Training of Trainers Module for Teachers on Creation of Culture of Safety through Knowledge and Education

Part of Deliverable 12

Preparing Long Term Training and Capacity Building Strategy for Disaster Risk Reduction in India, under NCRMP









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Contents

Abbreviations and Acronyms	iii
Glossary	iv
Introduction	1
Context	1
About the training module	2
Sub-Modules and Learning Units	3
Training Schedule	5
Guidance Note for trainers and facilitators	
Opening the course	8
Concurrent and End-of-module feedback from participants	10
LEARNING UNIT 1: DISASTER RISK REDUCTION (DRR) AND CULTURE OF SAFETY – AN OVERVIEW	11
Session 1.1: Disaster risk reduction (DRR) and culture of safety: an overview	12
Session 1.2: Concepts of hazard, risk vulnerability and capacity	16
Session 1.3: Disaster management cycle: stages, issues and challenges	20
LEARNING UNIT 2: ROLE OF EDUCATION IN DISASTER RISK REDUCTION (DRR)	24
Session 2.1: Role of education in creating awareness of disaster risks	25
Session 2.2: Disaster Risk Reduction (DRR) in Schools	30
LEARNING UNIT 3: ROLE OF SCHOOLS IN DISASTER PREVENTION AND PREPAREDNESS	34
Session 3.1: Disaster prevention: with a focus on school safety and the safety of the large	_
Session 3.2: Disaster prevention and preparedness: how to get most out of the formal curriculum?	38
Session 3.3: Co-curricular/extra-curricular activities for improved disaster prevention a preparedness	
LEARNING UNIT 4: SCHOOL-BASED DISASTER PREPAREDNESS: VALUES, PRINCIPLES AND PARAMETERS	46
Session 4.1: School based disaster preparedness: an overview	47
Session 4.2: Parameters for School Based Disaster Preparedness	51
Session 4.3: Development of School-Based Disaster Preparedness: Values and Principle	s55
LEARNING UNIT 5: SYSTEMATIC APPROACH TO TRAINING (SAT)	59
Session 5.1: Systematic Approach to Training (SAT) and Assessing Training Needs	60
Session 5.2: Defining Training Aim and Objectives	64

Session 5.3: Deciding the content, methodology and resource persons	67
Session 5.4: Deciding the monitoring and evaluation indicators and processes	70
EARNING UNIT 6: LEARNING AND FACILITATION SKILLS	73
Session 6.1: Art of Facilitation I	74
Session 6.2: Art of Facilitation II	77
Session 6.3: Sharing, Listening and Learning	81
Session 6.4: Learning to listen and listening to learn	84
ANNEXURE 1: HANDOUTS	87
Handout 1: Hyogo Framework for Action 2005-2015: Building the Resilience of Nationand Communities to Disaster	
Handout 2: Scope of DRR Curricula	
Handout 3: Four Indicative Examples of Learning Outcomes Progression	
Handout 4 : Cyclone AILA hits SundarbansCase Study	
Handout 5: Comprehensive School Safety Scheme	
Handout 6: Teaching and learning Disaster Prevention	
Handout 7: Appropriate Learning Modalities for Disaster Risk Reduction Education	93
Handout 8: Good Practices: Disaster Prevention and Preparedness Through Extra- Curricular Education	93
Handout 9: Example of School Disaster Management Checklist	95
Handout 10: Milestones for School Disaster Management Plan	96
Handout 11: Systematic Approach to training	96
Handout 12: Capacity Needs and Training Needs Assessment	98
Handout 13: Training/Behavioural Objectives: Verbs to Describe Complexity of Beha	viour
	100
Handout 14: Johari Window	101
Handout 15: Stephen Covey's seven habits of highly effective people	102
ANNEXURE 2: DESIGN BRIEF	103
Sources, References and Further Readings	114

Abbreviations and Acronyms

BRI : Building Research Institute
CCA : Climate Change Adaptation
DMCs : Disaster Management Centres

DRR : Disaster Risk Reduction

DRRE : Disaster Risk Reduction Education

Eos : Enabling Objectives
GOI : Government of India

GRIPS : The National Graduate Institute for Policy Studies

HFA : Hyogo Framework for Action

IFRC : International Federation of Red Cross and Red Crescent Societies

IPCC : The Inter-governmental Panel on Climate Change

KSA : Knowledge, Skills and AttitudeMDGs : Millennium Development Goals

NCRMP : National Cyclone Risk Mitigation Project
NIDM : National Institute of Disaster Management

Pos : Performance Objectives

SAT : Systematic Approach to Training

SFIT : Strategic Framework for Implementation of Training

SMART : Specific, Measurable, Attainable, Realistic and Time bound

SOP : Standard Operation Procedures

SOWT : Strength Opportunity Weakness Threat

TOS : Training Objectives
TOT : Training Of Trainers

UNFCCC : The United Nations Framework Convention on Climate Change UNISDR : The United Nations International Strategy for Disaster Reduction

VANE : Values, Attitudes, Needs and Expectations VANI : Values, Assumptions, Needs and Interests

Glossary

Basic terms of disaster risk reduction (DRR), UNISDR (2009)

Acceptable risk: The level of potential losses that a society or community considers acceptable given existing social, economic, political, cultural, technical and environmental conditions.

Adaptation: The adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

Biological hazard: Process or phenomenon of organic origin or conveyed by biological vectors, including exposure to pathogenic micro-organisms, toxins and bioactive substances that may cause loss of life, injury, illness or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Building code: A set of ordinances or regulations and associated standards intended to control aspects of the design, construction, materials, alteration and occupancy of structures that are necessary to ensure human safety and welfare, including resistance to collapse and damage.

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 Development: The process by which people, organizations and society systematically stimulate and develop their capacities over time to achieve social and economic goals, including through improvement of knowledge, skills, systems, and institutions.

Climate change: (a) The Inter-governmental Panel on Climate Change (IPCC) defines climate change as: —a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcing or to persistent anthropogenic changes in the composition of the atmosphere or in land use||.

(b) The United Nations Framework Convention on Climate Change (UNFCCC) defines climate change as —a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.

Contingency planning: A management process that analyses specific potential events or emerging situations that might threaten society or the environment and establishes arrangements in advance to enable timely, effective and appropriate responses to such events and situations.

Coping capacity: The ability of people, organizations and systems, using available skills and resources, to face and manage adverse conditions, emergencies or disasters.

Critical facilities: The primary physical structures, technical facilities and systems which are socially, economically or operationally essential to the functioning of a society or community, both in routine circumstances and in the extreme circumstances of an emergency.

Disaster A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources.

Disaster risk: The potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period.

Disaster risk management: The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster.

Disaster risk reduction: The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

Early warning system: The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss.

Ecosystem services: The benefits that people and communities obtain from ecosystems.

El Niño-Southern Oscillation phenomenon: A complex interaction of the tropical Pacific Ocean and the global atmosphere that results in irregularly occurring episodes of changed ocean and weather patterns in many parts of the world, often with significant impacts over many months, such as altered marine habitats, rainfall changes, floods, droughts, and changes in storm patterns.

Emergency management: The organization and management of resources and responsibilities for addressing all aspects of emergencies, in particular preparedness, response and initial recovery steps.

Emergency services: The set of specialized agencies that have specific responsibilities and objectives in serving and protecting people and property in emergency situations.

Environmental degradation: The reduction of the capacity of the environment to meet social and ecological objectives and needs.

Environmental impact assessment: Process by which the environmental consequences of a proposed project or programme are evaluated, undertaken as an integral part of planning and decision-making processes with a view to limiting or reducing the adverse impacts of the project or programme.

Exposure People, property, systems, or other elements present in hazard zones that are thereby subject to potential losses.

Forecast Definite statement or statistical estimate of the likely occurrence of a future event or conditions for a specific area.

Geological hazard: Geological process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Greenhouse gases: Gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation of thermal infrared radiation emitted by the Earth's surface, the atmosphere itself, and by clouds.

Hazard: A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Hydro meteorological hazard: Process or phenomenon of atmospheric, hydrological or oceanographic nature that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Land-use planning: The process undertaken by public authorities to identify, evaluate and decide on different options for the use of land, including consideration of long term economic, social and environmental objectives and the implications for different communities and interest groups, and the subsequent formulation and promulgation of plans that describe the permitted or acceptable uses.

Mitigation: The lessening or limitation of the adverse impacts of hazards and related disasters.

National platform for disaster risk reduction: A generic term for national mechanisms for coordination and policy guidance on disaster risk reduction that are multi-sectoral and interdisciplinary in nature, with public, private and civil society participation involving all concerned entities within a country.

Natural hazard: Natural process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

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.

Public awareness The extent of common knowledge about disaster risks, the factors that lead to disasters and the actions that can be taken individually and collectively to reduce exposure and vulnerability to hazards.

Recovery: The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors.

Residual risk: The risk that remains in unmanaged form, even when effective disaster risk reduction measures are in place, and for which emergency response and recovery capacities must be maintained.

Resilience: The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.

Response: The provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduces health impacts, ensures public safety and meet the basic subsistence needs of the people affected.

Retrofitting: Reinforcement or upgrading of existing structures to become more resistant and resilient to the damaging effects of hazards.

Risk: The combination of the probability of an event and its negative consequences.

Risk assessment: A methodology to determine the nature and extent of risk by analysing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment on which they depend.

Risk management The systematic approach and practice of managing uncertainty to minimize potential harm and loss.

Risk transfer The process of formally or informally shifting the financial consequences of particular risks from one party to another whereby a household, community, enterprise or state authority will obtain resources from the other party after a disaster occurs, in exchange for ongoing or compensatory social or financial benefits provided to that other party.

Socio-natural hazard: The phenomenon of increased occurrence of certain geophysical and hydro meteorological hazard events, such as landslides, flooding, land subsidence and drought that arise from the interaction of natural hazards with overexploited or degraded land and environmental resources.

Structural measures: Any physical construction to reduce or avoid possible impacts of hazards, or application of engineering techniques to achieve hazard-resistance and resilience in structures or systems;

Non-structural measures: Any measure not involving physical construction that uses knowledge, practice or agreement to reduce risks and impacts, in particular through policies and laws, public awareness raising, training and education.

Sustainable development: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Technological hazard: A hazard originating from technological or industrial conditions, including accidents, dangerous procedures, infrastructure failures or specific human activities, that may cause loss of life, injury, illness or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Vulnerability: The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard.

Introduction

This training module is developed as a tool to train school teachers for creating a culture of safety through knowledge and education

Use of knowledge, innovation and education to build a culture of safety and resilience at all levels is one of the key priority areas of Hyogo Framework for Action (HFA). The education sector is envisaged to be the key to creating awareness about disaster risks and sensitizing the students in schools and colleges about their possible role in disaster risk reduction. An early awareness in this is likely to result in reduction of damage and losses due to disasters and help young girls and boys to respond effectively as disaster managers and volunteers.

There is increasing evidence that students of all ages can actively study and participate in school safety measures, and also work with teachers and other adults in the community towards minimising risk before, during and after disaster events. Mainstreaming DRR into school curricula aims to raise awareness and provide a better understanding of disaster management for children, teachers and communities. Accompanying structural changes to improve safety in building schools will not only protect children and their access to education, but will also minimise long term costs.

In the Gujarat 2001 earthquake, 971 children were killed and 11,600 schools were destroyed or severely damaged. The main shock occurred during a national holiday so school deaths were not large, but tragic incidents involved students in schools for celebrations and, again children comprised half of more than 20,000 dead.

In another incident of fire in Lord Krishna School of Kumbakonam in Tamil Nadu in 2004, 90 young children died, which again highlighted the appalling state of schools—private and public—throughout the country. The tragedy pointed towards the steady deterioration of an already inadequate public education system and a proliferation of private schools that are often overcrowded, in shoddy buildings, and largely unregulated.

Generally, children are the most vulnerable group in all disasters but teaching DRR in schools will help raise awareness and give better understanding not limited to children and teachers, but to the community as well. When disasters occur, this in turn helps to minimize losses borne by the government. At the same time, investing more in strengthening school-building structures before disasters take place would help reduce long term costs, protect children, and ensure educational continuity after the event.

In the light of this need, GOI has launched National School Safety Program in June 2011 with the vision of promoting a culture of disaster preparedness in the schools. One of the major objectives of the project is capacity building of officials, teachers and students.

Context

India is the second most populous country after China. Total population of the country is 1210 million (census 2011) and about 43 percent of it is in 5 – 24 year age group and about 24 percent in age group of 5-14 years. There are about 1.22 million schools (from primary to higher secondary) in which about 223 million children are studying. Besides, there are about

19,300 other educational institutions, which cater to around 8.7 million students. This estimate does not include students of BE/ Arch/ Medicine/ dentistry/ Nursing/ B. Ed. / Polytechnics. Enrolment in Open Universities has also not been taken into account.

It is estimated that about 1.8 million teachers are required to be trained (SWOT report, pg.139). Given the current capacities, training on such a large scale does not seem possible over next 5 years. Therefore, in order to be realistic, 1/3 (600,000) of the estimated number of teachers are proposed to be trained over a period of 5 years.

This training module aims at creating a culture of safety in schools by orienting the teachers to the need and ways for mainstreaming disaster risk reduction (DRR) and climate change adaptation concerns into school education and underlining the critical role to be played by schools in this regard. This is the overall training objective of this module.

It is envisaged that this training module will help train master trainers, who will be able suitably adapt this module on education to organise further downstream training for school teachers on scale across different states in India. This is the over-arching performance objective of this module.

Specific objectives of different learning units (LUs) and sessions therein, as given in relevant sections, carry different enabling objectives to be achieved during the training programme.

Major constraint, however, of the module design is its duration. A longer duration programme was not considered feasible, as it will not be realistically possible to get school teachers, the main target audience of the programme, for training for a longer duration. Hence, the scope of the training module has been accordingly limited to focus on the essentials for creating a basic level of awareness and commitment for action post training.

The assumed entry behaviour of the primary participants of the programme i.e. potential master trainers, is that they would have at least five years of prior experience as a trainer along with the domain knowledge of education, DRR and CCA. Appropriate selection of participants would be the key to the successful roll out of the programme at the country level.

About the training module

While the focus of training approach and methodology is on experiential methods, the module uses a combination of traditional learning methods, such as presentations and discussions, along with more participatory and experiential learning approaches, e.g. case study based group work and reflections on personal experience. Practical tools and frameworks are provided throughout. There are numerous references to other sources of relevant information.

A list of hand outs is given for each session as required and the list of sources and references is given at the end of the document. Key learning points for each session are suggested so as to help the facilitator sum up the learning at the end of each session. However, the key learning points can be revised and re-defined in view of emerging new knowledge, insights and perspectives.

As required, these messages can also be presented with the help of power point, cards or flip charts or made available to participants in the form of a handout.

This training module is designed for a five-day workshop in which four days are devoted to the sub-module on role of education in creating awareness and the remaining two days are designed to offer practical skills in design and delivery of training. Though the module is organised in a particular order, it is intended to be a flexible resource, in order to allow the trainers to decide how to use it according to the varying needs of each set of participants and varying specific contexts. The sub-modules, learning units and sessions can be used in the order presented, on their own, or in combination with other individual sessions and learning units within sub-modules.

The material can be adapted by the facilitator to the specific context or needs of the participants. Different and more relevant case studies can be substituted. The way the sessions are eventually delivered may also depend on whether there is more than one facilitator, and if so, what expertise each brings to the training session. Estimated timings for sessions are offered, but these should be adapted to fit the time available and the group's level of experience and expertise.

PowerPoint presentations and hand outs are available as separate sections of the training module.

Sub-Modules and Learning Units

The modular structure of the training module allows freedom and flexibility to its users in terms of making their independent choices for running both the base and training of trainer modules either as one compact training event or as separate training events as required.

Base Sub Module on Education

The base sub module is divided into four learning units and eleven sessions therein. The learning units are as follows:

Learning Unit 1: Disaster Risk Reduction (DRR) and Culture of Safety – an overview

This learning unit aims at enabling the participants to:

- Identify the role of culture of safety in disaster risk reduction (DRR)
- Contextualize hazard, risk, vulnerability and capacity at the micro level
- Identify different stages of the disaster management cycle

At the end of the learning unit participants would have acquired an informed understanding of the dynamics of creating a culture of safety for disaster risk reduction (DRR).

Learning Unit 2: Role of Education in Disaster Risk Reduction (DRR)

This learning unit aims at enabling the participants to:

• Examine the role of education in disaster risk reduction (DRR)

At the end of the learning unit participants would have acquired an informed understanding of the role of education in disaster risk reduction (DRR) in general and role of school disaster management task teams in particular.

Learning Unit 3: Role of Schools in Disaster Prevention and Preparedness

This learning unit aims at enabling the participants to:

describe the role of schools in disaster prevention and preparedness

 identify the role of teachers, students and parents in ensuring effective disaster prevention and preparedness at the school level

At the end of the learning unit participants would have acquired an informed understanding of the role of schools in engaging with children on the issues of disaster prevention and preparedness through curricular and co-curricular/extra-curricular activities

Learning Unit 4: School-Based Disaster Preparedness: Values, Principles and Parameters

This learning unit aims at enabling the participants to examine the values, principles and parameters for school based disaster preparedness in terms of their implications for application in real time disaster preparedness planning and implementation.

Participants would have acquired an informed understanding of school based disaster preparedness, particularly from a planning perspective largely in terms of values and principles for development of school based disaster preparedness plans on the other.

TOT Module

Learning Unit 5: Systematic Approach to Training (SAT)

The objective of this learning unit is to equip the participants with basic knowledge about the key issues to be addressed in the course of designing a training intervention/programme.

Learning Unit 6: Learning and Facilitation Skills

The objective of this learning unit is to equip the participants with basic facilitation skills that help the trainers conduct training/learning sessions with efficiency and effectiveness.

Training Schedule

	Overall Theme	Specific Sessions			
Day 1	Opening Session	Morning			
•		Opening session			
	Learning Unit 1:	Session 1.1: Disaster risk reduction (DRR) and culture of			
	Disaster Risk Reduction	safety: an overview (90 minutes)			
	(DRR) and Culture of				
	Safety – an overview	Session 1.2: Concepts of hazard, risk vulnerability and			
		capacity (75 minutes)			
	Learning Unit 2: Role of				
	Education in Disaster	Afternoon			
	Risk Reduction (DRR)	Session1.3: Disaster management cycle: stages, issues and challenges (60 minutes)			
		Session 2.1: Role of education in creating awareness of disaster risks (90 minutes)			
		Evaluation of day (10 minutes)			
Day 2		Morning			
	Learning Unit 2: Role of	Recap of the previous day (10 minutes)			
	Education in Disaster	Session 2.2: Disaster Risk Reduction (DRR) in Schools(90			
	Risk Reduction (DRR)	minutes)			
	(Contd.)	Session 3.1: Disaster prevention: with a focus on school			
		safety and the safety of the larger community.(90 minutes)			
		Afternoon			
	Learning Unit 3: Role of	ing Unit 3: Role of Session 3.2: Disaster prevention and preparedness: how to			
	Schools in Disaster	get most out of the formal curriculum?(90 minutes)			
	Prevention and				
	Preparedness	Session 3.3: Co-curricular/extra-curricular activities for			
		improved disaster prevention and preparedness (90 minutes)			
		Evaluation of day (10 minutes)			
Based Disaster Session 4.1: School based disaste		Morning			
		Recap of the previous day (10 minutes)			
		Session 4.1: School based disaster preparedness: an overview			
	Preparedness: Values,	(90 minutes)			
	Principles and	Session 4.2: Parameters for School Based Disaster			
	Parameters				
		·			
		· ·			
		(30 minutes)			
		Evaluation of day (10 minutes)			
Day 4					
- ~ 1 '					
Systematic Approach to Session 5.1: Systematic Approach to					
		, , ,			
Day 4		Preparedness (90 minutes) Afternoon Session 4.3: Development of School-Based Disaster Preparedness: Values and Principles (90 minutes) Evaluation of day (10 minutes) Morning Recap of the previous day (10 minutes) Session 5.1: Systematic Approach to Training (SAT) and Assessing Training Needs (90 minutes)			

		minutes)			
		Afternoon			
		Session 5.3: Deciding the content, methodology and resource persons (90 minutes)			
		Session 5.4: Deciding the monitoring and evaluation			
		indicators and processes (90 minutes)			
Day 5 Morning		Morning			
	Learning Unit 6:	Recap of the previous day (10 minutes)			
	Learning and	Session 6.1: Art of Facilitation I (90 minutes)			
	Facilitation Skills	Session 6.2: Art of Facilitation II (90 minutes)			
	Monitoring and				
	evaluation	Afternoon			
Wrap-up session Session 6.3: Sharing, Listening a		Session 6.3: Sharing, Listening and Learning (60 minutes)			
		Session 6.4: Learning to listen and listening to learn (60			
		minutes)			
		Workshop summary, next steps, evaluation,			
		and closure (60 minutes)			

Facilitators might also like to consider adding in some time to the schedule for participants to read suggested resources or for free discussion.

