UNESCO
United Nations
Educational, Scientific and
Cultural Organization

Training
Module

2

Localising
Disaster Risk Reduction
in Education

**Ministry of Education and UNESCO
(February 2010)**

Module (2) Localising Disaster Risk Reduction in Education

CONTENTS

Module 2

LOCALISING DISASTER RISK REDUCTION IN EDUCATION

LEARNING OBJECTIVES

By the end of this session, participants will:

- ❖ Understand the importance of institutional mechanism at local level for risk reduction in education
- ❖ Be able to identify stakeholders involved in risk reduction of education sector
- ❖ Get an overview of the monitoring and evaluation components for educational administration

METHODOLOGY

The approach would be to make the participants aware of their surrounding hazards through the exercise. Thereafter, the participants would develop an understanding towards the institutional mechanisms for risk reduction. The exercise would outline the primary responsibilities of each stakeholder, from State to the village level, in the risk reduction process.

TIME

The total session will be of 3 hours, structured as follows:

Presentation: 60 minutes
Exercise: 120 minutes
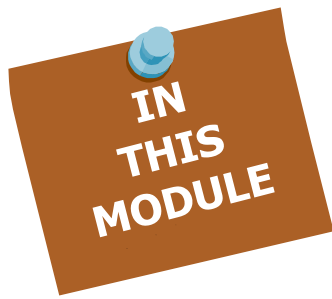
- State's role
- Disaster management cycle
- Probability
- Livelihood security
- Roles and responsibilities
- Multi level approach
- Monitoring and evaluation

Module 2

LOCALISING DISASTER RISK REDUCTION IN EDUCATION

1

This module relates to Priority 1 of the Hyogo Framework for Action (HFA).

Hyogo Framework for Action

Priority 1:

"Ensure that DRR is a national and a local priority with a strong institutional basis for implementation"

This module will look at the HFA priority through an education lens.

"Localise Disaster Risk Reduction in education"

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Module 2 is concerned with the institutional basis for implementation of DRR at national as well as local level. The module looks at the sub set of institutional base for DRR in the education sector in specific. It also looks at the multi-stakeholder dimension of the work.

Indicative Activities

- Setting up of institutional mechanisms

- DRR part of development policies and planning, sectorwise (education) and multi-sector

- Legislation to support DRR in education

- Decentralisation of responsibilities and resources

- Assessment of human resources and capacities

- Foster commitment

- Community participation

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These are indicative activities for Priority 1. Working on DRR in education requires relevant activities for the education sector towards building institutional base for risk reduction. This is the backbone for sustained risk reduction interventions.

Indicators of success

- A framework for DRR in education exists with responsibilities defined, particularly at the local level.

- A multi-sectoral engagement for DRR is operational.

- An approach for DRR in education exists that requires plans and activities at all levels, including all stakeholders.

- Dedicated and adequate resources are available to implement DRR plans at all levels of the education system.

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Indicators help in setting benchmarks and measuring success. While the specific indicators will be set for each programme component by the implementing teams, broad indicators for the institutionalisation process are identified here.

Educational Planning

- Educational Planning is the application of rational, systematic analysis to the process of educational development

- It aims at making education more effective and efficient in responding to the needs and goals of its students and society

Source: Fundamentals of Educational Planning, UNESCO (1970)

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Planning for Education is not an ad-hoc process of curriculum development, but is a comprehensive sequence of steps for assessing, analyzing, designing, implementing, monitoring and improving educational systems. The systems will include academic curriculum, extra curricular activities, training of teachers and administrators, improvement and management of infrastructure and all associated activities.

Educational Planning and DRR

- Incorporating DRR in educational planning is an effective way of tackling disaster vulnerabilities.
- Following components must be emphasized while planning:
  - Structural mitigation
  - Non-structural mitigation
  - Capacity building
  - Inclusion

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The introduction and integration of Disaster Risk Reduction in Education Planning will have to focus on all aspects of disaster management that help reduce disaster risk. Structural activities will deal with buildings, infrastructure and building content. Capacity building activities will deal with the human dimension and will aim at awareness, training, action planning and being inclusive in approach.

