflection about the form.

HANDOUT: NON-STRUCTURAL ASSESSMENT FORM

Area or location	Item (full description)	Risk			Priority high, medium or low (or 1, 2, 3)	Weight (including contents) in kg	Mitigation measure
		Threats to life	Threats to property	Threats to operational continuity			

Guide to filling in the non-structural assessment form

Area or location: Note the particular room or indoor or outdoor space in which the inventory is being taken.

Item: Note the closest detail of each non-structural hazard of that particular area or location.

Risk type:

There are three types of risk associated with non-structural elements – threats to life, threats to property and threats to operational continuity. Tick the appropriate associated risk.

Priority (high, medium or low): If the risk is of life, the priority is always high and requires a focus on mitigating or reducing the risk of that element. If it is a property loss, the priority is medium and becomes secondary to loss of life. If it is a functional or operational loss, the priority is lowest. It is essential to prioritize the risk and prioritize action accordingly because schools will have a limited budget and time may be a constraint. These prioritizations should help schools to use time and funds effectively.

Weight: Technically, it is essential to quote the approximate weight of an object because it will help to decide upon dimensions and material required for mitigation measures. For example, if a cupboard weighs 70 kilograms, what should be the size, dimension, material or device to fix it to a wall? The weight allows for a better technical solution.

Mitigation measures: Most mitigation measures can be locally judged by school teachers and administrators or other staff. In a few cases, it may require a technical specialist. The solution should address the risk with local feasibility and acceptance rather than something that is difficult to replicate or the materials are not locally available.

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HANDOUT: EXAMPLE OF A NON-STRUCTURAL MITIGATION ITEMIZED INVENTORY FORM

Area or location	Item (full description)	Risk			Priority high, medium or low (or 1, 2, 3)	Weight (including contents) in kg	Mitigation measure
		Threats to life	Threats to property	Threats to operational continuity			
Room No-1	Computer	X	X	X	H	3 kg	Fixing by hook or loop
	Glass Window Pane	X	X		H	5 kg	Filming
Room No-2	Door Opening inward	X			H	8 kg	Outward opening
	Sharp edge on exit door	X			H	4kg	sloping
Room No-3	Copier Machine with roller		X	X	M	15 kg	Fixing/ locking
	Telephone exchange board			X	L	7kg	Relocate/ fixing

Session III: **Response teams**

Session objective: Participants become confident and prepared in terms of what should be done during an emergency as well as during the post-disaster phase.

Concepts

This session focuses on importance of a response team, which is not just restricted to the institutional premises but is a mechanism of functioning during emergency situation.

Youth groups can help form links between young people and a community through the development of response teams. Their activities will create awareness among communities on the importance of being prepared. Youth can bridge the gap between planning and actions while developing leadership roles.

Suggested activity

The following activity can be used as relevant. Trainers are welcome to use other activities and locally available resources and materials as long as they meet the intended objectives of the module.

ACTIVITY A: Q&A WITH DISCUSSION

Activity objective: Participants understand how to prepare response teams.

Time required: 20 minutes

Materials needed: A white board or flip chart.

INSTRUCTIONS

1. Begin by asking the following questions:
   - What do you understand about a response team?
   - What are the important thematic areas during an emergency or disaster situation?

2. Write the answers on the board or flip chart.
3. If necessary, ask participants to elaborate on their answers.
4. After Q&A, explain the following:

It is important for the success of any school-based disaster risk reduction plan that students are part of the plan and are active participants in all the activities. In a disaster scenario, institutes or college campus may need to fend for themselves because the community may be heavily affected and not able to address an institution's immediate needs. The school management committee should lead this exercise along with the school-based disaster risk reduction team. However, various persons and institutions (including National Society partners) outside the institution can help to prepare schools and develop an emergency preparedness plan.

When establishing response teams, consider the following guidelines.
- Response teams should be created as per the hazards and risks analysis.
- Members must include students.
- Coordinator can be one among the student as agreed by team for one year.
- Criteria for member nomination to each team should be established.
- Members should be nominated, but with each person's consent.
- A gender balance should be maintained within each team.
- Each team should be inclusive, encompassing a member with a disability.
- Focus on the safety of rescuers.
- Relevant training should be in accordance with the learning and retaining capacity of the students.
- Once the team members master the basic information, then specialized training can be provided.
- Practice of skills and test of basic information by each member should be compulsory during all training sessions.
- Adequate refresher training should be scheduled.

Training of student members in the response teams

The following are examples of the types of training that teams should consider. If there is need for basic training materials for teams, they could be developed by the National Society.

For search and rescue:
- Training should be in accordance with the learning and retaining capacity of the student team members.
- Only basic techniques are to be taught, such as:
    - fireman lift method, crawl to drag, blanket drag, pick a bag, stretchers (2-hand, 3-hand, 4-hand seat method, blanket, rope, bamboo);
    - training should use materials that are available in a school or the community.
- No training on ropes (knots), rappelling, climbing, water rescue, pulleys, high-rise locations or other difficult techniques.
- Hailing search and rescue method to be taught because it will help the experts identify the location for a search to reduce the time until a rescue.