Guidance Note for trainers and facilitators

Who should facilitate this workshop?

The facilitator will ideally have practical experience and a good conceptual understanding of disaster management issues in general and disaster risk reduction (DRR) by creating a culture of safety in schools in particular. One way to do this is to have two facilitators working together, one with experience of disaster risk reduction (DRR), and the other of education sector. One of the facilitators must have the required domain expertise in disaster management and the other must have the expertise in issues related to education. Facilitators need to be confident trainers, with a working knowledge of monitoring and evaluation practices. They need to have flexibility, willingness to learn, and passion for promoting learning.

Group size and composition

The ideal group size for the workshop is 15, but it should not be more than 20 in any case. A gender balance among the participants is highly desirable. It is advisable to have at least equal number of women participants in the programme, if not more. As it is hard to achieve these numbers for a variety of reasons, it is important to initiate the process of seeking nominations fairly in advance.

What preparation is needed in advance?

The participants: A limited amount of relevant background reading is suggested for each session, usually one or two documents. It is helpful if participants can read this in advance of the session, particularly if they are not familiar with the subject area. 'Further readings' are suggested for many sessions, and a list of these should be handed to participants at the end of the session.

The facilitator: will need to do background reading, and prepare the following:

Two months before the workshop

Decide on the criteria for selection of participants and the broad focus and objectives for the training and write to the concerned organisations and departments requesting them to nominate equal number of women and men participants as per the shared criteria for selection of participants for the programme.

One month before the workshop

Send nominated participants an outline of the workshop, including titles of modules and sessions to be covered, and background reading to be done before the workshop. Ask the participants about their work experience, what they hope to gain from the workshop and any specific needs they have (e.g. translation). This could be in the form of a simple questionnaire to check the level of their knowledge and experience. The same questions could be used at the end of the course as part of the evaluation of the event. This could be formalized into a training needs assessment. Use this to guide your preparation of the workshop. Ensure the training room is of sufficient size for the whole group and has suitable areas for small groups to work independently.

One week before the workshop

Review the completed questionnaires you have received back in order to understand the participants' profile in terms of their background, level of knowledge and their expectations from the workshop. Use this to guide your preparation. Prepare presentations, slides, hand-

outs, a workshop timetable, flip charts, and lists of 'further resources' accordingly. Prepare a learning folder for each participant to hold all documents. At the start of the course this should contain the workshop agenda and timetable, any logistical information (accommodation, meals, transport, local maps), and a list of the names of all participants.

Two days before the workshop

Check to make sure that lighting, adaptors, extensions leads, plugs, as well as IT equipment are all working. Remember to test that you can open all the documents you will be using during the training, and that the equipment is compatible. If possible, use your own laptop and LCD projector.

What equipment will be needed?

Given the participatory nature of the workshop, much of the workshop can be conducted using flip charts, markers, pens, sticky notes (post-its), sticky tack (blue tack), and meta/flash cards (sheets of coloured paper, about half the size of regular A4 printer paper). Some of the sessions require a laptop and data projector to show PowerPoint presentations. Alternatively, PowerPoint slides can be printed on to acetates for use with an overhead projector, or as posters. A printer and photocopier would be useful, if available.

How to use the technical notes?

Technical notes are basically meant for the use of the trainers using this training module to train the participants of the programme and potential master resource persons. These would need to be suitably simplified and modified by the trained master resource persons for organising training of resource persons or direct training of district and sub-district level functionaries to be trained by the trained resource persons.

How to use the audio-visual and other material?

The general advice to the facilitators of this module is that audio-visual and other material is used in order to promote interactive and discursive learning among the participants as required.

Opening the course

As opening session is going to set the tone of the workshop to follow, it has to be planned and conducted carefully. Run an opening session of not more than one hour on the first day of the course. This session is the opportunity to share the purpose and objectives of the workshop, lay out the agenda, and set ground rules. It is also an opportunity for the participants to introduce themselves and their experience, explain their motivation for joining the workshop, and state their expectations of the course. You may want to use an 'ice-breaker' exercise like the one below to help participants get to know each other, and to put them at ease and get them talking.

Animals and Forest

Ask the participants to leave their seats and assemble in the middle of the training hall. Ask them to be quiet and listen to you carefully. Once the participants are totally silent and are fully with you, ask them to think of an animal in the forest.

After a few seconds, ask anyone of them to share the animal that s/he thought of. Usually, lion, tiger, horse, bear, deer, dog are the most common animals that people think of. If it is 'tiger' for

example, ask others who thought of this animal to raise their hands. Ask all those who thought of 'tiger' to be in one group.

Form other 3-4 groups with names of different animals accordingly. Once all the groups are formed, assign them different places within the room. Draw a big circle on the floor using chalk in the middle of the room. This is the boundary of the forest.

After having formed the groups with names of different animals and a circle of forest on the ground, brief the participants about the game to follow. The game will be played like this:

The game facilitator will shout out the names of two animals at the same time. On hearing this call, the two groups will exchange each other's places running. While the change of place is being done, the facilitator will shout out the names of other two animals. These groups will also start exchanging their places quickly.

After a couple of rounds, the facilitator can shout forest. On this shout, all the members of all the groups will try and get into the circle of forest. Those who fail to get into the circle of forest will be out of the game.

With each subsequent round of a couple of minutes, the circle of forest will be further reduced. This will go on till the circle is not big enough to accommodate more than 3-4 participants. The entire game can be played out in 10-15 minutes. People laugh a lot during the game and usually have a lot of fun in the process.

This game helps people loosen up both physically and mentally and they are quickly settled to go on with the programme.

End the game by telling people to group into pairs of twos by identifying the person having a date of birth closest to theirs. This process has to be facilitated a bit, as some may not remember their birthdays or could be vague about it. Those who do not recall their dates of birth could be grouped on the basis of gender, colour of their attire or any other distinguishing characteristic as decided by the facilitator.

Partners in each pair are advised to know the following about each other and write it out on a flash card provided for the purpose:

- Name and current assignment
- Educational background
- Work Experience
- Expectations from the workshop.

Ask everyone to stick their written flash cards on the space on the wall earmarked for the purpose. After all the pairs have stuck their cards, invite each one of them to introduce their partners and their expectations from the workshop to the entire group. This entire exercise can be completed in 40 minutes, if facilitated well.

Note: The icebreaker mentioned in the box above is just indicative of the function and purpose of an icebreaker at the very outset of the programme. Facilitator is advised to pick any icebreaker that serves the purpose. Please refer to the references on icebreaker at the end of the module.

Concurrent and End-of-module feedback from participants

Feedback is the way to learn about the workshop sessions and their efficacy from the participants' perspective. This has to be done both in the form of concurrent and end-of-module feedback from the participants.

Concurrent feedback is for learning about participants' reactions and responses practically in real time as different sessions are unfolding. End-of-module feedback offers a quick check on its perceived relevance, effectiveness and usefulness by the participants at the end of each module. It should be communicated to the participants at the very outset that their feedback is valued as it helps improve the delivery strategy of the modules in future workshops and of the subsequent module, if any, in the same workshop.

Feedback received should be thoroughly reviewed and responded to. Facilitators can assess the strengths and weaknesses of the sessions and the process, and make adjustments accordingly. At the end of each day, spend at least ten minutes for feedback.

Suggested methods for concurrent and end-of-module feedback are as follows:

- 1. One method for capturing feedback in real time is to create a space within the training hall and could be called 'comments and suggestions'. Facilitator could use any word that suggests that the space is meant for participants to give their comments and suggestions. This is a method to ensure that all the comments and suggestions of the participants are posted for everyone's review and reference on a daily basis. 'Post it' stick pads are made available on each table of the participants with the instructions that the participants are free to write out their comments and feedback on different sessions of the module and stick it up on the 'comments and suggestions' as and when convenient during breaks. This facilitates feedback by the participants in real time as per their convenience. Training facilitators should get the posted comments and feedback typed out on a daily basis for review, reflection and sharing with the participants as to how their comments and feedback are proposed to be addressed within the training programme.
- Another method will be to administer an end-of-the-module feedback form to be filled up by the participants at the end of each module after all the sessions of that module have been conducted. This will be a relatively more structured feedback and will seek to draw the feedback of the participants in the form of their responses to specific questions asked.

Both these methods together are likely to yield a very comprehensive feedback on the relevance, effectiveness and usefulness of different modules. These would be particularly helpful in sharpening the delivery strategy of these modules in subsequent training programmes on the one hand and of subsequent modules in the on-going training programme on the other.

LEARNING UNIT 1: DISASTER RISK REDUCTION (DRR) AND CULTURE OF SAFETY – AN OVERVIEW

Objectives

- Examine the role of culture of safety in disaster risk reduction (DRR)
- Contextualize hazard, risk, vulnerability and capacity at the micro level
- Identify different stages of the disaster management cycle

Sessions

- Disaster risk reduction (DRR) and culture of safety: an overview
- Concepts of hazard, risk vulnerability and capacity
- Disaster management cycle: stages and issues and challenges

Estimated time: 225 minutes (3 hours 45 minutes)

Expected Outcome

Participants would have acquired an informed understanding of the dynamics of creating a culture of safety for disaster risk reduction (DRR).

Session 1.1: Disaster risk reduction (DRR) and culture of safety: an overview

Duration: 90 minutes

Objective: At the end of the session the participants will be able to explain the critical role of creating a culture of safety in schools for effective disaster risk reduction (DRR).

Methods

- Interactive lecture presentation
- Question and answer session
- Group work
- Group presentation and discussion in the plenary

Materials Needed

Handouts, flipcharts, markers

Hand outs

Handout 1: Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disaster

Session Plan with Facilitator Notes

Interactive lecture presentation (10 minutes)

Make a presentation on creation of a culture of safety for disaster risk reduction (DRR), as it is embodied as one of the priority areas of Hyogo Framework for Action (HFA). This presentation should highlight the crucial role that schools could play not only in ensuring school safety during disasters, but also in creating community awareness about the need for recognising and reducing disaster risk through better disaster preparedness.

Question and answer session (15 minutes)

Invite comments and questions from the participants and respond to them in a manner that stimulates a discussion on the subject (15 minutes)

Group work (30 minutes)

Form 4-5 groups of participants and ask them to identify all the issues and challenges related to disaster management in schools in general and of creating a culture of safety in particular for reducing the disaster risk. Ask them to zero in on concrete action points for creating a culture of safety in schools and in the communities that the school children come from. (30 minutes)

Group presentations and discussion in the plenary (30 minutes)

Ask the groups to make their presentations in the plenary and follow it up by an open house discussion

Wrap-up (5 minutes)

Summarise the key learning points of the session

Technical Note

This technical note is meant to be used by the session facilitator/s to structure their presentation for the session. This presents the broad context and background against which the issue of creating a culture of safety can be addressed.

In the last 30 years disasters have been happening more frequently, and with greater impact, than ever before. Their impact is the greatest in low income countries, particularly Asia and the Pacific.

The total number of people affected by disasters resulting from natural hazards has tripled throughout the past decade, with an average of 211 million people directly affected each year as a result of damages to homes, property, crops, livestock and infrastructure; children typically represent 50 to 60 per cent of all those affected.

Children, and especially young children, are less equipped to deal with deprivation and stress due to their particular physical, social and psychological characteristics. This makes them particularly vulnerable to the effects of disasters. In the late 1990s the number of children affected by disasters was estimated at 66.5 million per year; climate change impacts are projected to increase this to as many as 175 million per year in the coming decade. Recurring disasters and the changes in climate are 'causing child rights to become even more difficult to safeguard, as adults, communities and governments do not fully appreciate the threats to their children's future or are increasingly powerless to fulfil their responsibilities to protect them' (Polack, 2010)¹

From a child rights perspective disasters and climate change not only affect a child's basic right to live (Article 6 United Nations Convention on the Rights of the Child (UNCRC); the right to the enjoyment of the highest attainable standard of health (Article 24); and the right to education (Article 27), but they cut across their right to participate (Article 12) and for decisions to be made in their best interests (Article 3).

Disasters also seriously affect education systems, schools, teachers and children. The number of people affected indirectly is much greater as many more are displaced. Furthermore, climate change has been recognized as a key driver of disaster risk. Evidence suggests that currently 7 out of every 10 disasters are climate-related. Studies on disaster trends and the likely consequences of climate change suggest that every year, 175 million children are likely to be affected by climate-related disasters alone.

Education in schools is widely acknowledged to be a major instrument for creating awareness about disaster risks and the need to mitigate them through better preparedness. Creating a culture of safety forms an integral part of education on disaster risk reduction (DRR). Education service delivery has increasingly been integrated into the humanitarian and development response to disasters in a number of contexts around the world. The scale and nature of natural disasters, however, continue to pose a threat to progress towards achieving the Millennium Development Goals (MDGs), including those related to education.

Against a background of increasing incidence and scale of disaster, the Hyogo Framework for Action (HFA) 2005-2015 was adopted by 168 governments in January 2005 at the World Conference on Disaster Reduction held in Kobe, Japan. Sub-titled Building the Resilience of Nations and Communities to Disasters, HFA lays out a strategic and systematic approach to

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¹ Children and Disasters: Understanding Impact and Enabling Agency

reducing risk from natural hazards incorporating strategic goals, priorities for action and key activities.

While each of the five priorities carries implications for school systems, schools and other learning institutions, HFA priority 3 is of most direct relevance to education. Priority 3 calls upon governments, regional and international organizations and other stakeholders including local jurisdictions and communities to 'use knowledge, innovation and education to build a culture of safety and resilience at all levels' and identifies the following school-related key activities:

- Inclusion of disaster risk reduction knowledge in relevant sections of school curricula at all levels.
- Implementation of local risk assessment and disaster preparedness programmes in schools and institutions of higher education.
- Implementation of programmes and activities in schools for learning how to minimize the effects of hazards.

The role of education for disaster risk reduction strategies can be presented according to three types of activities: 1) Save lives and prevent injuries should a hazardous event occur, 2) Prevent interruptions to the provision of education, or ensure its swift resumption in the event of an interruption, and 3) Develop a resilient population that is able to reduce the economic, social and cultural impacts should a hazardous event occur.

Education for Disaster Risk Reduction (DRR) takes into account the relationships between society, environment, economy, and culture and their impacts. It also promotes critical thinking and problem-solving as well as social and emotional life skills that are essential to the empowerment of groups threatened or affected by disasters.

The importance of education in promoting and enabling Disaster Risk Reduction (DRR) has already been identified by researchers and policy makers. In doing so, there is a renewed focus on disaster risk education in primary and secondary schools. Mainstreaming DRR into school curricula aims to raise awareness and provide a better understanding of disaster management for children, teachers and communities. Accompanying structural changes to improve safety in building schools will not only protect children and their access to education, but will also minimise long term costs.

There is increasing evidence that students of all ages can actively study and participate in school safety measures, and also work with teachers and other adults in the community towards minimising risk before, during and after disaster events. Methods of participatory vulnerability assessment, capacity assessment and hazard mapping have been used with broader communities surrounding schools and other institutions of education and research. Government can effectively reach out to communities and protect them by focusing on schools in DRR initiatives to achieve greater resilience to disasters.

Key Learning Points

- Education in schools is widely acknowledged to be a major instrument for creating awareness about disaster risks and the need to mitigate them through better preparedness.
- Creating a culture of safety forms an integral part of education on disaster risk reduction (DRR).
- Education for Disaster Risk Reduction (DRR) takes into account the relationships between society, environment, economy, and culture and their impacts.

Session 1.2: Concepts of hazard, risk vulnerability and capacity

Duration: 75 minutes

Objective: At the end of the session the participants will be able to explain the exact connotation of the key concepts of hazard, risk, vulnerability and capacity in the context of disaster management with a focus on disaster risk reduction.

Method(s):

- Interactive lecture presentation
- Questions and answers and discussion
- Group work
- Group presentation in the plenary

Materials needed

Markers, A4 size sheets and flip charts.

Hand outs

The glossary presented at the beginning of the training module can be used as a hand out for this session.

Session Plan with Facilitator Notes

Interactive lecture presentation (20 minutes)

Start the session with an informal interaction with the participants on what they already know about the concepts of hazard, risk, vulnerability and capacity. Invite them to share their views and make a note of the points made either on a flip chart or white board. Identify commonalities and differences in the views expressed. (10 minutes)

Make a brief presentation of around 10 minutes explaining the key concepts using live examples and illustrations from some recent disasters. It is important to highlight that hazards in themselves do not constitute disasters. It is the physical, social, and economic vulnerabilities and capacities of the people from communities at risk that determine the nature and extent of disasters. (10 minutes)

Questions and answers and discussion (10 minutes)

Follow it up with an open house discussion inviting comments and questions. Come up with facts, analysis and arguments to respond to the doubts and divergent opinions as expressed during the discussion. (10 minutes)

Group work (20 minutes)

Wrapping up the discussion, form 4-5 working groups of participants and ask them to examine the inter-related nature of hazards, risk, vulnerability and capacity in the light of their own experience and thinking. They need to carry this out as a group work (20 minutes)

Group presentation in the plenary (20 minutes)

Ask the working groups to share their findings and analysis in a presentation in the plenary. Groups will have the freedom to use power point, flip charts, cards, or just speech for making their presentation. Give 5 minutes at the end for some questions and answers, at least one on each presentation. (20 minutes)

Wrap-up (5 minutes)

Close the session with a presentation summing up the key learning from the session. (5 minutes)

Technical Note

This technical note contains the key concepts that are proposed to be discussed and clarified during this session. The facilitator/s could use this to structure their presentation for the session.

Key Concepts

Disaster: A disaster occurs when a natural event coincides with vulnerable human conditions and with insufficient capacities of the affected community to reduce the adverse impacts of the event. It is a sudden, calamitous event that disrupts the functioning of a community or society and causes human, material, and economic or environmental losses that exceed the community's or society's ability to cope using its own resources (IFRC 2013).

Disasters jeopardize development gains. Equally, development choices made by individuals, households, communities and governments increase or reduce the risk of disasters.

But disasters are not totally discrete events. With growing technology and scientific advances the possibility of occurrence, time, place and severity of the strike can be reasonably and in some cases accurately predicted.

Hazard: A dangerous phenomenon, substance, human activity, or condition that may cause loss of life, injury or other health impacts, damage to property, loss of livelihoods and services, social and economic disruption, or environmental damage. There are a number of different types of hazards, such as natural and human-induced hazards. It is important to differentiate between primary and secondary hazards. A secondary hazard would be the direct result of a primary hazard. For example, an earthquake can cause a landslide or tsunami.

Broadly hazards can be categorized as:

- Natural hazards are naturally occurring physical phenomena caused either by rapid
 or slow onset events which can be geophysical (earthquakes, landslides, tsunamis
 and volcanic activity), hydrological (avalanches and floods), climatological (extreme
 temperatures, drought and wildfires), meteorological (cyclones and storms/wave
 surges) or biological (disease epidemics and insect/animal plagues).
- Technological or man-made hazards (complex emergencies/conflicts, famine, displaced populations, industrial accidents and transport accidents) are events that are caused by humans and occur in or close to human settlements. This can include environmental degradation, pollution and accidents. Technological or man-made hazards (complex emergencies/conflicts, famine, displaced populations, industrial accidents and transport accidents)

Vulnerability: The characteristics and circumstances of a person, 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, political, and environmental factors. Vulnerability varies significantly within a community and over time. Vulnerability is a condition that makes a community weak and susceptible to the impacts of a hazard.

To determine people's vulnerability, two questions need to be asked:

- To what threat or hazard are they vulnerable?
- What makes them vulnerable to that threat or hazard?