Disaster Management Cycle: Relevant to Education Sector
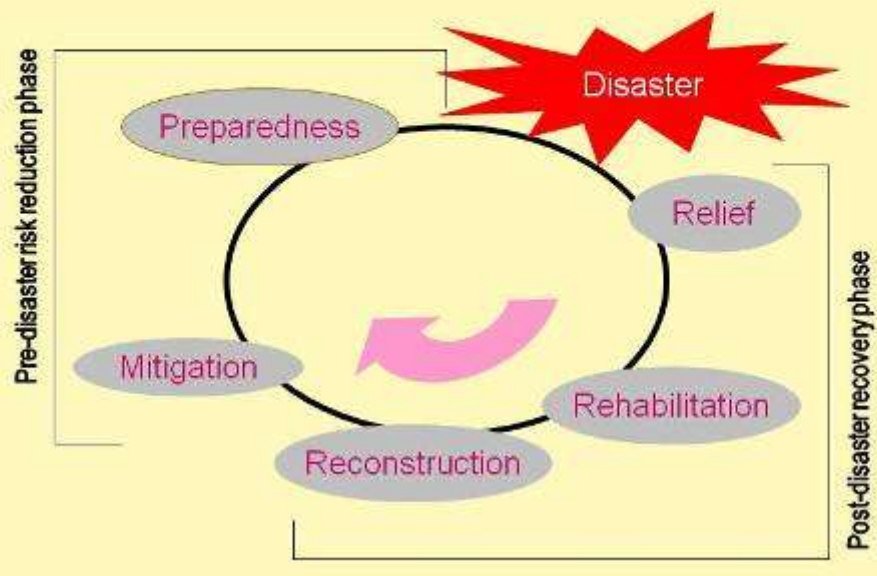
The disaster management cycle, also called the disaster cycle, shows that disasters are recurrent events, which form part of a series of cyclical events. After the disaster, relief measures are immediately taken up, followed by rehabilitation and reconstruction. Once things return to normal, mitigation efforts are mounted to reduce the impact of future disasters, and preparedness measures are taken up to increase capacity to respond.
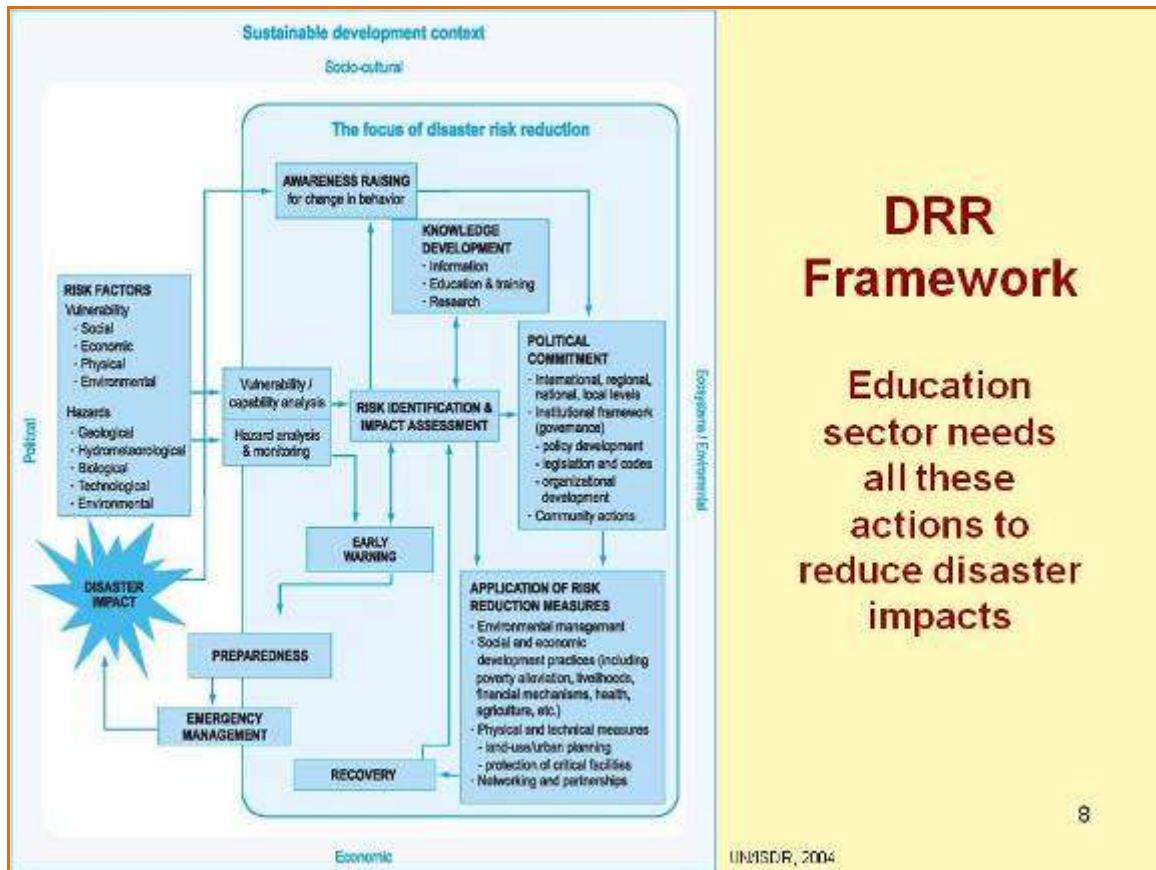
The DRR framework mainly states that sustainable development and risk factors influence communities ability to withstand disasters. The first step to address risk is analysis of vulnerability/capacity and hazards. This gives an understanding of local risks. The understanding thus gained can then be used through various means to reduce risk and reduce the impact of future disasters.