For first aid:
- Training should be in accordance with the learning and retaining capacity of the student team members.
- Only basic techniques to be taught.
- Techniques are to use gloves, mask, etc. and include details on proper disposal:
    - demonstrate how to bandage wounds, make a sling and tend to fractures and burns;
    - demonstrate how to respond to local medical conditions, such as snakebites, dog bites, heart attack and stroke; and
    - do not demonstrate to anyone younger than 15 how to perform CPR or apply a tourniquet or triage.

For fire safety:
- Training should be in accordance with learning and retaining capacity of the student team members.
- The focus should be more on precaution than dealing with a fire.
- Students should practise what is taught and not be limited to observing demonstrations by the expert training them.
- Provide details on the class of fires.
- Instruct students on the use of fire extinguishers and their appropriateness.
- Use only locally available fire extinguishers.
- Teaming up with the search and rescue team is recommended, even during mock exercises.
- Instruct students on other mechanisms to use in the absence of a fire extinguisher.

The list can be longer. The training needs analysis is necessary to determine the appropriate training for those groups. Leadership and management training also would benefits all teams.

ACTIVITY D: LINK BETWEEN INSTITUTIONS AND COMMUNITY, THROUGH DISASTER RISK REDUCTION Q&A DISCUSSION

Activity objective: Establish the links between youth and community. Participants should acquire an understanding of disaster risk reduction and its importance; can identify risks, threats and know how to address them; and know which mechanisms to use in generating awareness in the community.

Time required: 30 minutes

Materials needed: A white board or flip chart.

INSTRUCTIONS

1. Begin by asking the following questions:
   - What is your understanding on disaster management?
   - Are you familiar with the term 'disaster risk reduction'?
   - Have you ever participated in any kind of activities related to disaster risk reduction in your community?

2. If participants are not aware of disaster risk reduction, elaborate.

3. Encourage the participants to discuss their views or experiences in line with hazards, vulnerabilities and risks in the community and potential measures that can be taken with immediate effect.

4. Write down comments on the white board or flip chart.

5. The identification and analysis should be done along with participants

The following supplementary activities can be used to create links between youth and communities.

ACTIVITY E: CAPACITY-BUILDING TRAINING AND WORKSHOPS

Activity objective: Develop understanding of the existing coping capacities of a community and stakeholders for help with preparedness.

Time required: 60 minutes

Materials needed: Information education and communication materials on community level preparedness; flip chart

INSTRUCTIONS

1. Divide participants into two groups.
2. Ask one group to develop a seasonal calendar and ask the other group to devise a list of existing capacities.
3. Help participants to identify the two key problems.
4. Ask each group to identify underlying causes related to the problem.
5. Help participants to find steps to address the underlying causes by maximizing locally available resources.
6. Ask each group to make a presentation, and allow questions.
7. Conclude the sessions with a summary of the importance of partnership, working together, collaboration and the critical role of local governments.

ACTIVITY F: MAPPING LOCALITY, AREA, ZONE AND NEIGHBOURHOOD

Activity objective: Participants learn about the availability of resources and creating a safe assembly point.

Time required: 45 minutes

Materials needed: Chart paper and sketch pens.

INSTRUCTIONS

1. Divide the participants into groups (consisting of 3–4 participants).
2. Provide each group with a chart paper. Ask the groups to create a map of the different locations of their campus or locality near to their campus on the chart paper, with important landmarks.
3. After completion, ask each group to locate a safe assembly point and mark it.
4. Ask each group to mark the resources and the distance of those resources from the safe assembly point.
5. Explain the output of the exercise and help correct the errors in the map (if any).

ACTIVITY G: LIST SOCIOECONOMIC EFFECTS AND IMPACTS ON VULNERABLE GROUPS

Activity objective: Participants understand and learn how exposed their community is to a risk or hazard.

Time required: 20 minutes

Materials needed: Plain paper (A4 size), sketch pens, white board or flip chart, marker pens and duster.

INSTRUCTIONS

1. Elaborate and explain the activity by providing examples to the groups.
2. Each group should create a list of impacts and vulnerable groups that exist within the campus or chosen locality.
3. Ask a representative from each group to explain their list.
4. Note down the common points on the white board or flip chart and discuss them with the participants.

ACTIVITY H: PRIORITIZING RISKS AND PREVENTIVE MEASURES THROUGH PRIORITY MAPPING

Activity objective: Participants can prioritize risks and preventive measures.

Time required: 40 minutes

Materials needed: Paper plates, sketch pens and coloured chalk in 6 colours.

INSTRUCTIONS

1. Following the earlier activity, provide each group with 5 paper plates and ask them to write a risk on each plate and their respective preventive measures.
2. Ask each group to discuss within themselves and rank the risks on the basis of exposure and threats it poses.
3. Pick out the common risks and discuss with the participants.
4. Following the discussion, the five risks should again be ranked and written within the circles drawn on the paper plates.
5. Lead discussion on preventive measures, training required and access to resources.
6. Encourage different opinions and perspectives.
7. Provide a closure to the discussion by developing the immediate actions necessary for each risk.

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