People (living conditions, health, security), Property (physical property loss, services), Economy (loss of production and product, income) and Environment (water, air, soil or vegetation) etc. are the mentionable characteristics of "Tangible Vulnerability", because all of these can be determined easily.

On the other hand, Social Structure (family and community relationships), Cultural Practices (religious or agricultural activities), Motivation (government response) and Cohesion (interruption of normal life) are the major characteristics of "Intangible Vulnerability", because these are hard to determine.

Some of the major contributing factors are:

- Population Growth
- Rapid Urbanization
- Environmental Degradation
- Lack of Awareness & Information
- Political Instability

Capacity: Capacity is also often termed as a reverse phenomenon of vulnerability. It is defined as the combination of all the strengths, attributes, and resources available within a community, society, or organization that can be used to achieve agreed goals.

What capabilities do people have in lessening the impact of, preparing for, responding to, and recovering from disasters? What resources do they have access to and control over, so that they can effectively protect themselves from the impact of a disaster?

Risk: The combination of the probability of an event and its negative consequences often referred to by the following function:

Disaster risk = (Hazard x Vulnerability)/ Capacity

Disaster Risk Reduction: The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, decreased vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

Key Learning Points

- Disasters jeopardize development gains. Equally, development choices made by individuals, households, communities and governments increase or reduce the risk of disasters.
- Vulnerability is a condition that makes a community weak and susceptible to the impacts of a hazard.

Session 1.3: Disaster management cycle: stages, issues and challenges

Duration: 60 minutes

Objective: At the end of the session the participants will be able to identify different stages of disaster management cycle and the related issues and challenges in each one of them.

Methods

- Interactive lecture presentation
- Question and answer session and discussion
- Group work

Materials Needed

Flipcharts, markers

Session Plan with Facilitator Notes

Starting the session (5 min)

Share the purpose and intended learning outcome of the session, which is to help the participants examine the different phases of disaster management cycle. This session intends to build this understanding that different phases of the disaster management cycle (response, recovery, mitigation and preparedness) have different planning requirements.

Interactive Lecture Presentation (20 min)

This lecture presentation will aim at explaining the different phases of disaster management cycle by drawing on real life examples from some recent disasters such as Uttarakhand disaster of June 2013 and Phailin cyclone in Odisha and Andhra Pradesh in November 2013 in India.

People at risk are a diverse group involving women, men and children on the one hand and old, sick and the challenged on the other. Hence, issues of gender, equity, inclusion and participation, which vary across different community contexts and different phases of the disaster management cycle. It is important to consider these issues during the course of a disaster management planning exercise.

The lecture will also highlight the role of climate change in creating complex conditions having far reaching consequences for people's lives in general and health in particular. Climate change introduces the elements of uncertainty and unpredictability in the occurrence of these disastrous events, particularly health emergencies. Cloud bursts resulting in flash floods leading to massive landslides and widespread destruction of infrastructure, assets, resources and loss of lives and livelihoods in Uttarakhand in June 2013 underline the complexity of the relationship between climate change and disaster risks that the communities at risk face across many states in India.

All these considerations will inform the exposition of the different phases of the disaster management cycle during this interactive lecture presentation made using a conversational style inviting questions and comments from the participants during the course of the presentation itself.

Group Work: Understanding Disaster Management Cycle (20 minutes)

Ask them to discuss different phases of the disaster management cycle. They should try and form consensus within the group and fill the following matrix.

Activity	Phase	Implications for school safety and impact on education
Response (search, rescue)		
Recovery		
Mitigation/prevention		
Preparedness		

Ask the different working groups to make their respective presentations. Group presentations will be followed by a **discussion in the plenary (10 minutes)**

Summarise the key learning points from the session by pulling together all the points made by different groups. **(5 minutes)**

Technical Note

This technical note is basically a guidance note for the session facilitator/s to help them structure their presentation for the session and the sequence of inputs to be given. Mitigation, preparedness, response and recovery are generally considered to be the four stages or phases of a disaster management cycle. Terms 'stages' and 'phases' are often used interchangeably. Each stage or phase involves a number of activities.

The following note presents various phases of disaster management spelling out different activities undertaken across these phases. But the session facilitators are free to share this or the convention four stages of disaster management cycle as mentioned above.

Phases of Disaster Management

Disaster management cycle has four distinct, but inter-related phases. These are:

- Prevention and mitigation phase (pre-disaster)
- Preparedness (pre-disaster)
- Response and recovery phase (during and post disaster)
- Rehabilitation and reconstruction (post disaster)

Activities undertaken in one phase have knock-on effects on other phases. Like level and quality of preparedness would determine the effectiveness of response and recovery efforts. DRR and CCA sensitive design and delivery of recovery, rehabilitation and reconstruction programmes can result in effective prevention and mitigation of the disaster and climate risks faced by people and communities. As is evident from these illustrations, all the phases of the disaster management cycle are intimately linked and need to be viewed in relationship to each other.

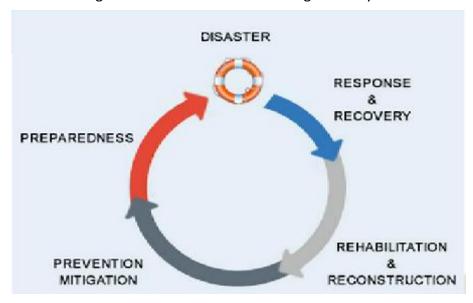


Figure 1: Phases of Disaster Management Cycle

Source: www.nidm.gov.in

Before a disaster (pre-disaster). Pre-disaster activities are those which are undertaken to reduce human and property losses caused by a potential hazard. For example, carrying out awareness campaigns, strengthening the existing weak structures, preparation of the disaster management plans at household and

- community level, etc. Such risk reduction measures undertaken during this phase are termed as mitigation and preparedness activities.
- During a disaster (disaster occurrence). These include initiatives taken to ensure that the needs and provisions of victims are met and suffering is minimized. Activities undertaken during this phase are called emergency response activities.
- After a disaster (post-disaster). There are initiatives taken in response to a disaster with a purpose to achieve early recovery and rehabilitation of affected communities, immediately after a disaster strikes. These are called recovery, rehabilitation and reconstruction activities.

Some of the key terms discussed in this diagram are defined below:

- Preparedness aims to reduce damage and loss of lives, livelihoods, property, infrastructure, assets, resources and services that could potentially be caused due to disasters. Effective preparedness allows communities and institutions to provide a quick, organised response to disasters and include early warning systems, planned evacuation routes and sites etc.
- Disaster 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. It is however not always possible to prevent a hazard event
 from taking place, in this case the task transforms to that of mitigation which aims to
 minimize the hazard impact. (UNISDR, 2009)
- Mitigation is 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. It should be noted that in climate change
 policy, "mitigation" is defined differently, being the term used for the reduction of
 greenhouse gas emissions that are the source of climate change. (UNISDR, 2009)
- Response: The provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected" (UNISDR,2009)
- Recovery is the activity that returns humans and built infrastructures to minimum living/operating standards and guides long-term efforts designed to return life to normal levels after a disaster. This includes building temporary housing and provision of basic household amenities.

Key Learning Points

- Activities undertaken in one phase have knock-on effects on other phases.
- DRR and CCA sensitive design and delivery of recovery, rehabilitation and reconstruction programmes can result in effective prevention and mitigation of the disaster and climate risks faced by people and communities.

LEARNING UNIT 2: ROLE OF EDUCATION IN DISASTER RISK REDUCTION (DRR)

Objective(s): are to help the participants

- Examine the role of education in disaster risk reduction (DRR)
- Analyse the role of disaster management task teams in DRR at the school level

Sessions

- Role of education in creating awareness of disaster risks
- Disaster risk reduction (DRR) in schools

Estimated time: 180 minutes (3 hours)

Expected Outcome

Participants would have acquired an informed understanding of the role of education in disaster risk reduction (DRR) in general and what are the disaster prevention initiatives at the school level

Session 2.1: Role of education in creating awareness of disaster risks

Duration: 90 minutes (1.5 hours)

Objective: At the end of the session the participants will be able to describe the role of education with specific reference to DRR learning and curricula in schools in creating awareness of disaster risks.

Methods:

- Group work on case study
- Presentation and discussion

Materials needed

Flip charts, markers, hand outs

Hand outs

Handout 2: Scope of DRR Curricula

Handout 3: Four Indicative Examples of Learning Outcomes Progression

Handout 4: Cyclone AILA hits Sundarbans--Case Study

Session Plan with Facilitator Notes

Starting the Session: (30 minutes)

Begin by asking the participants what they understand by risk in general and disaster risk in particular. Ask them to brainstorm on the sources of risk. Make a free list of points made by the participants. After all the responses from the participants are written out on the white board or a flip chart, group them into two broad categories of macro and micro risks through a consultative process. Location of a school in a highly seismic zone or close to coast exposed to cyclones and storms are sources of macro risk. But poverty and lack of access to basic services of the people living in slums would be of the nature of micro risks.

Draw the attention of the participants to the importance of assessment of both macro and micro risks as a primary precondition for effective disaster management planning at the school level.

This will set the tone for examining the implications of the existing policy regime on disaster management for integrating it into school disaster management plans.

Group work and discussion in plenary (30 minutes)

Use a case study (the attached case study on Sundarbans may be used), preferably from within India or Asia that presents an example of both macro and micro disaster risks. Ask the participants to examine the issues related to macro and micro disaster risks and their implications for school safety in such a scenario as given in the school safety.

Ask the participants to discuss the case study in their groups and come up with the group's analysis of the key learning from the case study, particularly from a school safety planning perspective. It is good to select a case study that highlights the efficacy of participatory approaches in developing disaster resilient development plans and processes.

Presentation and discussion (30 minutes)

Ask the working groups to make their group presentations. Wrap up the session with a closing discussion summarising the key learning from the session.

Technical Note

This technical note is meant to be used by the facilitator/s as reference material to structure their presentation to be made during the session. These present the five essential dimensions of DRR learning that must inform any initiative to impart knowledge and induce learning. Knowing about disaster risks and learning about different dimensions of learning about disaster risk reduction (DRR) are intimately linked.

Learning and teaching approaches used in addressing DRR curriculum tend to be generally limited in application. Links are not, in many cases, being made between the competency, community engagement and proactive citizenship ambitions of DRR and the need for interactive, participatory and 'in the field' learning through which competencies, involvement literacy and confidence are built. There is little evidence for affective learning approaches (involving the sharing of feelings and emotions) even though learning about hazard and disaster can elicit a strong emotional response in the learner. The need for affective learning becomes ever stronger in that the increasing incidence of disaster means that pre-disaster learning is increasingly taking place in post-disaster or slow-onset disaster learning environments.

Education is the key element for attaining disaster reduction and achieving human security in the pursuit of sustainable development. Education can be characterized in various ways, depending on the target and purpose. Formal education is important and essential, and provides basic knowledge to people. Informal education (including training, awareness raising, community and family education) applies this knowledge to practice. Thus, the synergy of formal and Informal education is of utmost Importance.

The Five Essential Dimensions of DRR Learning²

What elements comprise a systematic, coherent and implementable conception of disaster risk reduction education? Laid out below are five essential dimensions of DRR. The five dimensions outlined are essential in that, collectively, they scope out what the full and systematic treatment of DRR involves while enriching the potential for DRR learning in both school and community. As we move through these dimensions, the importance of active, participatory and experiential learning becomes clear.

Dimension 1: Understanding the Science and Mechanisms of Natural Disasters

The first dimension concerns developing understanding of the science and mechanisms of natural hazards such as cyclones, tsunamis and volcanic eruptions: why they happen; how they develop; where they occur; their frequency and power; their physical impacts; trends and patterns in their occurrence. The recent global mapping of disaster risk reduction curriculum found that, in many instances, disaster-related learning was more or less confined to parts of the curriculum, such as physical and natural science and geography, where there has been traditional and long-standing textbook coverage of natural weather and geo-seismic hazard. But just as science dominated early disaster-related international discourse before the social and economic consequences of disaster became the focal point of attention, so disaster-related education spearheaded by science is giving way to a broader, multi-disciplinary, socially oriented approach. Understanding the science of natural hazards nonetheless remains an important dimension of DRRE. Cultivating rich

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² Towards A Learning Culture of Safety and Resilience :Technical Guidance for Integrating Disaster Risk Reduction in the School Curriculum, UNICEF

understanding of mechanisms involves moving beyond the textbook and/or workbook toward engaging students in active enquiry, experimentation, project work, analysis and discussion of stimulus learning material and active engagement with DRR professionals, meteorologists, climate change researchers, community DRR activists and those with indigenous insight.

Dimension 2: Learning and Practicing Safety Measures and Procedures

Instruction and practice in safety measures and procedures in the event of hazard, at school, at home or out in the community or local environment form the second dimension of DRRE. This includes familiarization with hazard early warning signs and signals, instruction in evacuation or sheltering procedures, drills and exercises, familiarization with basic first aid and the contents of a first aid kit, health and safety measures, and guidance on how to stay safe after a hazard has subsided.

Safety awareness has so far tended to find a place in the student learning experience as a co- or extra-curricular element or as an addition to the textbook study of hazard in science lessons. A cross-curricular approach is needed in which safety behaviours are internalized and continually improved through reinforced practice. Occasional learning that is inactive in nature, limited in its practical, action and decision-making scope and unreflective is not best suited to fostering safety knowledge and practice.

Dimension 3: Understanding Risk Drivers and How Hazards Can Become Disasters

By focusing on the science of natural hazards and/or on safety procedures in the face of hazard, learning programmes can inadvertently give learners the impression that little that can be done to combat against disaster. The third dimension of DRRE learning seeks to encourage learners to act and be proactive in mitigating risk through a thorough examination of the elements at work in the fundamental disaster risk formula:

Disaster Risk = Natural Hazard x Vulnerability Capacity of Societal System

Hazards and disasters are different. A hazard is an event with the potential to cause harm. A disaster happens when the hazard exceeds people's capacity to cope, to devastating effect. Clearly, the more intense is the hazard, the greater the likelihood of disaster. But the level of disaster risk is also fundamentally influenced by prevailing conditions of vulnerability.

Forms of vulnerability that drive up the likelihood of disaster risk in any context – risk drivers - can be social (e.g. illiteracy and lack of knowledge and education) or economic (e.g. poverty and inequality) or environmental (e.g. deforestation and other forms of ecosystem degradation).

A key question to regularly review with learners is whether at any level, local through global, there is such a thing as an exclusively 'natural' disaster. Having learners actively examine local conditions, drivers and processes of vulnerability through participation, even leadership, in community enquiry projects, is an essential, but as yet insufficiently addressed aspect of DRRE.

Dimension 4: Building Community Risk Reduction Capacity

The formula noted under dimension 3 demonstrates that disaster risk can be reduced by increasing the capacity of a society to protect itself against hazard. The fourth dimension of DRRE learning engages learners in processes of resilience building in their own community

through grassroots level initiatives such as undertaking local vulnerability assessment and mapping initiatives, identifying hazards, developing resilience action plans, and implementing those plans. The action-oriented learning dimension of DRRE offers hands-on experience of participatory citizenship education.

Resilience building embraces both mitigation and adaptation. Mitigation, at one level, is about reducing or limiting the potential threat from hazards. At this level, it overlaps considerably with adaptation, (i.e., adjusting human or natural processes to modify the effects of hazard, for example, changing an agricultural method to cope with drought). At a deeper level, mitigation concerns examining how and to what extent human activities may contribute to increasing frequency and severity of hazard, and how to effect fundamental changes in human behaviour (e.g., encouraging consumer behaviour changes toward sustainable consumption). In practice most DRRE has stopped short of this deeper level, limiting itself to mitigating the effects of hazard.

Dimension 5: Building an Institutional Culture of Safety and Resilience

Disaster risk reduction in education is understood to have both structural components, such as school buildings and facilities, and non-structural elements, such as school disaster management, school policy development, disaster drills and procedures and formal, non-formal and informal learning. The latter covers 'any measure not involving physical construction that uses knowledge, practice or agreement to reduce risks and impacts'.

The fifth and final dimension places an emphasis on blending the structural and non-structural elements so that the school becomes a DRR learning community or organization oriented towards building a culture of safety and resilience. It involves principals and teachers in looking for possibilities to give a voice to students in the curriculum, in their daily lives and in the processes of the school regarding both structural and non-structural aspects of safety and resilience building. In such a blending the school becomes a DRR learning laboratory – the campus becomes part of the curriculum.

Possible elements/activities include learner involvement in school DRR policy development, learner engagement with technical personnel on structural safety aspects of the school, learner management of school hazard bulletin boards, student run vulnerability assessments of the school as practice for their resilience building projects in the community, student presentations of in-class or in-community DRR work at school assemblies, and establishment of a school and community DRR council with student membership.

- Education is the key element for attaining disaster reduction and achieving human security in the pursuit of sustainable development.
- Learning and teaching approaches needs to be linked with competency, community
 engagement and proactive citizenship ambitions of DRR and the need for interactive,
 participatory and 'in the field' learning through which competencies, involvement literacy
 and confidence are built.
- Formal education is important and essential, and provides basic knowledge to people.

Session 2.2: Disaster Risk Reduction (DRR) in Schools

Duration: 90 minutes (1.5 hours)

Objectives:

At the end of the session the participants will be able to articulate the role and relevance of school disaster management task teams in ensuring effective disaster risk reduction (DRR) at the school level.

Methods:

- Group work
- Group presentation and discussion
- Summing up

Materials needed:

Flip charts, markers

Handouts:

Handout 5: Comprehensive School Safety Schema

Session Plan with Facilitator Notes

Starting the Session (5 minutes)

Explain the purpose and process of the session and its intended learning outcome/s.

Group work (40 minutes)

Form four working groups to work respectively on opportunities that school disaster management teams can explore for ensuring disaster risk reduction (DRR) in schools. The task will be to highlight the role of education and the windows of opportunities that schools offer for mainstreaming DRR in the school education through extracurricular activities or otherwise.

Ask the working groups to have a round of individual experience sharing and discussion within their respective groups. After all the groups are finished with their initial round of sharing and discussion, team leaders of all the four groups will meet to discuss and prepare a plan of action spelling out different activities to be undertaken for disaster risk reduction in schools in general and role of task teams in particular.

However, as local conditions vary across different geographical and cultural contexts, a lot of what is agreed as action to be taken in this session will be sharpened and firmed up in the light of different group exercises proposed across different sessions towards the end of this sub-module on education.

Group presentation and discussion (40 minutes)

Each working group will prepare the presentation using power point, flip charts or cards. After all the group presentations are made, hold an open house discussion using questions and answers.

Summing up (5 minutes)

Summarise the key learning points from this session.

Technical Note

This is a guidance note for the session facilitators to help them shape up the content of this session in terms of its overall sequence and flow.

'Disaster Reduction Begins at School' was the slogan of the UN International Strategy for Disaster Reduction's 2006-8 global campaign. Since then there has been a growing recognition of the need for school safety as one of the cardinal features of disaster prevention at the local level.

Basic education and disaster prevention go hand in hand. The methods for recognizing and assessing the future impact of hazards, vulnerabilities and risks and identifying strengths and capacities happen to contain the fundamentals of scientific thinking as well as the basics of good citizenship and participatory governance. The values, attitudes and technologies needed for physical protection; informed planning, environmental stewardship disaster-resilient design and construction, are the same as those fundamental to sustainable development and livelihood security.

It is important to recognise that disaster risk reduction cannot be addressed as one more topic to be added to an already full school curriculum. Instead it needs to be viewed and addressed as an integral part of the overall orientation of the school education by integrating it into different parts of the school curricula.

The solutions for ensuring effective disaster prevention at the school level through sound DRR initiatives are as follows:

Create safe learning environments with safe construction and retrofit

- Select safe school sites and design and build every new school a safe school.
- Prioritize replacement and retrofit of unsafe schools.
- Minimize non-structural risks from all sources.

Maintain safe learning environments with school disaster management

- Engage school administrators, staff, students and parents in ongoing school community disaster prevention activities.
- Practice simulation drills for expected and recurring disasters and planning for safe reunification.
- Maintain building structural and non-structural safety measures.