Different disasters have varying probabilities and impacts on education

Probability of events	Unimportant	Limited	Serious	Very serious	Catastrophic
Very probable					Event X
Probable					
Less probable		Event Y			
Improbable					Event Z

Consequences of events

Source: HPN Good Practice Review on DRR, 2004   9

Some disasters have very high impacts, but do not happen very often, for example earthquakes and severe cyclones. Other disasters may happen very often but have lower impacts, for example flu or mild diseases. An understanding of the probability and severity of disaster impacts gives us the means for deciding our priorities. Events that are high on probability and impact need priority attention.

Security & Assets: Schools and Education are also assets
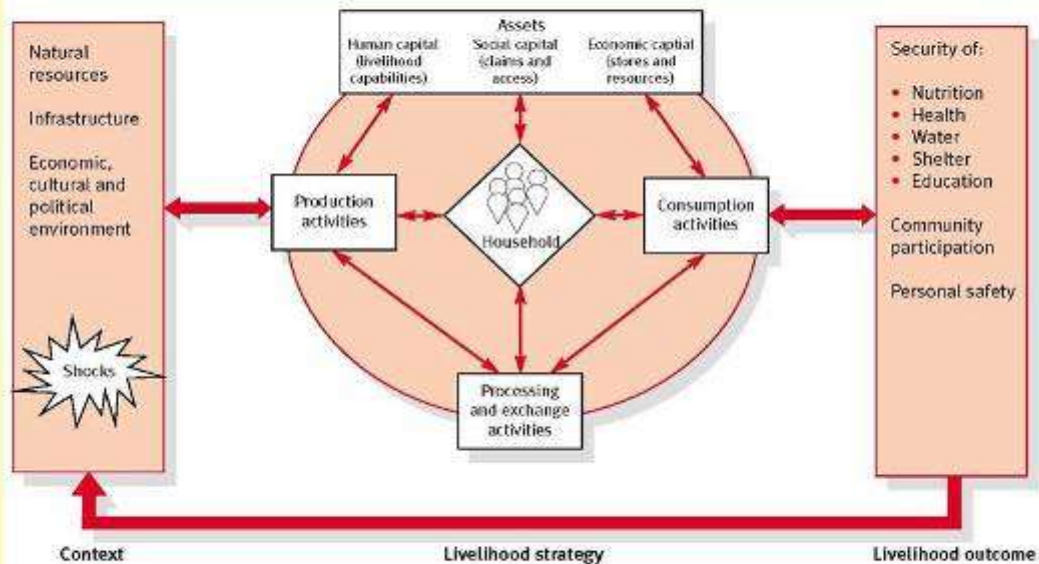
M. Drinkwater and T. Rusinow, *Presentation on CARE's Livelihoods Approach for NRAC '99* (London: CARE International, 1999), www.careinternational.org.uk/resource_centre/livelihoods/cares_livelihoods_approach.doc, p. 2.

This model puts the family at the centre, as the smallest unit of individuals that suffers similar impact. People need to access natural resources to make a living. These are provided by nature, but so are shocks or disasters. People consume the resources and create assets, which can be physical, financial, social and so on. Assets protect people from disasters. Better access to resources means more assets, which means reduced risk.

Structure at the Township Level

Township Peace & Development Committee	
Related Township Officers	Board of Trustees
Community Leaders	Principals
TEO	ATEO
NGO	INGO
Parent Teacher Association (PTA)	

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The focus of the DRR initiative in education is at the local level. Therein, the Township Education Officer and the Assistant Township Education Officer are key role-players. These will be the action level government officials to be trained under the programme.