Protect access to education with educational continuity planning

- Develop school and national contingency plans in advance.
- Learn and implement "Minimum Standards for Education in Chronic Emergencies and Disasters".
- Incorporate the needs of children not-yet-in-school, children with disabilities, girls.

Teach and learn disaster prevention and preparedness

- Disaster prevention and preparedness and principles of disaster-resilient construction and environmental protection inside and outside the curriculum.
- Engage teachers and students in adapting, developing and testing strategies and materials for risk reduction education.

- Basic education and disaster prevention go hand in hand.
- DRR at the school level needs to be viewed and addressed as an integral part of the overall
 orientation of the school education by integrating it into different parts of the school
 curricula.

LEARNING UNIT 3: ROLE OF SCHOOLS IN DISASTER PREVENTION AND PREPAREDNESS

Objectives: To help the participants do the following:

- Describe the role of schools in disaster prevention and preparedness
- Identify the role of teachers, students and parents in ensuring effective disaster prevention and preparedness at the school level

Sessions:

- Disaster prevention: with a focus on school safety and the safety of the larger community.
- Disaster prevention and preparedness: how to get most out of the formal curriculum?
- Co-curricular/extra-curricular activities for improved disaster prevention and preparedness

Estimated time: 270 minutes (4.5 hours)

Expected Outcome:

Participants would have acquired an informed understanding of the role of schools in engaging with children on the issues of disaster prevention and preparedness through curricular and co-curricular/extra-curricular activities.

Session 3.1: Disaster prevention: with a focus on school safety and the safety of the larger community.

Duration: 90 minutes (1.5 hours)

Objective: At the end of the session, the participants will be able to describe and explain the various aspects and dimensions of disaster prevention with a focus on school safety and the safety of the larger community.

Methods:

- Discussion
- Group work on 'dimensions of teaching and learning about disaster prevention'
- Group presentation and discussion

Materials needed:

Flip charts, markers, hand outs

Handouts:

Handout 6: Teaching and learning disaster prevention

Session Plan with Facilitator Notes

Starting the Session: (30 minutes)

Begin by asking the participants what they understand by disaster prevention in particular in view of the learning from the first two preceding modules accompanied with their own work experience. Ask them to brainstorm on different aspects and dimensions of disaster prevention, particularly with reference to safety of schools and the larger community. Make a free list of points made by the participants. Write out responses from the participants on the white board or a flip chart.

This will set the tone for examining how disaster prevention can form a part of school level disaster management planning with the active involvement of teachers, students and their parents.

Group work on 'different dimensions of disaster prevention' (30 minutes)

Form 4-5 working groups of participants and ask them to discuss different aspects and dimensions of disaster prevention. Do explain that total prevention of disaster may not be possible, but the impact of disaster on children and their communities can be considerably reduced through effective mitigation measures and preparedness at the school level. Ask the participants to examine the issues related to macro and micro disaster risks and their implications for disaster prevention at the school level.

Ask the working groups to prepare their respective group presentations for sharing in the plenary.

Presentation and discussion (30 minutes)

Ask the working groups to make their group presentations and throw the house open for discussion either after each group presentation or at the end of all the presentations as decided in consultation with the participants. Wrap up the session with closing remarks summarising the key learning from the session.

Technical Note

Session facilitator/s can use this as a background note to structure the content of this session and their sequence and flow as required.

Hazards combined with the vulnerabilities of communities at risk result in disasters impacting the lives, livelihoods and well-being of people. People include a diverse group of women, men and children on the one hand and sick, old and challenged on the other. Vulnerabilities of these different groups of people vary from each other in their nature in terms of their distinct capacities and constraints. An informed understanding of different kinds of vulnerabilities and different sources of risk along with an assessment of the existing capacities and constraints is the key to an effective disaster prevention strategy.

In fact, the term 'disaster prevention' is a bit of a misnomer, as disasters are almost inevitable in certain cases. However, with appropriate mitigation measures and preparedness initiatives, the impact of disasters on people living with risk can be considerably reduced.

Schools can be the institutional locations for spreading awareness about the need to be prepared to minimise the impact of disasters. School safety has to be the starting point in this initiative. School safety includes both the structural safety and safety of children, which are intimately linked.

A sound school safety plan is a major instrument of disaster prevention at the school level with significant implications for disaster prevention at the community level as well. For instance, schools are often used as temporary shelters for disaster affected women, men and children. Hence, safety of school structures and their basic facilities such as water points and toilets are critical for effective post disaster response.

In order to make sure that teacher, students and their parents understand the sources of risk at the school and community level, their active involvement in school based disaster management plan including disaster prevention plan is of critical importance. Their involvement has to be for the purpose of risk assessment, resource mapping, formation of disaster task teams, and allocations of roles and responsibilities among teachers, other school staff, students and their parents.

Effective mitigation measures and preparedness initiatives together constitute disaster prevention. This has to be appreciated and addressed during the initial brainstorming, interactive lecture presentation, group work and presentation and the summing up of key learning from the session, particularly in terms of their implications for action at the school level.

- Schools can be the institutional locations for spreading awareness about the need to be prepared to minimise the impact of disasters.
- School safety includes both the structural safety and safety of children, which are intimately linked.
- A sound school safety plan is a major instrument of disaster prevention at the school level with significant implications for disaster prevention at the community level as well.

Session 3.2: Disaster prevention and preparedness: how to get most out of the formal curriculum?

Duration: 90 minutes (1.5 hours)

Objective: At the end of the session the participants will be able to explain the ways in which the formal curriculum for disaster prevention and preparedness could be used for imparting learning to the students in a manner that results in effective learning about disaster prevention and preparedness.

Methods:

- Interactive lecture presentation
- Group work
- Presentation and discussion

Materials needed:

Flip charts, markers, hand outs

Handouts:

Handout 7: Appropriate Learning Modalities for Disaster Risk Reduction Education

Session Plan with Facilitator Notes

Starting the Session: (30 minutes)

Begin by asking the participants what they understand by formal curriculum and what do they know about their design and delivery from their own personal experience as teachers. Ask them to brainstorm on the good and bad practices related to the design and delivery of formal curriculum related to disaster prevention and preparedness. This will offer an entry point for the facilitator to position her own presentation on the subject.

The facilitator should make a brief presentation of about 10 minutes at this point using the power point or flip charts. The presentation should highlight the need for innovative and creative ways of delivering the formal curriculum for ensuring effective learning and action at the level of school children involved. This will set the tone for working out innovative and creative ways of delivering the formal curriculum in the group work to follow.

Group work on Delivery of Formal Curriculum (30 minutes)

Form 4-5 working groups of participants and ask them to share their experiences or/and brainstorm on innovative and creative ways of delivering the formal curriculum on disaster prevention and preparedness in schools within their groups. Ask them to make a free list of all the ideas shared and prepare it in the form of a group presentation.

Presentation and discussion (30 minutes)

Ask the working groups to make their group presentations and allow open house discussion either at the end of each presentation or at the end of all the presentations as decided in consultation with the participants. Wrap up the session with closing remarks summarising the key learning from the session, particularly in terms of possible strategies and action.

Technical Note

Facilitator/s can use the ideas presented in this technical note to structure the content of their presentation and decide on its delivery strategy. They are free to make additions and deletions as required to respond to the learning needs of the participants and their own presentation style and preferences. Ideas drawn from the available literature are as follows.

Disaster risk reduction education (DRRE) is about building students' understanding of the causes, nature and effects of hazards while also fostering a range of competencies and skills to enable them to contribute proactively to the prevention and mitigation of disaster. Knowledge and skills in turn need to be informed by a framework of attitudes, dispositions and values that propel them to act pro-actively, responsibly and responsively when their families and communities are threatened.

A pedagogy that brings knowledge to life, practices, skills, challenges, and attitudes and scrutinizes values is a pedagogy that is active, interactive, experiential and participatory. Knowledge can be learnt from books but if it is to be internalized it needs to be drawn upon and tested within real life situations. Skills need to be practised if they are to be honed (one would not trust the driver who had learned to drive from a book). Attitudes and values are optimally challenged, tested and rethought through dialog and debate.

Such considerations lie behind the emphasis on interactive and experiential learning approaches. It is at root a medium and message question. If the message of disaster risk reduction education is that students should be made ready to actively engage in preempting and facing potential disaster, then the medium through which they learn should be one of active engagement. The curriculum's themes and topics are by no means the whole message received by the students; they are complemented (or detracted from) by the hidden curriculum of the learning process.

The medium is also the message. A curriculum that calls students to action while they listen in a passive and sedentary manner will be received as incongruent. On the other hand, a curriculum that calls students to action by having them actively participate in learning is of a potentially catalytic and enabling impact.

Examples of engagement with disaster risk reduction curriculum using the following (overlapping) learning modalities are given below:

- Interactive Learning: brainstorming (i.e., spontaneously offering ideas on a given topic, all ideas being accepted, prior to the categorization, organization and evaluation of the ideas); discussions in pairs, small groups and with the whole group; interactive multi-media presentations (by students, teacher, DRR-related visiting speakers)
- Affective learning: sharing feelings about threats and disasters; empathetic exercises based upon those caught up in disasters
- Inquiry Learning: team case study research and analysis; Internet enquiries; project work
- Surrogate Experiential Learning: filmmaking, board games, role plays, drama (sketches, mime, puppetry), simulation gaming; school assemblies on disaster topics Field Experiential Learning: field trips to disaster support services; hazard mapping and vulnerability assessment in schools and in communities; community hazard transects; reviewing emergency plans; interviewing local community members on hazards and hazard/disaster memories

 Action Learning: student community partnerships to raise hazard awareness, develop risk maps and risk reduction plans; poster campaigns; street theatre; risk reduction campaigns (e.g., tree planting)

Any mechanism developed for delivery of knowledge and skill is incomplete without methods and ways to assess the effectiveness of that knowledge and also to highlight what is and what is not being learned and therefore enable programmatic and pedagogical adjustments in a timely fashion. Ways to integrate assessment into the flow of the learning process should, in particular, be explored as a way forward. A suggestive list of innovative ways of assessment is given below:

Assessment Mode

- Written tests (including a computer-based exam and
- multiple choice questions)
- Written essays
- Self/peer assessment
- Oral questioning
- Simulation
- Observations
- Artefacts (e.g., drawing)
- Questionnaires
- Oral/written comments
- Homework
- Demonstration, miming, singing, storytelling

- Disaster risk reduction education (DRRE) is about building students' understanding of the causes, nature and effects of hazards while also fostering a range of competencies and skills to enable them to contribute proactively to the prevention and mitigation of disaster.
- Curriculum that calls students to action by having them actively participate in learning is of a potentially catalytic and enabling impact.
- Any mechanism developed for delivery of knowledge and skill is incomplete without methods and ways to assess the effectiveness

Session 3.3: Co-curricular/extra-curricular activities for improved disaster prevention and preparedness

Duration: 90 minutes (1.5 hours)

Objective: At the end of the session the participants will be able to explain the ways in which co-curricular/extra-curricular activities at the school level can be used effectively to promote improved disaster prevention and preparedness.

Methods:

- Brainstorming
- Group work
- Presentation and discussion

Materials needed:

Flip charts, markers, hand outs

Handouts:

Handout 8: Good Practices: Disaster Prevention and Preparedness through Extra-Curricular Education

Session Plan with Facilitator Notes

Brainstorming: (30 minutes)

Explain the purpose and process of the session. Do tell that brainstorming aims at generating ideas that could be potentially used as effective tools for designing co-curricular and extra-curricular activities at the school level to promote improved disaster prevention and preparedness.

Make a free list of points made by the participants. After all the responses from the participants are written out on the white board or a flip chart, ask the participants to group them into some broad categories to identify and analyse the emerging practices and their patterns

This is expected to set the tone for examining the full potential of co-curricular and extracurricular activities at the school level to promote a robust disaster prevention and preparedness regime.

Group work on 'role of co-curricular/extra-curricular activities in promoting disaster prevention and preparedness (30 minutes)

Form 4-5 working groups of participants and ask them to work in their respective groups to identify concrete action points that could be initiated at the level of teachers themselves without any extraordinary demand for time and resources from the school authorities and administrators on their part.

It is envisaged that this group work will generate a number of practical ideas and suggestions that could be replicated across schools in different states and districts.

Presentation and discussion (30 minutes)

Ask the working groups to make their group presentations. Wrap up the session with a closing discussion summarising the key learning from the session.

Technical Note

Facilitator/s can use the ideas presented in this technical note to structure the content of their presentation and decide on its delivery strategy. They are free to make additions and deletions as required to respond to the learning needs of the participants and their own presentation style and preferences. Ideas drawn from the available literature is as follows.

Co-curricular education can take many forms, and in most cases can offer a low cost and quickly mounted introduction to disaster prevention. It often provides the opportunity to introduce and to reinforce important and consistent lessons. The most obvious of these are disaster drills of several kinds depending on the hazards faced. The skills to respond to drills are taught ahead of time during school assembly and in the classroom. Theses drills, conducted throughout the school year, ideally take place at different times of the school day, and without warning, allowing practice, reflection and improvement.

An annual School Safety Day may be observed on International Day for Disaster Reduction (13th October) or in remembrance of a major national disaster such as Bhuj earthquake on 26th January 2001 and Aila Cyclone in Sunderbans on 25th May, 2009. These can become an important event for the whole school community and create space for a wide range of awareness creation activities. Assemblies offer the opportunity to reach all children through announcements, short didactic sessions, theatrical skits, oral history, story-telling, puppetry, magic, videos, learning rhymes or songs, providing take home material, announcing competitions, playing games, practicing drills, and hosting guest speakers.

Guest speakers can include survivors of disasters who can share their live experiences and the lessons that could be drawn from them. Other speakers could include members of the civil protection staff, fire department educators, and Red Cross/Red Crescent Society representatives, local non-government programme staff or volunteers. News coverage of disasters in other places, and support campaigns can be opportunities to engage in discussion and proactive measures at school.

After-school activities offer the opportunity to engage smaller groups of children in skill-building and voluntary service activities through "safety clubs", scouting badges, and similar ongoing efforts. After school programmes provide an opportunity to develop awareness materials and displays, plan games and engage in performances and art projects to communicate with others. Voluntary drawing and writing competitions engage many children. Small-scale models including, for example, shake table demonstrations are also powerful hands-on tools. Documentary videos, storybooks, comic books, activity books, toys and games will engage others. Knowledge Competitions generate student, community and mass media interest.

Parent meetings, parent-teacher association or school welfare committee meetings, wider community fairs and "open house" can be important opportunities for co-curricular education. Displays of student-created risk and capacity maps, student art work and essays generate interest. Community members may also engage as volunteers helping to secure furnishings against earthquake shaking or dig channels to direct rainwater away from building. Cultural arts, whether music, song, poetry, dance, puppetry, magic, street theatre, improvisation, pantomime, or artwork are appealing, engaging and creative ways to introduce this important subject area.

Sports Day activities are an excellent time for drills and demonstrations, as well as for games that introduce cooperative response skills (eg. water bucket brigade competition, fire

extinguisher target practice, injury transport relays, and knowledge games). Dissemination of written materials, use of posters and signage, displays and artwork are more subtle but important ways to share disaster risk reduction messages. Awards and commendations and media coverage can acknowledge these activities and help to generate enthusiasm for reproducing them.

- Disaster risk reduction education (DRRE) is about building students' understanding of the causes, nature and effects of hazards while also fostering a range of competencies and skills to enable them to contribute proactively to the prevention and mitigation of disaster.
- Curriculum that calls students to action by having them actively participate in learning is of a
 potentially catalytic and enabling impact.
- Any mechanism developed for delivery of knowledge and skill is incomplete without methods and ways to assess the effectiveness

LEARNING UNIT 4: SCHOOL-BASED DISASTER PREPAREDNESS: VALUES, PRINCIPLES AND PARAMETERS

Objectives: To help the participants examine the core values, principles and parameters for school based disaster preparedness in terms of their implications for application in real time disaster preparedness planning and implementation.

Sessions:

- School based disaster preparedness: an overview
- Parameters, indicators, and verification processes and methods for school based disaster preparedness
- Development of School-Based Disaster Preparedness: Values and Principles

Estimated time: 270 minutes (4.5 hours)

Expected Outcome:

Participants would have acquired an informed understanding of school based disaster preparedness, particularly from a planning perspective and in terms of different parameters, indicators and verification and processes on the one hand and values and principles for development of school based disaster preparedness plans on the other.

Session 4.1: School based disaster preparedness: an overview

Duration: 90 minutes (1.5 hours)

Objective: At the end of the session, the participants will be able to spell out the basic principles and steps for school based disaster preparedness.

Methods:

- Interactive lecture presentation
- Group work
- Presentation and discussion

Materials needed:

Flip charts, markers

Session Plan with Facilitator Notes

Interactive lecture presentation: (30 minutes)

Begin by asking the participants what they understand by school based disaster preparedness in the light of their own experience as teachers in schools. This has to be a quick round of sharing aimed at mapping out the current levels of experience and understanding of the participants regarding school based disaster preparedness.

Key ideas shared by the participants during this initial round will offer the entry point for the session facilitator to make her presentation on the available frameworks and methodologies for school based disaster preparedness.

Taking up all the ideas shared by the participants make a brief presentation of about 10 minutes on the broad scope of DRR activities.

Group work on school based disaster preparedness (30 minutes)

Form 4-5 working groups of participants to work on appropriate methodologies for preparing school based disaster preparedness plans. Ask the participants to examine the issues related to macro and micro disaster risks and their implications for school safety for the purpose of including them into plans to be prepared.

Ask the participants to discuss within their respective groups and come up with the group's analysis of the key learning from the group discussion and prepare their group presentations.

Presentation and discussion (30 minutes)

Ask the working groups to make their group presentations. Wrap up the session with closing remarks summarising the key learning from the session.

Technical Note

Facilitator/s can use the ideas presented in this technical note to structure the content of their presentation and decide on its delivery strategy. They are free to make additions and deletions as required to respond to the learning needs of the participants and their own presentation style and preferences. Ideas drawn from the available literature are as follows.

School disaster management planning process entails an assessment and action planning to ensure the following:

- Protect students and the staff from physical harm
- Minimize disruption of school education and ensure the continuity of education for all children
- Develop and maintain a culture of safety

School safety and educational continuity require a dynamic, continuous process initiated by management and involving workers, students, parents, and the local community. School disaster management involves the familiar cycle of steps found in all project management: assess hazards, vulnerabilities, capacities and resources; plan and implement for physical risk reduction, maintenance of safe facilities, standard operating procedures and training for disaster response; test mitigation and preparedness plans and skills regularly, with realistic simulation drills; and revise your plan based on your experience. School disaster management mirrors individual and family disaster prevention, and wider community disaster prevention efforts. The full scope of activities is included as follows:

- **Assessment and planning** establishing or empowering your school disaster management committee; assessing your risks, hazards, vulnerabilities and capacities; making contingency plans for educational continuity; communicating your plan.
- **Physical and environmental protection** structural safety maintenance, non-structural mitigation; local infrastructure and environmental mitigation; fire safety.
- **Response capacity development** standard operating procedures; response skills and organization; response provisions.
- **Practicing, monitoring, and improving** holding simulation drills to practice, reflect upon and update your plan; monitoring indicators for school disaster management.

A School Disaster Management Plan (SDMP) is always a work-in-progress, and never a finished document. Successful plans emphasize planning as a process, rather than a neatly bound document. In the course of the steps below, you will generate and re-generate live documentation that will constitute your "plan." What is of crucial importance is having everyone participate in the planning, and learning and continuing to develop the plan through practice.

- School safety and educational continuity require a dynamic, continuous process initiated by management and involving workers, students, parents, and the local community.
- School disaster management mirrors individual and family disaster prevention, and wider community disaster prevention efforts.
- A School Disaster Management Plan (SDMP) is always a work-in-progress, and never a finished document.
- Successful plans emphasize planning as a process, rather than a neatly bound document.

Everyone participation in the planning, and learning and continuing to develop the plan through practice is of crucial importance.

Session 4.2: Parameters for School Based Disaster Preparedness

Duration: 90 minutes (1.5 hours)

Objective: At the end of the session, the participants will be able to determine appropriate parameters for the preparation and implementation of school disaster preparedness plans.

Methods:

- Interactive lecture presentation
- Group work
- Presentation and discussion

Materials needed:

Flip charts, markers, hand outs

Handouts:

Handout 9: Example of School Disaster Management Checklist

Session Plan with Facilitator Notes

Interactive lecture presentation: (30 minutes)

Begin by opening a discussion on the parameters for school based disaster preparedness. Ask the participants to share their ideas in the light of their own experience as teachers in schools. This has to be a quick round of sharing aimed at mapping out the current levels of experience and understanding of the participants regarding parameters, indicators and verification processes and methods regarding school based disaster preparedness.

Key ideas shared by the participants during this initial round will offer the entry point for the session facilitator to make her presentation on parameters for school based disaster preparedness.

This presentation could be made using the power point or flip charts as decided by the facilitator and must highlight the need for developing appropriate parameters, indicators and verification processes and methods for ensuring local and context specific school based disaster preparedness plans and strategies.

Group work on parameters, indicators and verification processes and methods parameters, indicators and verification processes and methods for school based disaster preparedness (30 minutes)

Form 4-5 working groups of participants to work on parameters, indicators and verification processes and methods for preparing school based disaster preparedness plans. Ask the participants to determine parameters, indicators and verification processes and methods that are best suited to address the identified risks and vulnerabilities in order to track the efficacy of the school based disaster management plans and strategies.

Ask the participants to discuss within their respective groups and come up with the group's analysis of the key learning from the group discussion and prepare their group presentations.

Presentation and discussion (30 minutes)

Ask the working groups to make their group presentations. Wrap up the session with closing remarks summarising the key learning from the session.

Technical Note

Facilitator/s can use the ideas presented in this technical note to structure the content of their presentation and decide on its delivery strategy. They are free to make additions and deletions as required to respond to the learning needs of the participants and their own presentation style and preferences. Ideas drawn from the available literature are as follows.

To measure the efforts made by schools in developing school-based disaster preparedness plans, parameters, indicators and their verification process and methods need to be determined. Parameter is a minimum standard benchmark that determines the minimum level that is needed to be achieved. It is usually qualitative in nature, but may involve quantitative measures as well. Indicator is a 'marker' which shows whether agreed standards have been achieved in reality.

It provides means to measure and communicate process, impact or outcome of a program, a process as well as the method used. Indicator can be qualitative or quantitative in nature. Verification is essentially a process involving a set of methods to generate evidence of the results achieved against set parameters and indicators. Broad parameter of school preparedness could belong to the following four factors:

1. Attitude and Action

As perception, knowledge and skills constitute the basis of one's actions, this could be one broad area which could help determine one of the parameters of school based disaster preparedness planning. School disaster management planning expects to build the capacity of all elements of school communities, both individually and collectively to face disasters promptly and efficiently. Students, teachers, other members of the school staff constitute the main target audience.

2. School Policy

School policy is a formally binding decision made by school management on the matters needed to support the implementation of DRR at the school level. In practice, the school's policy shall be the foundation, guideline, and direction for the implementation of activities relevant to DRR in school.

3. Preparedness and Planning

Preparedness and planning aim at ensuring rapid and efficient action in the event of a disaster, taking into consideration the local disaster management system and adjusting it according to the local conditions. It will require having certain documents in place such as Standard Operation Procedures (SOP), contingency plans and other supporting preparedness documents, including establishment of accurate early warning system that considers local context.

4. Resource Mobilisation

Efficient and effective resource mobilisation is the key to a sound disaster preparedness plan at the school level. The school ought to prepare a comprehensive resource inventory including: human resource, basic facilities such as water and sanitation, infrastructure such as building and financial support for disaster management to ensure effective school disaster preparedness. Resource mobilisation is based both on the capacity of the school and other stakeholders such as parents of the children in schools.

The four parameters as stated above can be used as means to measure disaster preparedness in school. It is important to keep in mind that these are all inter-linked and cannot be addressed in isolation of each other. Moreover, school preparedness should also be integrated with corresponding initiatives of local government, communities around the school and other relevant stakeholders such as PRIs.

- Parameter is a minimum standard benchmark that determines the minimum level that is needed to be achieved.
- Indicator is a 'marker' which shows whether agreed standards have been achieved in reality.
- Indicator can be qualitative or quantitative in nature.
- Verification is essentially a process involving a set of methods to generate evidence of the results achieved against set parameters and indicators.

Session 4.3: Development of School-Based Disaster Preparedness: Values and Principles

Duration: 90 minutes (1.5 hours)

Objective: At the end of the session, the participants will be able to identify the key values and principles for development of school based disaster preparedness.

Methods:

- Interactive lecture presentation
- Group work on case study
- Presentation and discussion

Materials needed:

Flip charts, markers, hand outs

Handouts:

Handout 10: Milestones for School Disaster Management Plan

Session Plan with Facilitator Notes

Interactive lecture presentation: (30 minutes)

Begin by asking the participants about their understanding of the values and principles that need to inform the development of school based disaster management plans in the light of their own experience as teachers in schools. This has to be a quick round of sharing aimed at mapping out the current values and principles in practice.

Key ideas shared by the participants during this initial round will offer the entry point for the session facilitator to make her presentation on the values and principles of school based disaster management preparedness.

This presentation could be made using the power point or flip charts as decided by the facilitator and must underline the need for making school based disaster preparedness strategies robust by basing them on key values and principles.

Group work on values and principles of school based disaster preparedness (30 minutes)

Form 4-5 working groups of participants to identify values and principles for development of school based disaster preparedness plans. Ask the participants to examine the current practices related to school based disaster preparedness and their underlying values and principles.

Ask the participants to discuss within their respective groups and come up with the group's analysis of the key learning from the group discussion and prepare their group presentations.

Presentation and discussion (30 minutes)

Ask the working groups to make their group presentations. Wrap up the session with closing remarks summarising the key learning from the session.

Technical Notes

Facilitator/s can use the ideas presented in this technical note to structure the content of their presentation and decide on its delivery strategy. They are free to make additions and deletions as required to respond to the learning needs of the participants and their own presentation style and preferences. Ideas drawn from the available literature are as follows.

In developing school-based disaster preparedness, it is essential to promote the values and principles to ensure the quality of DRR education practices in general and school based disaster preparedness in particular. Values will serve as references to the outcome of DRR education practice, while principles will become indicators of how DRR Education should be planned and practiced. These values and principles are also expected to be the guideline for practitioners (community of practices) as well as stakeholders in developing school-based disaster preparedness.

Values

- 1. **Change of Culture:** To create a new culture of safety, and a shift in perspective from safety to resilience.
- 2. **Empowerment-oriented:** To enable and empower all the stakeholders at the school level including students, teachers, other members of the school staff, parents and PRIs for planning and implementing DRR initiatives at the school level.
- 3. **Independence:** To optimize the utilization of school and community resources and reduce dependency on external resources.
- 4. **Right-based approach:** To pay attention to basic human rights issues.
- 5. **Sustainability:** To ensure sustainability and institutionalization.
- 6. **Local Wisdom:** To explore and empower local wisdom for the DRR education practices.
- 7. **Partnership:** To involve various stakeholders from different components, sectors, society group, government institution as well as non-government organization to achieve common objectives based on collaboration principle and proper synergy.
- 8. **Inclusivity:** To pay attention to the needs of student including those who have special needs.

Principles

- Interdisciplinary and comprehensive: Lessons for DRR can be included and
 integrated in existing curricula, it is not necessary to be given as separate learning
 activity or subject. 'Comprehensive' means that the learning process of all subjects
 should be implemented in an integration to achieve the stipulated competency
 standard.
- 2. **Intercultural communication (Intercultural Approach):** DRR approach should be based on interaction and communication among a number of people with different cultural backgrounds (ethnicity, social-economy, etc.).
- 3. **Value-oriented:** DRR should be based on common values that inform the planning process. However, the values must be open to critical review and revision in response to emerging needs and perspectives.
- 4. **Action-oriented:** Action has to be the key: DRR lessons learned to be applied by the participants in their daily lives, both personally as well as professionally.
- 5. **Critical thinking in Problem-Solving:** Development of critical thinking and problem solving by building self-confidence in addressing dilemma and challenges to build a culture of safety and resilience to disasters.

- 6. **Multi-methodology:** There is no 'one size fits all' method to effective DRR. Hence, all DRR planning should be open to adopting multiple methodologies as required in view of local context and conditions. A multi- methodology approach should enable the teachers and students to work together to gain knowledge and play a role to create their own DRR education environment,
- 7. **Relevant to the local condition**: All planned activities should be relevant to the local conditions.
- 8. **Participatory:** Participation of all the stakeholders including students, teachers, other members of the staff, parents and PRIs must be ensured so as to create ownership of the plans prepared. Participatory decision-making is the key to effective implementation of the plans prepared.
- 9. **Prudence.** To avoid the vulnerability and dependence on other party.
- 10. **Accountability:** All activities and the outputs should be accountable to the members in accordance to the prevailing regulation. It also refers to the obligation to deliver accountability to parties holding the right or authority to demand it.
- 11. **Enforcement of School Function**. The function of school in providing education service as well as learning and teaching activity should continue to be the ultimate priority during emergency.

- It is essential to promote the values and principles to ensure the quality of DRR education practices in general and school based disaster preparedness in particular.
- Values will serve as references to the outcome of DRR education practice, while principles will become indicators of how DRR Education should be planned and practiced.

LEARNING UNIT 5: SYSTEMATIC APPROACH TO TRAINING (SAT)

Objective (s)

The objective of this Learning Unit is to equip the participants with basic knowledge and skills about the key issues to be addressed in the course of designing a training intervention/programme.

This Learning Unit has four sessions:

- Session 1: Systematic Approach to Training (SAT) and Assessing Training Needs
- Session 2: Defining Training Aim and Objectives
- Session 3: Deciding the content, methodology and resource persons
- Session 4: Deciding the monitoring and evaluation indicators and processes

Estimated time: 6 hours

Expected Outcome:

Participants are able to effectively adapt the base sub module of this training module for training resource persons or organising direct training programmes.

Session 5.1: Systematic Approach to Training (SAT) and Assessing Training Needs

Duration: 90 minutes (1.5 minutes)

Objectives:

At the end of the session participants will be able to:

- Explain the systematic approach to training (SAT)
- Articulate the relevance of training needs assessment
- Undertake training needs assessment exercise

Methods:

- Brainstorming
- Group work
- Presentation and discussion in the plenary

Materials needed:

Flip charts, markers, hand outs

Handouts:

Handout 6: Systematic Approach to training

Handout 7: Capacity Needs and Training Needs Assessment

Session Plan and Facilitator Notes

Starting the Session (5 minutes)

Explain the purpose and process of the session and its intended learning outcomes including a brief overview of the overall flow of the session.

Brainstorming (40 minutes)

Initiate a quick brainstorming on capacity needs in general and training needs in particular. Ask them to give some examples of both capacity and training needs.

Make a free list of all the examples shared by the participants by recording them on a flip chart with the help of volunteers from among the participants. Get all the points grouped in three categories of knowledge, skills and attitude.

Conclude the brainstorming by highlighting the notion of gap in current and desired levels of knowledge, skills and attitude to undertake a task and achieve a pre-specified goal. It is important to underline that training gaps and needs are a sub-set of larger capacity gaps that a target group may be having.

Group work (40 minutes)

Distribute cards to all the participants and request them to write about their experience and learning related to assessing training needs, if any, or their ideas about training needs assessment as a trainer. Ask them to write it out in bullet points than sentences. Give 10 minutes for this individual exercise.

After the card exercise is done by the participants, ask them to share it in the plenary. Wrap this up in 10 minutes by inviting those who want to share. Ask each of the willing ones to share ideas which are not shared by others. If more people want to share than can be accommodated in 10 minutes, ask them to paste all the cards on the wall for everyone to see and discuss. Cards will have to be placed in knowledge, skills and attitude (KSA) categories as would have emerged during initial few sharings.

Summing up (5 minutes)

Summarise the key learning points from the session.

Technical Notes

Training needs are a sub-set of larger capacity needs. Training needs are essentially learning needs that can be addressed through a training intervention. Training works on knowledge, skills and attitude of people that form a part of the human capacity. Other dimensions of capacity include infrastructure, policy, institutions, strategy, structure and culture, which often call for non-training solutions to capacity gaps related to these dimensions.

It is universally agreed that an effective training intervention has to be based on identified training needs. It is also recognised that participatory assessment involving active participation of those whose needs are being identified is crucial to a fair assessment of the training needs. As training is a time and cost intensive activity, identified needs have to be prioritised in order to make sure that training targets only most important and relevant needs so as to achieve maximum focus and impact.

Moreover, training needs have to be identified and articulated in view of the assigned roles and responsibilities of the functionaries whose needs are being identified. It is quite likely that roles of some functionaries are not clearly defined and communicated and what they do in their work situation is largely determined by established norms, conventions and practices. In a situation like this these norms and practices have to be mapped out in order to identify the capacity gap areas in general and training needs in particular.

As training needs relate to knowledge, skills and attitude, identified training needs have to be grouped in these three categories. This helps in firming up the overall orientation of the training program. While there are usually inputs related to all the three categories of knowledge, skills and attitude in a training program, one of them or a couple of them could constitute the focus of the training to be imparted.

Training needs often help determine the training objectives, but the reverse could also be true in certain cases. It is possible that training objectives are defined in advance and needs assessment exercise is carried out in view of certain pre-agreed objectives.

Training needs could be prioritised in the following manner:

Table 4: Format for Prioritisation of Training Needs

Capacity Need	Training Need	Knowledge	Skill	Attitude
Example: Lack of informed participatory planning	How to facilitate participatory planning	Basic principles and processes of participatory planning	How to use available methods and tools to engage in participatory planning	Making the planning process participatory and community led

- Training needs are a sub-set of larger capacity needs.
- Effective training intervention has to be based on identified training needs.
- Training needs have to be identified and articulated in view of the assigned roles and responsibilities of the functionaries whose needs are being identified.
- Training needs often help determine the training objectives

Session 5.2: Defining Training Aim and Objectives

Duration: 90 minutes

Objectives: At the end of the session participants will be able to:

- Articulate the role and relevance of defining training aim and objectives.
- Define training aim and objectives of the adapted base sub module for resource persons and direct training programmes.

Methods:

- Individual exercise
- Group work
- Interactive Lecture Presentation and discussion in the plenary
- Summing up

Materials needed:

Flip charts, markers, hand outs

Handouts:

Handout 8: Training/Behavioural Objectives: Verbs to Describe Complexity Of Behaviour

Session Plan with Facilitator Notes

Starting the Session (5 minutes)

Explain the purpose and process of the session and its intended learning outcomes.

Individual exercise (20 minutes)

Distribute flash cards to all the participants and ask them to write out the aim and objectives of the base sub module that they attended over last four days. Ask them to read it out to the entire group and post the written cards on the space provided for the purpose.

Group work (30 minutes)

Ask the working groups of the needs assessment exercise to define the training aim and objectives in the light of identified training needs in the previous sessions. Underline that aim and objectives have to be SMART meaning: specific, measurable, attainable, realistic and time bound

Share the design of the base sub module of this training module and ask them to critically examine the aim and objectives of the base sub module that they have received over last 4 days in the light of their own immediate experience as a participant. Ask them to share their ideas and insights in the plenary.

Presentation and discussion in the plenary (30 minutes)

Ask all the working groups to make their respective presentations in the plenary. Follow it up with an open house discussion on the subject.

Summarise the key learning (5 minutes)

Defining training aim and objectives is the key to a sound training design and its subsequent delivery strategy. Aim refers to the overall goal that a training intervention seeks to achieve. Objectives are more specific outputs and outcomes that are sought to be achieved through a training exercise. Clarity in objectives helps in doing a smart and sharp training design. Objectives have to be SMART; meaning specific, measurable, attainable, realistic and time bound.

Training needs identified in terms of specific gaps in knowledge, skills and attitude form the basis for different types of training objectives. Objectives have to be written in terms of expected action outcomes that a training intervention is intended to lead to. Thus, training objectives are often written in terms of what the trained person would be able to do at the end of the training program.

In the process of finalising the aim and objectives of a training programme, the following three types of objectives have to defined:

Training objectives (TOs): TOs refer to the immediate outcomes of a training programme that can be ascertained at the end of the programme evaluation using structured or semi-structured questionnaire and feedback forms.

Performance objectives (POs): POs refer to the visible change in the work behaviour of the trained personnel in her/his real work environment, following training. This can be found out through qualitative investigation methods such as interviews and discussions after some lapse of time post training, preferably during a period of 6-12 months after training.

Enabling objectives (EOs): EOs refer to the specific expected outcomes of different sessions across different modules, learning units or events. These can be verified through formal or informal feedback sessions at the end of each session. Feedback forms could also be used to assess whether enabling objectives of a particular session are achieved.

It is important to understand that defining the different kinds of objectives at the very outset can help the trainers and facilitators maintain the focus and orientation of the training programme in the right direction. This is also of great help in selecting the right resource persons for different sessions and in choosing the appropriate training method for different topics and themes.

Key Learning Points

- Defining training aim and objectives is the key to a sound training design and its subsequent delivery strategy.
- Objectives have to be written in terms of expected action outcomes that a training intervention is intended to lead to.
- Defining the different kinds of objectives at the very outset can help the trainers and facilitators maintain the focus and orientation of the training programme

Session 5.3: Deciding the content, methodology and resource persons

Duration: 90 minutes (1.5 hours)

Objectives: At the end of the session participants will be able to

• Decide the content, methodology and resource persons for the training programs

`Methods:

- Group work
- Presentation and discussion in the plenary
- Summing up

Materials needed:

Flip charts, markers,

Session Plan with Facilitation Notes

Starting the Session (5 minutes)

Explain the purpose and process of the session and its intended learning outcomes.

Group work (40 minutes)

Ask the working groups to re-assemble to decide on the content, methodology and resource persons. Based on the training needs identified and the aim and objectives of the training programme agreed, the working groups will be required to list out the topics and themes that are proposed to be covered during the training programme.

Methods have to be decided on the basis of the principles of adult learning as applied to specific themes and contexts. Methods such as brainstorming, experience sharing, group work, presentation and discussion, case studies and good and best practices provide a lot of room for participatory and interactive learning.

Selection of resource persons should be not on the basis of who is available, but on the basis of the experience and expertise required to do justice to the chosen topics and themes in terms of inducing the desired learning.

Presentation and discussion in the plenary (40 minutes)

Ask the working groups to make their respective presentations in the plenary. Follow it up with an open house discussion to sharpen the understanding on the ways to decide on the contents, methods and resource persons.

Summing up (5 minutes)

Summarise the key learning from the session.

Agreed objectives of the training dictate the content and methodology to be adopted to deliver the content. Content is basically the themes and topics related to the chosen subject matter.

As adults learn more from experience, content has to be delivered using methods of experiential learning. This could involve brainstorming, experience sharing, exploratory discussions, case studies, and role plays.

Resource persons need to be selected on the basis of two key criteria: one, their domain knowledge and expertise; two, their training and facilitation skills.

Key Learning Points

- Methodology of the training should be decided on the basis of the principles of adult learning as applied to specific themes and contexts.
- Selection of resource persons should be not on the basis of who is available, but on the basis
 of the experience and expertise required to do justice to the chosen topics and themes in
 terms of inducing the desired learning.

Session 5.4: Deciding the monitoring and evaluation indicators and processes

Duration: 90 minutes

Session Objectives: At the end of the session participants will be able to:

- Articulate the relevance of developing monitoring and evaluation indicators
- Develop monitoring and evaluation indicators on their own.

Methods:

- Interactive Lecture Presentation
- Group work
- Presentation and discussion in the plenary
- Summing up

Materials needed

Flip charts, markers

Session Plan

Starting the Session (5 min)

Explain the purpose and process of the session and its intended learning outcomes.

Interactive Lecture Presentation (25 min)

One way to begin this is to initiate a discussion on the role of monitoring and evaluation indicators in assessing the efficacy of the training interventions designed and delivered.

Indicators, as objectively verifiable measures of change, can tell about the changes taking place as a result of the training imparted. Sharper the indicator, sharper will be the understanding of the changes taking place.