Institutional tasks – Township level

Natural disaster preparedness and management committees should be organized at township level. The sub-committees at township level can comprise of 1 officer from head office, 1 from State and Division, 2 from township, 2 from BEHS (high school), 4 from BEMS (middle school) and 6 from BEPS (primary school). The committees can manage the following tasks:

- Local Strategy on Education and DRR
- Local Action Plan for DRR in Education Sector
- Calendar for Trainings, Drills, Workshops
- Pool of Local Trainers
- Repository of Information on Schools
- Local Knowledge Resource Centres

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Actions need to be taken at the national level by the Ministry of Education to establish a system that will sustain over time and will deliver DRR in education programmes in an organised and efficient manner. These actions will include policy level institutionalisation and creation of national resources.

Capacity Building on DRR in Education

Ministry of Education and UNESO will provide trainings at different levels:

National level	→ Department of Basic Education officials
State / Division level	→ State / Division Education Officer (IS/AIS)
Township level	→ Township Education Officer / Assistant Township Education Officer (TEO / ATEO)
School level	→ Primary / Middle / High School Teachers, Principals and Students
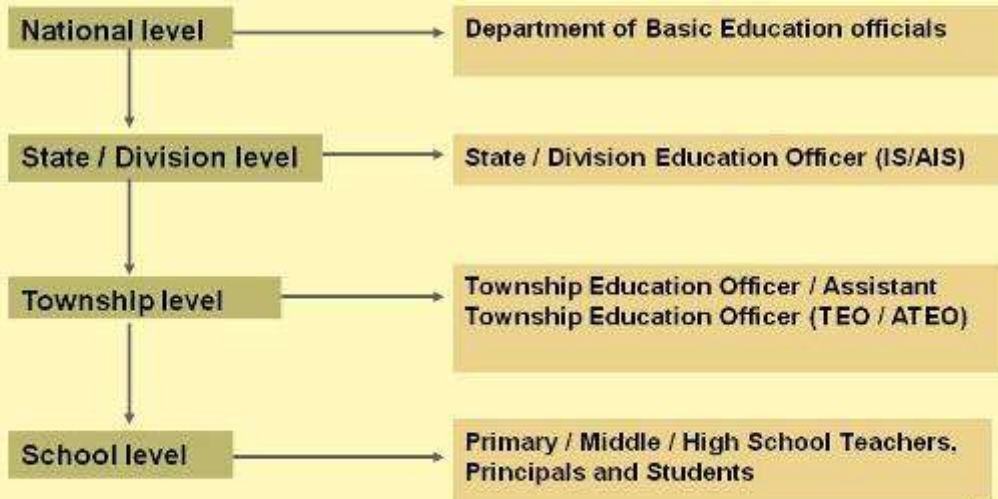
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The cascade model of training targets multiple levels of training groups, starting from training of trainers at the national level and rolling down to the school level, including national level officials, state and divisional level officials, township officials, principals, teachers and students as part of the package.

Multi level approach

Multi-Stakeholder:

Government
International Agencies
INGOs, NGOs
Technical and Research Centres
Academia
Industry and Private Sector
Media
Community

Multi-Sectoral:

Emergency Relief
Land, Development, Infrastructure
Economy and Livelihoods
Health
Education

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It is recommended to a multi-stakeholder and multi-sectoral approach to disaster risk reduction in education. Risk reduction is seen as a developmental subject rather than a disaster management one. As such, various stakeholders are seen as critical partners, and sectors related to development are also seen as important.

Public awareness, Education & Training

- Awareness through Disaster Safety Day
- National Public Awareness Programme
- Awareness through school and school curriculum
- Expansion plan for disaster management training
- Training for emergency preparedness and response at township level
- Enhancing training capacities
- Special awareness programme
- Establishment of National Disaster Management Training School, Myanmar
- Research and development in DRR
- Regional networking and knowledge sharing on DRR

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Public awreness, education and training has clearly identified sub-components that have strategic activities with a large outreach, collaborative actions that build local capacities and have impacts, as well as very specific activities that engage the community and target local action.

Assessment, Mobilisation and Planning

These are the three important steps for stakeholders at all levels to carry out – at division, township, village, school, classroom and family level.