A good indicator is the one that can capture a lot of qualitative information and feedback within a single measurable change. For example, 'the number of participants that have been able to successfully adapt and deliver the base sub module for training resource persons' contains the following qualitative information:

- Capacity of the participants in terms of their knowledge and skills to design and deliver training programme has increased.
- Understanding of the participants on DRR/CCA mainstreaming issues and challenges is of an advanced level.
- Participants are keen to volunteer their time and effort to organise downstream training programmes as proposed and planned

Differences between monitoring and learning indicators have to be highlighted and explained.

Group work (30 min)

Ask the working groups to develop a set of monitoring and learning indicators for the adapted base sub module.

Presentation and discussion in the plenary (25 min)

Ask the working groups to make their respective presentations in the plenary. Follow it up with an open house discussion to sharpen the understanding of the key points involved.

Summing up (5 min)

Summarise the key learning from the session

Monitoring and evaluation are often the weakest links in most of the training interventions. It is generally hard to know the outcomes of a training program other than the ones focussed on some specific skill building involving motor skills such as cooking and driving.

It is important to have a robust monitoring and evaluation system in place in order to track the efficacy of the training intervention being designed and delivered. This helps ensure the effectiveness of the training both in terms of the quality of process and outcomes achieved.

Indicators are objectively verifiable measures of change. These indicators are generally related to processes, inputs, outputs, outcomes, and impact. Monitoring as a concurrent exercise in learning during the life cycle of an intervention is generally about process, input and output indicators. Evaluation which is a periodic (mid-term, end term and post intervention) exercise in learning about an intervention requires outcome and impact indicators.

Indicators have to be SMART meaning: specific, measurable, attainable, realistic and time bound

Identification of these indicators in advance and their use and application to generate the required data has to be built in into the training design and delivery.

Key Learning Points

- Monitoring and evaluation need to be built into training intervention in order to make them more effective.
- Indicators for monitoring and evaluation are objectively verifiable measures of change
- Indicators may relate to processes, inputs, outputs, outcomes and impact.
- Indicators have to be specific, measurable, attainable, realistic and time bound.

LEARNING UNIT 6: LEARNING AND FACILITATION SKILLS

Objectives

The objective of this Learning Unit is to equip the participants with basic learning and facilitation skills that help the trainers conduct training/learning sessions with efficiency and effectiveness.

Sessions

- Art of facilitation I
- Art of facilitation II
- Sharing, Listening and Learning
- Learning to listen and listening to learn

Estimated time: 5 hours

Expected outcome

Participants are able to practice learning and facilitation skills effectively.

Session 6.1: Art of Facilitation I

Duration: 90 minutes (1.5 hours)

Objectives:

- Articulate the importance of understanding self and others for effective facilitation
- Articulate ways to promote trust and sharing between the participants and the facilitator
- Use active listening as a key facilitation strategy

Methods:

- Individual exercise
- Group work
- Presentation and discussion in the plenary
- Summing up

Materials needed

Flip charts, markers, hand outs

Handouts:

Handout 9: Johari Window

Handout 10: Stephen Covey's seven habits of highly effective people

Session Plan with Facilitation Skills

Starting the Session (5 minutes)

Explain the purpose and process of the session and its intended learning outcomes.

Individual exercise (20 minutes)

The individual exercise is designed to trigger experiential learning about the concepts of self, self-image and self-esteem. Distribute cards to participants and ask each participant to write one sentence about herself/himself (that s/he thinks describes her/him the best) on the card provided for the purpose. Invite those willing to share with others in the plenary.

What they share would mostly be about what they think who they are. Idea and description of who they are is their self-image. How they feel about themselves constitutes their self-esteem. High self-esteem means that the person generally feels good about oneself and others. Low self-esteem means that the person generally does not feel so good about oneself and others. Having high self-esteem is a primary pre-condition for being an effective trainer and facilitator. A person with low self-esteem is bound to be a poor facilitator.

After this individual exercise, as a part of the summing up, the facilitator should present the Johari Window to explain the ways to understand oneself and develop a critical awareness about oneself as a person and facilitator.

Group work (30 minutes)

The group work is designed to promote an experiential learning about the ways to work on sharpening one's facilitation skills. Ask people to engage in a group discussion within their respective groups about the skills and attitude of an effective trainer and facilitator for presentations in the plenary.

Presentations and Discussion in the plenary (30 minutes)

Ask the working groups to make their respective presentations in the plenary. Follow it up with an open house discussion.

Summing up (5 minutes)

Summarise the key learning from the session and present the key points from Stephen Covey's seven habits of highly effective people, which can help enhance the facilitation orientation and skills of the participants.

Having an intuitive and fair understanding of self and others is the key to the art of facilitation. Understanding self involves an awareness of one's own strengths and weaknesses, hopes and fears, and values, assumptions, needs and interests (VANI). Understanding others is being aware of their values, attitudes, needs and expectations (VANE).

Johari Window and Seven Habits of Highly Effective People will constitute the core of this session and will aim at creating an enhanced awareness of one's self and others among the participants.

An improved understanding of the self and others forms the basis for a relationship of trust and sharing between the facilitator and the learner.

Listening is the basic skill required for understanding self and others on the one hand and for promoting trust and sharing on the other. Listening has to be active and empathetic and not passive and sympathetic. Active listening means listening with an active interest in learning and empathetic listening means listening from the point of view of the speaker and not the listener's.

Key Learning Points

- Knowing self and others is the key to being an effective facilitator.
- An improved understanding of the self and others forms the basis for a relationship of trust and sharing between the f;acilitator and the learner.
- Listening is the basic skill required for understanding self and others on the one hand for promoting trust and sharing on the other.
- 'Learning to listen and listening to learn' is the hallmark of an effective facilitator

Session 6.2: Art of Facilitation II

Duration: 90 minutes

Objectives:

- Handle questions
- manage expectations
- manage conflicts
- nurture the eco-system of learning

Methods:

- Interactive Lecture Presentation
- Role Play

Materials needed:

Flip charts, markers

Session Plan

Starting the Session (5 minutes)

Explain the purpose and process of the session and its intended learning outcomes.

Interactive Lecture Presentation (20 minutes)

Begin the presentation with a set of key questions by way of illustration. Illustrative questions should be able to demonstrate how questions are the key to learning. Hence, raising and handling questions is the most critical activity in the process of learning and facilitation of learning.

After the art of asking and answering questions is covered, the facilitator should move on to the knowledge and skills related to managing expectations and conflicts.

The presentation should end with pointers for nurturing the eco-system of learning as a part of the art of facilitation.

Role Play (60 minutes)

This role play aims at promoting experiential learning on the art of handling questions, and managing expectations and conflicts. In order to ensure maximum participation, this could be organised as two or more different role plays.

Divide the group of participants into facilitators, learners, observes. Ask the facilitator group of 2-3 members to plan a session on a theme of their choice. Brief the group of learners to ask difficult questions, express high expectations from the session and voice conflicting opinions and views on the theme chosen. Group observers are briefed about observing the entire process carefully and document it without any bias and with total objectivity and fairness.

At the end of the role play/s, ask the observer group to share their observations in the plenary. Ask the other groups to respond, ask questions and offer clarifications.

Summing up (5 minutes)

Summarise the key learning from the session.

Questions are the key to learning. They are the basic tools of inquiry to generate learning in any field. Hence, it is important to encourage the participants to ask questions and respond to those questions with honesty and understanding. Questions are generally of the following four types:

- Questions for seeking information or/and clarification
- Questions for showing that one knows more than others
- Questions for simply asking questions, in other words for registering one's presence
- Questions for making a serious inquiry and learning

Handling questions in a manner that maximises learning for all is a key facilitation skill. This involves appreciating the true nature and intent of the question being asked to begin with. Questions can be answered immediately or later at the end of the session as decided by the facilitator with or without consultation with the participants as required.

All questions need not be answered by the facilitator. It is a good strategy to ask other participants if they would like to respond to the questions posed by someone from amongst them. Many a time the questions will satisfactorily get answered by someone from among the participants themselves. This not only promotes participation and interactive learning, but provides more opportunity to the facilitator to understand the gaps in learning and address them effectively without being didactic.

Managing expectations is an aspect that is often missed out by the facilitators. Expectations need to be managed in time and well, as unmet expectations can hamper and block learning. Hence, it is important to identify and address expectations of the participant's right at the outset of the training program. Expectations of the participants could be vast and varied and it may not be possible to meet all the expectations given the scope and design of the training program. It is good to tell the participants upfront about what part of their expectations are going to be addressed during the program and how and what part of the expectations are not going to be addressed and why not.

Conflicts of ideas, views and interests are bound to crop up during different training sessions, especially when the participants are coming from a diverse background with diverse needs and interests. Managing conflicts well and in time is crucial to creating a healthy eco-system of learning. Conflicts in themselves are not necessarily unhealthy. They are often opportunities for new and unintended learning, as they help surface varying perceptions, perspectives, ideas, views and opinions on theme/s under discussion. Hence, conflicts can also be seen and approached as opportunities for learning and change.

All the preceding topics related to handling questions and managing expectations and conflicts will logically lead to the closing topic of nurturing the eco-system of learning. Major success of the trainer/facilitator lies in creating a favourable climate for learning for all the participants. This can be achieved only by making everyone feel that they are active participants in and contributors to the process of learning.

Key Learning Points

 Questions are the key to learning. They are the basic tools of inquiry to generate learning in any field. Hence, it is important to encourage the participants to ask questions and respond to those questions with honesty and understanding.

- Handling questions in a manner that maximises learning for all is a key facilitation skill. This involves appreciating the true nature and intent of the question being asked to begin with.
- Managing expectations is an aspect that is often missed out by the facilitators. Expectations need to be managed in time and well, as unmet expectations can hamper and block learning.
- Managing conflicts well and in time is crucial to creating a healthy eco-system of learning.
- Major success of the trainer/facilitator lies in creating a favourable climate for learning for all the participants.

Session 6.3: Sharing, Listening and Learning

Duration: 60 minutes (1 hour)

Objective(s): To create a learning event and environment open to sharing, listening and

learning

Methods:

- Experience sharing
- Group exercise
- Summing up
- Interactive Lecture presentation

Materials needed:

Flip charts, markers

Session Plan with Facilitation Notes

Starting the Session (5 minutes)

Explain the purpose and process of the session and its intended learning outcomes.

Experience sharing (20 minutes)

Ask the working groups to share their experiences as a trainer and facilitator in the past including what they learnt from those experiences and how they applied that learning in their subsequent training and facilitation work.

Draw the major learning from these experiences and highlight the amount and quality of learning that have taken place as a result of this sharing.

Discuss the role of listening in this sharing and learning and highlight the role of active listening as the most significant facilitation skill.

Group exercise (20 minutes)

Ask for 5 volunteers from among the participants. Ask 4 of the 5 volunteers to go out of the training hall and wait for their names to be called. After they have left the hall, tell a message of 3-4 sentences to the only remaining volunteer in the training hall.

This could be as follows: 'Tomorrow there is a solar eclipse. All of you are requested to assemble in the parade ground to witness this rare phenomenon. In case it rains, we will meet in the auditorium where an eminent scientist will give us a lecture presentation on the subject.'

Invite one of the 4 volunteers into the hall and ask the first one to tell him the message that you have told her/him. In the next round, the second volunteer will pass on the received message to the third volunteer. This will go on till the 5th volunteer has shared the received message with the entire group.

This group exercise invariably results in the last message delivered to be very different from the original message shared. This results in experiential learning about how we all listen selectively and establishes the need to work on learning so as to engage in active and maximum listening.

Interactive Lecture Presentation (15 minutes)

Present the role of sharing in learning and the role of active listening in learning as a key feature of the art of facilitation. Summarise the key learning from the session

Training professionals entails a situation of adult learning. Adults learn through experience and their learning is determined by the nature of their values, attitudes, needs and interests (VANI). Experience sharing offers an opportunity for the participants to look at and examine their experience with the intention to learn from it. A structured and well facilitated experience sharing session can result in a lot of significant and practical learning.

Listening without judging and interpreting promotes learning. It is important for the facilitator and learner to recognise that it is in their mutual benefit not to judge each other and be open to learning from each other's experiences.

Experience sharing and learning accompanied with critical reflection is expected to result in learning about new ideas and insights that can help achieve not only the enabling objectives of different sessions during the training program but also the training and performance objectives of different Learning Units and the overall training program.

Major responsibility of the facilitator is to create a learning event and environment. Each session has to be designed and delivered as a veritable learning event for all concerned. A learning environment is an essential attribute of a learning event and refers to an environment where everyone is willing to share their experiences, engage in a critical reflection in the light of new information, ideas and insights and learn from each other in an atmosphere of mutual trust, respect and understanding. Creating this kind of an environment at the very outset and maintaining it throughout the duration of the training event is essential for the success of the training program.

Key Learning Points

- Adults learn through experience and their learning is determined by the nature of their values, attitudes, needs and interests (VANI).
- Listening without judging and interpreting promotes learning. It is important for the facilitator and learner to recognise that it is in their mutual benefit not to judge each other and be open to learning from each other's experiences.
- Experience sharing and learning accompanied with critical reflection is expected to result in learning about new ideas and insights that can help achieve not only the enabling objectives of different sessions during the training program but also the training and performance objectives of different Learning Units and the overall training program.
- Major responsibility of the facilitator is to create a learning event and environment. A
 learning environment is an essential attribute of a learning event and refers to an
 environment where everyone is willing to share their experiences, engage in a critical
 reflection in the light of new information, ideas and insights and learn from each other in an
 atmosphere of mutual trust, respect and understanding.

Session 6.4: Learning to listen and listening to learn

Duration: 60 minutes (1 hour)

Objectives: To articulate the importance of receiving and giving feedback; consolidating

learning;

Methods:

- Interactive Learning Presentation
- Role play
- Summing up

Materials needed:

Flip charts, markers

Session Plan with Facilitator Notes

Introduction (5 minutes)

Explain the purpose and process of this session and its intended learning outcomes.

Interactive Lecture Presentation (15 minutes)

The facilitator should present the conceptual framework underlying different learning styles of adults and their relative merits and limitations. It will be good to administer individual and group exercises that can bring this out at an experiential level in the following session.

As adults learn through observation, reflection and action and are trained to talk more than listen, this often comes as a handicap in the process of effective facilitation. Encourage the participants to ask questions and share their experiences related to gaps in listening leading to disruption or/and distortion in inter-personal communication.

Role play (20 minutes)

Ask a couple of volunteers from among the participants to organise impromptu sessions on training themes of her/his choice. Keep the session by the volunteers of not more than 10 minutes with additional 5 minutes for preparation.

After the session by the volunteers, ask other participants to share what they listened to and what they have learnt from the session.

Consolidation of learning (20 minutes)

This will be the final wrap-up session organised at the end of the TOT sub module, which also happens to be the end of the training module. This must summarise all the key learning from the entire module.

Listening is caring and learning to listen is learning to care. Listening takes place not only at the level of words, but also and more so at the level of feelings and emotions. Values, attitudes, needs and expectations (VANE) of participants with varied and diverse backgrounds is also a major determinant in how one listens and with what effect.

Learning is expanding the boundaries of knowledge and understanding. Listening to learn is to look for information, ideas and insights that can help expand the boundaries of knowledge and understanding. This requires appropriate orientation and training.

Most of the conventional training on communication focuses on talking than listening. This session seeks to underline the seminal significance of listening in communication and learning.

Receiving and giving feedback is an important site and occasion for listening and learning. Everyone likes good feedback and dislikes bad feedback. This is a part of human nature. People like to hear good and not bad things about themselves. But those who want to learn for making improvements in their work behaviour have to learn the art of receiving and giving feedback.

While giving feedback is a lot easier, receiving feedback calls for openness and a willingness to learn about one's own gaps and weaknesses. The best way to give feedback is to share good and encouraging feedback first. Feedback that points to gaps and shortcomings should be presented in the form of suggestions for improvement in order to make them less offensive and relatively more user friendly. Receiving both positive and negative feedback calls for a lot of trust, understanding, and courage. While it is important to receive positive feedback with humility, it is all the more important to receive negative feedback with openness and willingness to learn from others about one's own weaknesses in order to make efforts to remove them for improved performance and results.

It is the primary responsibility of the facilitator to consolidate learning at the end of each specific session, Learning Unit and event in order to make sure that all the agreed enabling, training and performance objectives are being achieved as intended.

Key Learning Points

- Listening is caring and learning to listen is learning to care.
- Learning is expanding the boundaries of knowledge and understanding. Listening to learn is to look for information, ideas and insights that can help expand the boundaries of knowledge and understanding.
- Receiving and giving feedback is an important site and occasion for listening and learning.

ANNEXURE 1: HANDOUTS

Handout 1: Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disaster

Three Strategic Goals

- The integration of disaster risk reduction in sustainable development policies and planning
- Development and strengthening of institutions, mechanisms and capacities to build resilience to hazards
- The systemic incorporation of risk reduction approaches into the implementation of emergency preparedness, responses and recovery programmes

Five Priorities for Action

- Ensure that disaster risk reduction (DRR) is a national and a local priority with a strong institutional basis for implementation
- Identify, assess and monitor disaster risk and enhance early warning
- Use knowledge, innovation and education to build a culture of safety and resilience at all levels
- Reduce the underlying risk factors
- Strengthen disaster preparedness for effective response at all levels

Four Cross-Cutting Issues

- Multi-hazard approach
- Gender perspective and cultural diversity
- Community and volunteers' participation
- Capacity building and technology transfer

Source: Taken from ISDR http://www.unisdr.org/we/inform/publications/1037

Handout 2: Scope of DRR Curricula

The scope of the Hyogo Framework for Action 'encompasses disasters caused by hazards of natural origin and related environmental and technological hazards and risks'. Disaster risk reduction curricula have, for the most part, been developed within these parameters but in some countries the notion of 'disaster' has come to be more widely conceived to include, for instance, civil unrest, conflict, biohazards, terrorism and pandemics. In Western and Central Africa, in particular, the notion of conflict and disaster risk reduction (C/DRR) has gained ground incorporating disaster- and conflict-related education.

C/DRR has been defined as 'a systematic analysis of and attempt to reduce disaster or conflict-related risks to enable the education system to provide (and learners to continue, and out of school children and youth to access) quality education for all, before, during and after emergencies.' Climate change is, for the most part, not 'of natural origin' but increasingly appears within DRR curricula. This guidance tool does not cover C/DRR but does integrate discussion of climate change education.

Source: Technical Guidance for Integrating Disaster Risk Reduction in the School Curriculum

Handout 3: Four Indicative Examples of Learning Outcomes Progression

Generic outcome: Learners understand key disaster risk reduction concepts, their application to specific hazard circumstances, and their concrete applications in the local Community	
Ages 4-7	Learners understand ideas of risk, danger and safety and are aware of hazards in the classroom and at home, and ways of being careful and staying safe
Ages 7-11	Learners know about risks and dangers in the local community and environment and what they can do individually to reduce danger and stay safe
Ages 11-14	Learners understand the ideas of vulnerability and resilience and can apply them to specific potential hazards
Ages 14-18	Learners understand the interrelationships between disaster risk, hazard, vulnerability, resilience and societal capacity as manifest in the local and wider community

Handout 4: Cyclone AILA hits Sundarbans--Case Study

Sundarbans is the world's largest delta region that spreads over India and Bangladesh covering around 25,500 sq. k.m. The Indian part is approximately 9,630 sq. k.m. The Indian part of Sundarbans is not confined to one single district. Sundarbans also covers 6 administrative blocks of the adjacent North 24 Parganas district, besides 13 blocks in South 24 Parganas.

Cyclone Aila hit the Sunderbans on 25th May 2009. More than three years later, the poor communities residing here have yet to recover from its onslaught.

It was evident from discussions with residents of three sites visited - Luxbagan, Kumirmari and Jharkhali - that despite the high speed winds, heavy rains and the breaching of embankments, which caused flooding for several days, the number of lives lost in the storm was relatively low. Communities say that this was primarily because the storm struck during daylight hours, allowing people to make their way to safer areas. People took shelter wherever they could—on roads up on the embankments, in schools, boats, neighbors' pucca homes and flood shelters, when they could reach them.

A two-storey flood center constructed in 2005 in Kumirmari became the refuge for nearly 2000 people. However, as the building had never been used or maintained it was in a state of disrepair. The toilets were not functioning and there was no clean drinking water. Some traveled long distances to find tube-wells that had not been contaminated and tried to bring clean water back to the shelter. Others survived by drinking rainwater in vessels they could salvage from their homes. People had to urinate and defecate outdoors, thus creating unhygienic conditions and exacerbating health risks. The study team was told repeatedly that the absence of clean drinking water, sanitation facilities and the rotting carcasses of livestock unleashed a diarrhea epidemic in which several hundreds died in the days that

followed the cyclone. In Kumirmari alone, residents estimated that 100 people had died from diarrhea.

During the 3 days after the cyclone, floodwaters swept into the villages inundating the mud houses. As the salt water seeped into the mud walls, the mud structures gradually weakened and collapsed. Only a handful of *pucca* houses remained unharmed in the cyclone affected villages.

Most people in the Sundarbans depend on agriculture, animal husbandry and fishing for their livelihoods, all of which were severely damaged by the cyclone. Residents reported that the saline ingress combined with poor rainfall that prevented the salt from being flushed out of the soil, had ruined the harvest for the last 3 years. Women and gram panchayats members both reported that the soil salinity had killed their fruit trees along with their crops. Many appear to be surviving on vegetables from gardens and small fish from local ponds. But the paddy crop, which has traditionally been the main source of income for farmers, is barely enough to feed their families.

"We have yet to return to normal. For 3 years, there has not been a proper harvest. The fruit trees mango, jackfruit – are all dead," A Member of the Iharkhali GP.

While the surface water in small ponds is no longer saline, ground water continues to be highly saline. This imbalance between freshwater and salt water has adversely affected fish stocks. The tiger prawns, once the most profitable catch for fisher folk here, have considerably dwindled. In addition, the Forest Department has requested fisher folk to stop using the areas near damaged embankments, as this will further erode them. These losses in livelihoods combined with the need to rebuild houses have led the major proportion (70-90%) of households in the area to migrate to cities where they work either as domestic or as construction labour.

External assistance – whether from NGOs, private sector or government –arrived several days after the cyclone, leaving survivors to fend for themselves for anything between 3 to 7 days after the cyclone, demonstrating the need for robust, responsive emergency response and relief arrangements within local communities who must fend for themselves.

While most external organizations provided relief services in the form of food, water, clothing, and vessels for cooking, a few also put in place long term DRR measures such as raised water pumps to prevent contamination of groundwater in future floods. While grateful for the support of NGOs and corporations that helped them survive, communities could not recollect ever being consulted by external agencies on their needs or priorities and implied that these organizations were never accountable to local communities. During a discussion with panchayat members in Jharkhali, one of the participants stated that "50-70 NGOs came here, but we never heard from them again."

Farmers and fisher folk have for the most part been left to adapt to new adverse conditions by growing crops that flourish in saline soil and cultivating fish that do better in salt water. However, there are programs led by both the Government and locally focused NGOs such as Tagore Society for Rural Development to plant mangroves in order to regenerate the coastal eco-system, crucial for the sustenance and the development of poor communities.

What kinds of local institutions exist among communities of the Sundarbans? A few youth have been given emergency preparedness training. District officials state that 100 volunteers have been trained in emergency response and preparedness, acknowledging that it is a woefully inadequate number. But the research team found no evidence of village disaster management teams or task forces. We did however encounter youth clubs who can, with small investments, be trained to lead effective emergency preparedness and response teams. Youth clubs in the Sundarbans have a long history of organizing social activities, primarily around for religious festivals or sporting events and there is at least one club for 300-400 households. In Jharkhali the gram panchayat appointed a local youth club to distribute relief.

Disaster management investments that provide communities with skills and infrastructure that prepare them to respond to emergencies are certainly welcomed by local communities. They suggest that several, smaller, more accessible flood shelters be constructed in their villages rather than a single shelter for each village that could mean that some settlements are 2 or 3 km away from the shelter. Communities are also advocating for TSRD's innovative flood shelter model that constructs flood shelters above school buildings so that the buildings are used regularly and that school maintenance funds can be used to ensure the upkeep of these shelters, adding that the shelters should have power supply, toilets and clean drinking water. District officials suggest the need for new housing technologies coupled with a subsidy such as under the Indira Awas Yojana to promote cyclone and flood-safe housing.

Equally critical are issues of livelihoods and incomes. Communities are clearly struggling to make a living, while the Government's flagship social protection program fails to deliver. Jharkhali gram panchayat members report that wageworkers under NREGS have not received their wages for two months. Young men recommended the creation of a disaster management center that could employ youth while enhancing disaster preparedness and response in the community.

While the West Bengal Government has a Directorate of Disaster Management with an elaborate, sophisticated institutional infrastructure that includes district and block disaster management officers and a Relief Code that dates back to the Bengal Famine of 1943, there is little evidence of these arrangements on the ground. Indeed, communities report that three years later, a third of the households affected by the cyclone are yet to receive their compensation. The point is that even if an effective DRM program were in place, is a program focused on early warning, rescue and relief adequate to build the resilience of isolated, marginalized communities living with a high level of disaster risk? While early warning, evacuations and access to clean food and water would have saved lives, three years since the cyclone the communities of Sundarbans are in desperate need of solutions to restore their homes, natural resource base and livelihoods.

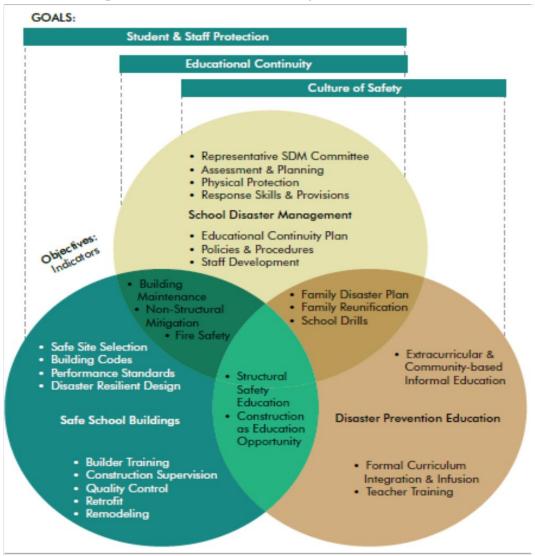
As pointed out by an officer in the Directorate of Disaster Management from Government of West Bengal "We are not yet ready to accept that risk management should get priority over crisis management."

Key Learnings from the case study

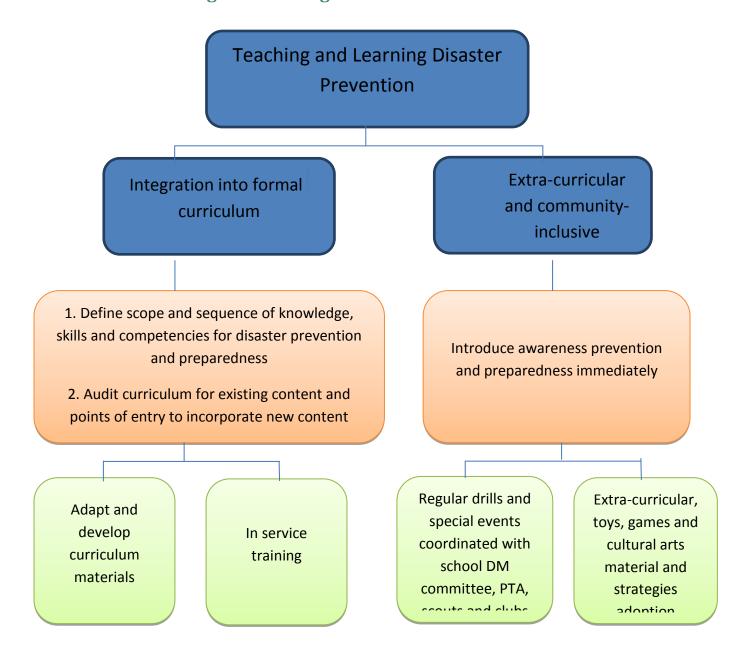
- 1. No training had been imparted to community how to respond in such situations: apparently no mock drill had been conducted earlier.
- 2. Adequate user-friendly warning had not been given resulting in people being caught unawares.

- 3. District administration was not ready to meet such emergencies; the fact that relief materials could reach the community after 3 to 7 days speaks for itself.
- 4. The Cyclone Shelter was not properly maintained with inadequate toilet facilities. It may be better to have small multi-purpose shelters which can be maintained and are in close proximity of people.
- 5. People died after cyclone due to unhygienic conditions mainly due to open defecation, which resulted in cholera and diarrhoea. Apparently, even after disaster, adequate medical assistance was not provided to ensure that diseases are contained and hygiene is maintained.
- 6. A well-established institutional structure at state level (Directorate of Disaster Management) and time tested Codes (Relief Code, 1943) would not help unless preventive measures have been taken by way of awareness and training.
- 7. Hygiene, water and sanitation should be taken as an integral part of DRR Strategy. Otherwise, as experienced during AILA, the number of people who died in the aftermath of cyclone was much more than the number of people who died during the cyclone.

Handout 5: Comprehensive School Safety Scheme



Handout 6: Teaching and learning Disaster Prevention



Handout 7: Appropriate Learning Modalities for Disaster Risk Reduction Education

- Interactive Learning: brainstorming, categorization, organization and evaluation of ideas; pair, small group and whole group discussion; interactive multi-media presentations
- Affective learning: feelings sharing about threats and disasters, empathetic activities to support those impacted by disasters
- Inquiry Learning: team case study research and analysis; Internet enquiry; project work
- Surrogate Experiential Learning: watching videos and films, board games, role-playing, dramatic arts, simulation gaming, assemblies
- Field Experiential Learning: field visits to disaster support services; hazard/vulnerability and capacity mapping in school and community; transect walks; reviewing and revising emergency plans; interviewing local community members on hazards and hazard/disaster memories
- Action Learning: developing, practicing and implementing standard operating procedures, student/community partnerships to raise hazard awareness, hazard and risk mapping and risk reduction planning; awareness campaigns; risk reduction campaigns (e.g. tree planting, rain water harvesting, evacuation route and safe haven development, solid waste management, gardening.)
- Imaginal Learning: Envisioning positive and negative futures, thinking through hazard
 impacts, rehearsing what to do in crisis circumstances, recognizing prevention measures.
 This may include guided visualization activities and circle storytelling, as well as developing
 personal safety scenarios.

Handout 8: Good Practices: Disaster Prevention and Preparedness Through Extra-Curricular Education

Armenia, Kapan: In 2006 and 2007 a cooperative project between the National Survey for Seismic Protection and the Asian Disaster Reduction Center of Japan trained and certified 125 principals and teachers and 250 students as trainers and practitioners in the identification and assessment of seismic risks and priorities for action. In the future other regions and communities will benefit from this training.

Cape Verde, Prala & Santo Domingo: Almost 7,000 students in two cities participated in a project of the National Civil Protection Service with the Ministry of Education and other governmental organizations, learning risk awareness and prevention and practicing evacuation drills.

France: A 2004 decree by the Ministries of National Education, Health and Interior made it mandatory to sensitize students on risk prevention, rescue services and training in first aid. A national project to develop risk reduction plans in every school and sensitize 12 million students was launched in 2006 with 40% of primary schools meeting the target within the first year.

Grenada: A teaching guide for grades 3, 4, and 5 students has led to increased participation and increased knowledge revealed during three rounds of the annual "National Disaster Awareness Week Primary School Quiz" held in front of a large audience at the beginning of hurricane season. Feedback from Hurricane Ivan survivors helped expand the

curriculum to include psychological first aid.

India, Central Board for Secondary Education: Primary schools introduce disaster management

through extra-curricular performing and visual arts activities. Formal education in disaster management begins in Standard VIII.

India, Gujarat: The Gujarat School Safety Initiative undertaken by the Gujarat State Disaster Management Authority, in conjunction with the state education authority, and in cooperation with NGO, SEEDS addresses awareness and preparedness. Working with 175 schools in the region, 100 teacher trainers have reached 9,000 teachers in 25 districts, who in turn reach 100,000 students.

India, Gujarat, Tamil Nadu & Jammu/Kashmir: The Right to Safer Schools Campaign begun in 2001 and is ongoing, led by the All India Disaster Mitigation Institute. Initial efforts reached 40 schools, more than 18,000 children, and 450 teachers and administrators. The programme fosters a culture of safety with fire safety equipment demonstration and installation, first aid kits, insurance policies, awareness materials, training for teachers

and staff, mock drill training, as well as need-based support to schools and student families and research activities. The programme will be expanded to four more states.

India, Pune: In early 2008, 360 children from 36 schools participated in a 2-day event on the premises of the Film and Television Institute of India. Activities included inter-school competitions, demonstrations, debate, essay and drawing competition, knowledge hunt, and using evacuation routes. Follow-up activities include theme-based calendar, summer camp and developing a child ambassadors' programme.

India, Shimla: In 2005, more than 10,000 participants from 20 schools took part in school safety activities, learning basic disaster awareness and participating in mock drills. Capacity-development addressed non-structural risk mitigation and school disaster management planning. Outreach materials reached 750 schools.

Iran: Co-curricular education complements formal education with a safety campaign and annual drill, art, painting, drawing and writing competitions. These benefit from maximum participation from educational, social, cultural, media and NGOs. Books and stories, posters, brochures, workbooks and educational aids targeting different age groups supplement textbook materials.

Japan: Supplementary reading materials designed to pass down lessons from the Great Hanshin-Awaji Earthquake Disaster have been created for students at all grade levels. Teacher training materials and emergency management manuals support this.

Mali: The Ministry of Education and Directorate of Civil Defence introduced disaster prevention messages to build resilience to drought, locust invasions and flood by introducing messages on the covers cover and 1 internal sheet of children's exercise books (providing a total of 8 sides of information). This simple and cost-effective way of raising awareness in schools has already reached more than 25,000 students with the help of the Young Business Owners' and Managers' Federation, even before mainstreaming disaster risk reduction into the curriculum is implemented.

Mozambique: Combating cyclones, floods, landslides, drought, and epidemics, the Mozambique Red Cross provided training to 99 teachers from 76 schools, reaching 4,400 students directly. It is noted that having visiting experts support special school-based meetings and activities provide several advantages: more students can benefit, the audience can include community members, and more depth can be achieved.

South Africa, Eastern Cape Province: A school competition enables students to demonstrate their knowledge on disaster risk reduction through art, music and drama. This best practice was selected for replication in two other provinces. Multi-stakeholder cooperation and local media interest supports children in reaching the entire community.

Handout 9: Example of School Disaster Management Checklist **School Disaster Management Checklist** 1. Ongoing school disaster management or safety committee guides the school disaster management process An existing or special group representative of all parts of the school community is tasked with leading school disaster management efforts on an ongoing basis. School disaster management has the full support of school leadership. ☐ School disaster management committee takes lead in ongoing planning for prevention, mitigation, response and recovery. □ School disaster and emergency management plan is reviewed and updated at least annually. 2. Assessment and planning for disaster mitigation takes place continuously ☐ Hazards, vulnerabilities, risks, capacities and resources are researched and assessed. ☐ Mitigation measures are identified and prioritized for action. ☐ Building evacuation routes and safe assembly areas are identified. Area evacuation and safe havens for family reunification are identified, as needed. ☐ Educational continuity plans are in place for recurring hazards and high impact hazards. 3. Physical and environmental protection measures are taken to protect students and staff School buildings and grounds are maintained (eg. against moisture, termites, fungus) and repaired, for disaster resilience. Fire prevention and fire suppression measures are maintained and checked regularly. ☐ Safety measures related to building non-structural elements, furnishings and equipment are taken to protect students and staff from hazards within the building (especially due to earthquakes, severe weather etc.). ☐ School infrastructure, including access routes, shelters and safe havens are developed as needed and maintained for safety. Crime, vandalism, and bullying prevention measures are maintained and students and staff feel safe and secure on school premises. Measures are taken to provide clean drinking water, food security, drought and hazardous materials protection (eg. rainwater harvesting, school gardens, solid waste management, erosion prevention). 4. School personnel have disaster and emergency response skills and school have emergency provisions School personnel are ready to organize disaster response using a standard emergency management system (eg. incident command systems). 2 2 School personnel receive training in a range of response skills including, as necessary: building and area evacuation, first aid, light search and rescue, student supervision, shelter, nutrition and sanitation. 2 2 □ School maintains first aid supplies and fire suppression equipment. 2 2 ☐ School maintains emergency water, nutrition and shelter supplies to support staff and students for a minimum of 72 hours, and preferably one week. 5. Schools have and practice policies and procedures for disasters and emergencies Policies and standard operating procedures adopted to address each known hazards. 2 2

□ Standard operating procedures include: building evacuation and assembly, shelter-in-place, lockdown, and family contact and reunification procedures. ② ②
 □ School personnel have and practice procedures to ensure safe student reunification with emergency contacts identified in advance by parents or guardians. ② ②
 □ School drills are held at least twice yearly to practice and improve upon disaster mitigation and preparedness skills and plans. One of these drills is a full scenario drill to practice

Source: Assessing School Safety from Disasters – A Global Baseline Report

response preparedness.

Handout 10: Milestones for School Disaster Management Plan

- Form or re-form committee;
- Distribute Family Disaster Plan forms to staff, students and families;
- Complete School Hazard Impact Assessment; Identify vulnerabilities and capacities;
- Prioritize mitigation activities;
- Develop staff training plan;
- Review basic emergency and standard operating procedures;
- · Conduct school and neighbourhood hazard hunt;
- Check School Evacuation Route Maps posted in each classroom and corridor;
- Check fire suppression equipment;
- Identify campus and neighbourhood risks, and resources on maps;
- Post neighbourhood and school campus maps prominently;
- Check and re-supply administration, nursing office, and classroom Go-Bags;
- Request student comfort kits from families;
- Check and re-supply first aid kits and emergency supplies;
- Communicate student-family reunification procedures to parents;
- Update student emergency release permissions;
- Schedule fire drill and full simulation drills;
- Practice drills with each class;
- Minimum of two annual fire and building evacuation drills;
- Implement full simulation drill for other hazards.
- Evaluate drill and revise plans and procedures.

Handout 11: Systematic Approach to training

The fact that current DM and DRR related training practices are largely ad hoc and not based on clear identification of training needs call for a systematic approach to training. There seems to be a global consensus that training in order to be effective has to be based on a systematic approach.

A systematic approach to training (SAT) pre-supposes the following:

- Training is based on identified training needs and is in response to real and not imagined needs of the functionaries involved
- Participants are selected on the basis of training needs and not on other factors including their easy availability for training.
- Impact of training is evaluated and learning used to improve the training design and delivery further for better results.

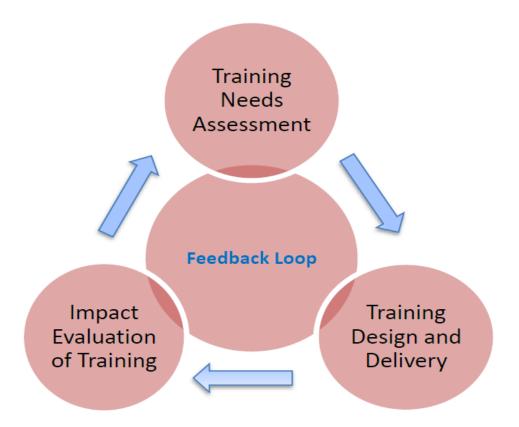
The first and last related to training needs and impact evaluation happen to be the blind spots of training in the development sector in general and in the field of disaster management in particular. Even the performance of the second one related to selection of participants for training is suspect and skewed in many cases as revealed by the study.

The following figures present the suggested framework for implementation of training, which is based on the larger capacity development framework of the study, but targets only training for the purpose of this framework.

Impact Training Design Training Needs **Evaluation of** and Delivery Assessment **Training** Specific Specific capacities Knowledge objectives targeted Intended Capacities Skills learning built outcomes Delivery Performance Attitude methods and improved mechanism

Figure 1: Strategic Framework for Implementation of Training (SFIT)

Figure 2: Feedback Loop



The current training practices are in general limited mainly to training design and delivery component of the suggested framework. This is generally not preceded by any systematic training needs assessment and is usually not followed up by any kind of impact evaluation. This is practically like shooting in the dark: one of course is hitting some target, but is never sure what and with what consequences.

This framework can be used to streamline the training functions in a manner that leads to targeted capacity development for disaster management and disaster risk reduction across sectors.