1) Under assessment risks and capacities have to be assessed, so that gaps are known

2) Under mobilisation, the need to bring together materials and equipment, as well as people in the form of trained task forces is identified

3) Under planning, the sequence of events and detailed steps are identified that will lead to the deployment of mobilised resources effectively

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Essential components of a monitoring and evaluation system are identified here. These may be appropriately adapted for setting up a system specifically designed for implementation of the training and institutionalisation process.

Monitoring and Evaluation

"Monitoring and evaluation are two different, but related activities"

Monitoring: routine function carried out for the purpose of measuring whether activities are proceeding according to the plan

Evaluation: systematic and objective assessment of an ongoing or completed policy, program or project

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Monitoring is a routine function carried out for the purpose of measuring whether activities are proceeding according to the plan or in compliance with approved procedures or policies.

Evaluation is a systematic and objective assessment of an ongoing or completed policy, program or project that considers its design, implementation, and results.

Monitoring and Evaluation

For educational administration, the essential components of a monitoring and evaluation system are:

- Selection of indicators
- Collection of data concerning the indicators
- Data analysis
- Reporting/presentation of information
- Using the information to improve the work

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Essential components of a monitoring and evaluation system are identified here. These may be appropriately adapted for setting up a system specifically designed for implementation of the training and institutionalisation process. For instance,

1. An indicators for school attendace - 75%.
2. Data collection- Data obtained from Register A; Period Register, Monthly Register
3. Data Analysis- Students' attendance in Register; Cross verification of registers
4. Reporting- Submission of a report with suggestions to the Deputy Director General of Basic Education Department.
5. Improvement- Information given to schools under the administration of Basic Education Department for improvement.

Experiences

MYANMAR:

- UNESCO convened the Disaster Preparedness and Response Education (DPRE) Working Group in Myanmar.

- The DPRE Working Group formed to ensure that education response to disaster includes activities and systems that can help reduce risk, and mitigate the impacts of future disasters.

- In consultation with the Ministry of Education, DPRE Working Group prepared a disaster preparedness resource pack. 4000 resource packs already delivered to nearly 2000 schools in 9 townships: 8 severely affected townships in Ayeyarwady and Yangon Divisions and 1 township in Mandalay Division.

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UNESCO convened the **Disaster Preparedness and Response Education (DPRE)** working group in Myanmar, as a sub-working group of the Education cluster. DPRE was formed to ensure that education response to the disaster includes activities and systems that can help reduce risk, and mitigate the impacts of future disasters. In consultation with the Ministry of Education, DPRE has prepared a **disaster preparedness resource pack** that has five main components: Risk assessment, school disaster preparedness and response plans, drills and practices, teaching-learning materials, and recovery and support. About 4000 resource packs have already been delivered to schools in 9 townships- 8 townships in Ayeyarwady and Yangon Divisions and 1 from Mandalay Division. Training on how to use the resource materials was also conducted in the townships.

SRI LANKA:

- A Sector Wide Approach (SWAP) adopted by the Government to cover the entire education sector and include DRR as an extension of Tsunami recovery.
- Disaster Management and DRR incorporated in the form of limited modules in the curriculum of Universities including Colombo and Peradeniya

BANGLADESH:

- An integrated school education and mass education approach adopted for building community capacity on Disaster Management and DRR.
- A full fledged course on Disaster Management initiated at BRAC University
- Sisimpur – a tele series based non-formal education initiative on DRR

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Besides aligning with the local context, MERP has also examined lessons from international experiences and brought the benefit of these to the programme. Within the region, Sri Lanka, Bangladesh, India and Japan have done pioneering work on DRR in education. These are brought into the modules at appropriate places.

Linkage with HFA Priority 1

Ensure that disaster risk reduction is a national and local priority with a strong institutional basis for implementation.

Implementing Priority 1 in the education sector requires fostering political commitment and community participation in DRR, and developing or strengthening the institutional, legislative and operational mechanisms for disaster reduction. It involves integrating DRR into educational planning and decentralizing responsibilities where necessary. It also calls for assessing human and financial needs, and allocating the necessary resources.

Institutional arrangement for disaster management in Myanmar

The institutions responsible for the dissemination and implementation of disaster preparedness activities are:

- National Disaster Preparedness Central Committee (chairman: Prime Minister)

- National Disaster Preparedness Management Working Committee (chairman: Secretary of State 1, the State Peace and Development Council)

- Ten sub-committees

  1) Information and education

  2) Emergency communication

  3) Search and rescue

  4) Information of losses and emergency assistance

  5) Assessment of losses

  6) Transport and route clearance

  7) Emergency shelter provision

  8) Health care sub committee

  9) Rehabilitation and reconstruction

  10) Security

Post – Nargis Recovery and Preparedness Plan

Cyclone Nargis left almost 140,000 people dead and missing in the Delta. An estimated 2.4 million people lost, partially or completely, their homes, livelihoods and community structures. They have courageously begun to rebuild their lives with the help of local communities, the Government, and the support of the international community.