Handout 12: Capacity Needs and Training Needs Assessment

Capacity, Capacity Needs and Training Needs³

Capacity for the purpose of this framework is defined as the overall capability of an actor (individual or institution) to perform and produce results. Capacity is a relative term and can be defined only in relation to the roles and responsibilities of the concerned actors as stakeholders. In case of functionaries at work, capacity is defined in terms of knowledge, skills and attitude that they possess to carry out a given task and achieve a certain intended result. In the case of organisations, capacity is defined in terms of overall organizational capability to plan and implement schemes, programmes and projects to achieve a given set of objectives on scale.

Capacity Needs



Training as a tool to build capacity seeks to upgrade knowledge, skills and attitude (KSA) of the people being trained. Organisational re-engineering and development including redesigning the business processes and work protocols are the means to enhance organizational capacity to function and deliver the required goods and services to achieve the agreed objectives. This may entail re-defining the functional goals of the organization and developing strategic action plans, besides mobilizing resources and upgrading the existing infrastructure to increase the organizational capacity.

As this framework relates to training, a look at the current training scenario with specific reference to DM and DRR functions would be in order. Training is of various types differentiated by factors such as length/duration of training, content of training, training methods and tools. There are different types of training categorized by their nature, location, level, duration, purpose and methodology. These include: general and specialized

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³ Strategic Framework for Implementation of Training(pg 20-21), Deliverable 6, Preparing Long Term Training and Capacity building Strategy, NCRMP

training; induction, in service and follow up training; on site and off site training; training of trainers.

Conventional notion of training carries the image primarily of a class room activity based on a vertical relationship between the trainer and trainees: this is characterized by a top down relationship between the trainer as teacher and the participant as the learner. This is now universally recognised to be outmoded and of limited use, as the retention and use of learning received through one way top down method (mainly lectures) by an expert is very low, as it does not fit in with adult modes of learning. But class room training sessions are still the most widely used training methodology both at NIDM and state level Disaster Management Centres (DMCs). Most of the class room training is theoretical and of a general nature. Practical training aimed at building specific knowledge and skills of specific groups of people is very limited and has yet to be undertaken in a systematic manner and on scale.

There are other innovative modes of training that have been used in varying degrees in recent years. These include online training, blended learning, satellite training etc. These have been used by NIDM, Indian Institute of Remote Sensing, Vigyan Prasar and state level agencies such as in Karnataka. But the specific ways in which these modes help have yet to be ascertained and fully appreciated.

Handout 13: Training/Behavioural Objectives: Verbs to Describe Complexity of Behaviour

1. **Knowledge:** The recall of information.

define order name describe recite recognize label recall record list relate reproduce state match repeat underline arrange

2. Comprehension: The translation, interpretation or extrapolation of knowledge.

arrange explain interpret classify express locate describe indentify report discuss indicate restate sort translate extrapolate

3. **Application:** The application of knowledge to a new situation.

apply practice solve Choose prepare use

Illustrate schedule demonstrate
Operate sketch measure

4. Analysis: To break down knowledge into parts and show relationships among the parts.

analyze diagram question appraise discriminate test

calculatedistinguishdifferentiatecategoriesexaminecomparecontrastexperimentinventory

criticize

5. **Synthesis:** Bringing together parts (elements, components) of knowledge to form a whole and build relationships for new situations.

arrange design prepare assemble formulate propose collect manage set up synthesize compose organize plan write create construct modify conduct

6. Evaluation: Judgments about the value of material and methods for given purposes.

appraise estimate select argue evaluate support assess judge value attack predict score compare rate defend

Handout 14: Johari Window

It is a simple and useful tool for understanding and training self-awareness, personal development, improving communications, interpersonal relationships, group dynamics, team development and intergroup relationships.

It is also referred to as a 'disclosure/feedback model of self-awareness', and an 'information processing tool'. It represents information - feelings, experience, views, attitudes, skills, intentions, motivation, etc - within or about a person - in relation to their team, from four perspectives.

Self Known Unknown Known 1 2 Open/Free Blind Area Area Others Unknown 3 4 Hidden Unknown Area Area

Standard Representation

The four Johari Window perspectives:

Called 'regions' or 'areas' or 'quadrants' each contains and represents the information - feelings, motivation, etc – in terms of whether the information is known or unknown by the person, and whether the information is known or unknown by others in the team.

The four regions, areas, quadrants, or perspectives are as follows, showing the quadrant numbers and commonly used names:

- 1. Open area, open self, free area, free self, or 'the arena': what is known by the person about him/herself and is also known by others.
- 2. Blind area, blind self, or 'blind spot': what is unknown by the person about him/herself but which others know.
- 3. Hidden area, hidden self, avoided area, avoided self or 'façade': what the person knows about him/herself that others do not know
- 4. Unknown area or unknown self: what is unknown by the person about him/herself and is also unknown by others

Handout 15: Stephen Covey's seven habits of highly effective people

Stephen Covey's Seven Habits of Highly Effective People⁴

Habit 1 - be proactive

This is the ability to control one's environment, rather than have it control you, as is so often the case. Self-determination, choice, and the power to decide response to stimulus, conditions and circumstances

Habit 2 - begin with the end in mind

Covey calls this the habit of personal leadership - leading oneself that is, towards what you consider your aims. By developing the habit of concentrating on relevant activities you will build a platform to avoid distractions and become more productive and successful.

Habit 3 - put first things first

Covey calls this the habit of personal management. This is about organising and implementing activities in line with the aims established in habit 2. Covey says that habit 2 is the first, or mental creation; habit 3 is the second, or physical creation.

Habit 4 - think win-win

Covey calls this the habit of interpersonal leadership, necessary because achievements are largely dependent on co-operative efforts with others. He says that win-win is based on the assumption that there is plenty for everyone, and that success follows a co-operative approach more naturally than the confrontation of win-or-lose.

Habit 5 - seek first to understand and then to be understood

One of the great maxims of the modern age. This is Covey's habit of communication, and it's extremely powerful. Covey helps to explain this in his simple analogy 'diagnose before you prescribe'. Simple and effective, and essential for developing and maintaining positive relationships in all aspects of life.

Habit 6 - synergize

Covey says this is the habit of creative co-operation: the principle that the whole is greater than the sum of its parts, which implicitly lays down the challenge to see the good and potential in the other person's contribution.

Habit 7 - sharpen the saw

This is the habit of self-renewal, says Covey, and it necessarily surrounds all the other habits, enabling and encouraging them to happen and grow. Covey interprets the self into four parts: the spiritual, mental, physical and the social/emotional, which all need feeding and developing.

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⁴ http://www.businessballs.com/sevenhabitsstevencovey.htm

ANNEXURE 2: DESIGN BRIEF

CLIENT

The National Disaster Management Authority (NDMA) and the National Institute of Disaster Management (NIDM) of India.

WHY THIS TRAINING COURSE?

Performance Problem

This training package is developed as a tool to train school teachers for creating a culture of safety through knowledge and education

Use of knowledge, innovation and education to build a culture of safety and resilience at all levels is one of the key priority areas of Hyogo Framework for Action (HFA). The education sector is envisaged to be the key to creating awareness about disaster risks and sensitising the students in schools and colleges about their possible role in disaster risk reduction. An early awareness in this is likely to result in reduction of damage and losses due to disasters and help young girls and boys to respond effectively as disaster managers and volunteers.

There is increasing evidence that students of all ages can actively study and participate in school safety measures, and also work with teachers and other adults in the community towards minimising risk before, during and after disaster events. Mainstreaming DRR into school curricula aims to raise awareness and provide a better understanding of disaster management for children, teachers and communities. Accompanying structural changes to improve safety in building schools will not only protect children and their access to education, but will also minimise long term costs.

In the light of this need, GOI has launched National School Safety Program with the vision of promoting a culture of disaster preparedness in the schools. One of the major objectives of the project is capacity building of officials, teachers and students.

India is the second most populous country after China. Total population of the country is 1210 million (census 2011) and about 43 percent of it is in 5 – 24 year age group and about 24 percent in age group of 5-14 years. There are about 1.22 million schools (from primary to higher secondary) in which about 223 million children are studying. Besides, there are about 19,300 other educational institutions, which cater to around 8.7 million students. This estimate does not include students of BE/ Arch/ Medicine/ dentistry/ Nursing/ B. Ed. / Polytechnics. Enrolment in Open Universities has also not been taken into account.

It is estimated that about 1.8 million teachers are required to be trained (SWOT report, pg.139). Given the current capacities, training on such a large scale does not seem possible over next 5 years. Therefore, in order to be realistic, 1/3 (600,000) of the estimated number of teachers are proposed to be trained over a period of 5 years.

Aim

The aim of the module is to generate awareness amongst the teachers on their role in creating a culture of safety and prevention in schools.

WHO IS INVOLVED?

Trainee Profile

Using this module as the starting point, it will be desirable to organise separate training programs for various levels of teachers including teachers of primary school, secondary school, high school, intermediate, colleges/universities and other institutions. However, this module is intended to focus on teachers from schools both in rural and urban areas located in multi-hazard prone locations across districts and states in the country.

Master resource persons may be selected from the schools, colleges, universities and teachers training institutes (DITE) etc. in a demand responsive fashion using a qualifying criterion of at least 10-15 years of experience of teaching / training. In exceptional cases, people with 5-10 years of experience could also be considered in case they are found to be potentially good trainers.

Targeted Number of Trainees in the Education Sector

It is estimated that for training 600,000 teachers in a period of five years, around 24,000 training programs are required to be organised. In order to achieve this, 42 master resource persons (in two batches of 21 participants each) and 2000 resource persons are to be developed. Summary of the quantification exercise on which this proposal is based is as follows:

Number of teachers to be trained	6,00,000
Number of training programs in 5 years	24,000
Number of training programs annually	4,800
Number of training of trainers program	67
Number of master resource persons	42
Number of trainers	2,000

Source: Preparing Long Term Training and Capacity Building Strategy for Disaster Risk Mitigation under NCRMP: SWOT Analysis

Duration

This training module is designed as a set of two sub-modules to be run over a period of 5 days:

- A base sub-module of 3 days
- 2. A TOT sub-module of 2 days

Number of trainees per course

The training module will be conducted in a batch of 24 participants.

Resource Persons

Resource persons may be selected from the educational institutions and training institutes with 6-10 years of experience as trainers and learning facilitators and with expressed willingness to be available as trainers for further training of teachers from schools.

A detailed set of selection criterion can be developed by the States in consultation with NIDM.

Constraints

Major constraint in the implementation of this module is that the trained master resource persons are envisaged to train other resource persons, who can organise direct training programs at district and sub-district levels. This is a constraint as it calls for a lot of administrative and management effort at various levels which can significantly influence the overall quality of training delivery at the cutting edge.

Paucity of teachers, especially trained teachers, is another major constraint. But this is a human resource constraint, which is a feature of the overall operating environment of the education sector. Though this is not a constraint of the training design and delivery approach itself, it is likely to impact the selection and availability of participants significantly.

During the field study across states of Andhra Pradesh, Bihar, Gujarat, Odisha, Uttarakhand and West Bengal, lack of adequate number of teachers was reported from many primary, upper primary, and secondary schools: in some cases one or two teachers were found to be handling many classes simultaneously. This may present a major constraint in getting school teachers for training. This will need to be addressed locally by the trainers and training managers at the district and sub-district levels as required.

BASE sub-MODULE

Aim

Equip the master resource persons with knowledge and skills for training resource persons for enabling disaster risk reduction and resilience building at the school level.

Objectives

Performance objectives	Training objectives	Enabling objectives
1) Adapt and customise this base sub-module for training the resource persons.	1) To impart requisite knowledge on the fundamentals of disaster risk management, functions during disasters and role of school disaster management team in developing school disaster	Mainstream DRR activities through co-curricular/extracurricular activities at the school level can be used effectively to promote improved disaster prevention and preparedness. Develop parameters and

management plan; 2) To sketch the basic requirements for school safety measures.	indicators for preparation and implementation of school disaster management plan on the basis of some agreed values and principles
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Training Needs

This base sub-module seeks to address the following training needs identified during the study:

- Knowledge of concepts related to disaster management
- Role of school and education in creation of culture of safety and prevention in schools
- Addressing issues of disaster risk reduction through informal curriculum
- Disaster prevention and preparedness in schools
- School disaster management planning: parameters, indicators etc.

Duration

The base sub-module will be run over a period of 3 days.

Detailed Training Outline and Learning Units of the ToT Module

The module will attempt to kick-start the thinking process and generate discussion, rather than prescribe rigid solutions as people will have to adapt these fundamentals to varying situations on the ground.

Learning units	Objectives	Session(s)	Method	Media / performance aids	Assessment measures	Time
PART 1: INTRODUCTION						
	Welcome Know each other and about the workshop	By course organisers By trainees: Introductions, educational/work background and expectations from training By resource person: Introduction and brief explanation of what to expect over the course of the training. Address the 'WHY'!	Welcome address Individual and Group Exercises Games Power point presentation (PPT) Discussion	Black/white board/PPT slide on module outline/ expected schedule		45 min
Learning L	Init 1: Disaster Risk R	eduction (DRR) and Culture	of Safety – an overview			
	Examine the role of culture of safety in disaster risk reduction (DRR) Contextualise hazard, risk, vulnerability and capacity at the	1. Disaster risk reduction (DRR) and culture of safety: an overview 2. Concepts of hazard, risk vulnerability and capacity 3. Disaster management cycle: stages and issues	 Interactive lecture presentation Question and answer session Group work Group presentation and discussion in the plenary 	HandoutsPower point	Internal validation	3hours 45 minutes

micro level Identify different stages of the disaster management cycle Learning Unit 2: Role of Education	ion in Disaster Risk Reductio	n (DRR)			
Examine the role of education in disaster risk reduction (DRR) Analyse the role of disaster management task teams in DRR at the school level Learning Unit 3: Role of Schools	Role of education in creating awareness of disaster risks Disaster risk reduction (DRR) in schools	 Group work on case study Presentation and discussion Summing up 	HandoutsPower point	Internal validation	180 minutes(3 hours)
describe the role of schools in disaster prevention and preparedness identify the role of teachers, students and parents in ensuring effective disaster prevention and preparedness at the school level	1. Disaster prevention: with a focus on school safety and the safety of the larger community. 2. Disaster prevention and preparedness: how to get most out of the formal curriculum? 3. Co-curricular/extracurricular activities for improved disaster prevention and preparedness	 Interactive lecture presentation Questions and Answers Group work Presentation in the plenary 	HandoutsPower point	Internal validation	4.5 hours

Learning Unit 4: School-Based L	Learning Unit 4: School-Based Disaster Preparedness: Values, Principles and Parameters						
To help the participants examine the core values, principles and parameters for school based disaster preparedness in terms of their implications for application in real time disaster preparedness planning and implementation.	1. School based disaster preparedness: an overview 2. Parameters, indicators, and verification processes and methods for school based disaster preparedness 3. Development of School-Based Disaster Preparedness: Values and Principles	 Interactive lecture presentation Questions and Answers Group work Presentation in the plenary 	HandoutsPower point	Internal validation	4.5 hours		
EVALUATION AND FEEDBACK							
Evaluation Gather feedback		Presentations of assignmentsDiscussion	Checklist to evaluate Feedback form	Internal validation	45 min		

TOT SUB- Module

Aim

The aim of this sub-module is to introduce the participants to the basic knowledge and skills related to design and delivery of training.

PERFORMANCE OBJECTIVE	TRAINING OBJECTIVES	ENABLING OBJECTIVES*
In their jobs, the resource persons will: 1. Design and develop training module 2.Facilitate training programs/workshops	After the training course, the trainees will be able to: adapt the base submodule to specific local contexts in which further training programmes are to be organised and organise it with effectiveness.	 During the training, the trainees will learn to: Conduct training need assessment Design a training program in terms of its content, methodology Evaluate and monitor the training program Facilitation skills for training

Objectives

Duration

The TOT sub-module will run over 2 days.

De tailed training outline and learning units of the TOT sub module

This sub module is intended to be a refresher crash course in training design and delivery for those who already have sufficient background and experience in training trainers from different development sectors and at various levels.

Learning	Objectives	Content / content delivery	Method	Media / performance	Assessment	Time
units				aids	measures	
Learning	unit 6: Systematic Approach t	o Training (SAT)				
	The objective of this sub- module is to equip the participants with basic knowledge about the key issues to be addressed in the course of designing a training intervention/programme	 Assess training needs Define training objectives Decide the content, methodology, and resource persons Decide monitoring and evaluation indicators and processes 	 Brainstorming Group work Presentation and discussion in the plenary 	HandoutsPower point	Internal validation	6 hours
Learning	Unit 7: Learning and Facilitati	on Skills (LFS)				
	The objective of this submodule is to equip the participants with basic facilitation skills that help the trainers conduct training/learning sessions with efficiency and effectiveness.	1. Art of facilitation -I: understanding self and others; promoting trust and sharing; listening 2. Art of facilitation-II: handling questions; managing expectations; managing conflicts; nurturing the eco- system of learning 3. Sharing, listening and learning including: creating a learning event and	 Individual Exercises Group work Discussion Simulation/ Role play 	 Handouts Power point 	Internal validation	5 hours

	environment 4. learning to listen and listening to learn; receiving and giving feedback;			
	consolidating learning;			
EVALUATION OF FINAL ASSIGNMENTS	AND FEEDBACK			
Appraise final assignment		Discussion	Facilitator's note	1 hour
Gather feedback			Note on guidelines for	
			appraisal of final	
			assignment.	

Assessment

- The initial assessment of the knowledge and level of understanding of use of knowledge will be undertaken through a pre training assessment based on quiz. Findings of the assessment will be used to make suitable modifications in the content and delivery strategy of different learning units.
- Each learning unit will also be assessed separately;
- A post training assessment will be carried out to assess the enhancement in the knowledge and skill levels of the participants.

Validation measures

Internal Validation:

- The immediate feedback on the effectiveness of the training methods and learning outcomes will be undertaken at the end of sub-modules.
- The feedback from the participants on the hand outs and performance aids will also be taken.
- The efforts will be made to improve the hand outs and performance aids based on participants' feedback to ensure their effectiveness.

External Validation:

The external validation is proposed by the respective state officials and disaster management authorities to assess the application of learning at the performance level.

Sources, References and Further Readings

ISDR, UNESCO. 2007. Towards a Culture of Prevention: Disaster Risk Reduction Begins at School

Marla Petal. November 2008. Disaster Prevention for Schools Guidance for Education Sector Decision-Makers

CONSORTIUM FOR DISASTER EDUCATION INDONESIA. A Framework of School-Based Disaster Preparedness

UNESCO and UNICEF. 2012. Disaster Risk Reduction in School Curricula: Case Studies from Thirty Countries

Emily Bild and Maggie Ibrahim. 2013. Towards the resilient future children want: a review of progress in achieving the Children's Charter for Disaster Risk Reduction

Pedro Bast idas & Marla Petal. 2012. Assessing School Safety from Disasters A Global Baseline Report

UNESCO. 2007. Natural Disaster Preparedness and Education for Sustainable Development

IFC. Disaster and Emergency Preparedness: Guidance for Schools

Jack Campbell and Roger Yates. Lessons for life: Building a culture of safety and resilience to disasters through schools

ISDR. 2006-2007. Disaster risk reduction begins at school

Web resources:

Sarva Shiksha Abhiyaan, http://ssa.nic.in/

National School Safety Programme, http://ndma.gov.in/en/national-school-safety-programme-a-demonstrative-project

Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector (GADRRES), http://www.preventionweb.net/english/professional/contacts/v.php?id=4983

Mainstreaming Disaster Risk Reduction in the Education Sector in The Philippines

http://www.ndcc.gov.ph/attachments/042 MDRReducation Philippines.pdf

Study on Impact of Disasters on the Education Sector in Cambodia, http://www.adpc.net/v2007/ikm/ONLINE%20DOCUMENTS/downloads/2008/Mar/MDRDEducationCambodiaFinal Mar08.pdf

Mainstreaming of Disaster Risk Reduction in the Education Sector in the Lao PDR http://www.adpc.net/v2007/programs/dms/PROGRAMS/Mainstreaming%20DRR/Downloads/Laos%20(1).pdf

Video References:

China's Unnatural Disaster: The Tears of Sichuan Province, a documentary by Jon Alpert and Matt O'Neill