As immediate humanitarian needs are met and early recovery has been carried out, the focus now gradually shifts towards the medium-term recovery and the re-establishment of safe and sustainable lives and livelihoods. The Post-Nargis Recovery and Preparedness Plan (PONREPP) is a response to this progression, outlining an indicative three-year recovery plan which takes a people-centred approach of promoting productive lives, healthy lives, and protected lives. The PONREPP draws on the PONJA, the first Periodic Review of the cyclone-affected communities undertaken in October-November 2008, and the initial findings of the Social Impacts Monitoring study.

The PONREPP proposes a three-year medium-term recovery plan, from January 2009 through December 2011. In doing so, it recognizes the need for a gradual transition from emergency relief and early recovery (the basis of the UN Revised Appeal) toward medium-term recovery. The PONREPP was developed jointly by the international community, the ASEAN, and the Government of the Union of Myanmar, drawing to the greatest extent possible on the views and experiences of affected communities.

With reference to the education sector, the PONREPP prescribes a sectoral plan. A total of 302 high schools, 349 middle schools and 3,261 primary schools were destroyed or damaged with an estimated loss in value of K116 billion and a further 2,403 administrative building and offices, as well as 602 tertiary education buildings, were also damaged. As of November, 952 buildings have been repaired, 358 are in the process of being repaired, and 1,695 still await construction. To minimise interruption and to allow examinations to proceed, temporary shelters have been built for 360,000 students and school books, uniforms, and furniture have been supplied. In reconstructing totally destroyed school buildings, the Government plans to make them storm resistant as appropriate and necessary, depending on specific conditions prevailing in each village. In addition, an extensive programme of repairs, renovation, restocking and upgrading will be carried out with respect to thousands of schools that were damaged by the storm.

During the emergency relief phase, the education sector focused on re-establishing access to formal and non-formal education through repairing damaged schools, providing temporary safe learning spaces, and distributing education materials including essential learning kits, school-in-a-box, teacher kits, textbooks, furniture and blackboards. An estimated 504,000 children have benefited from the education humanitarian response – about one third of the total number of children enrolled in primary and secondary schools, or just over half of the students affected by the cyclone.20 This was instrumental in ensuring that teaching and learning were able to continue with minimal disruption and in acceptable, safe conditions.

The core objectives of the proposed programme are to ensure: (i) restoration of the primary school system, enrolments and to improve retention rates through reconstruction of schools, improving quality of the learning environment (as a mechanism to ultimately improve learning outcomes) and reducing the costs of school for vulnerable families; (ii) reconstruction of destroyed and damaged middle and high schools; and (iii) restoration and enhancement of important early childhood, non- formal and vocational education programmes.

This will involve: (i) comprehensive township plans; and (ii) design and implementation of ways to reduce school attendance costs (e.g., supply of textbooks and school materials and develop subsidized school attendance for families whose incomes have been severely affected by cyclone). The affordability of schooling needs to be addressed as a matter of urgency if enrolment and retention objectives are to be met.

Monitoring and Evaluation:

Monitoring and evaluation are two different, but related activities. **Monitoring** is a routine function that is carried out for the purpose of measuring whether activities are proceeding according to the plan or in compliance with approved procedures or policies. It is performed to ensure that any events or actions which are not according to policy or plan are fully understood and communicated to those in a position to take corrective action if needed. As district managers it is your responsibility to take such action in order to improve the quality of education in your districts. The monitoring function is an ongoing activity and involves multiple aspects including monitoring of:

- School and district administration
- Human resources
- Instructional quality

- School and district finances (this last point will be covered separately in the Financial
- Management workshop)

Monitoring includes inspection and supervision. Monitoring includes both process monitoring and impact monitoring. Process monitoring looks at the use of resources, the progress of activities and the way they are conducted. Impact monitoring looks at the impact the program or activities are having in relation to set objectives. It is the means by which:

- The work can be related to its overall purpose on a continuous basis in order to provide a measure of progress.
- The work can be modified in response to changing circumstances without losing the overall direction.
- The need to change objectives can be identified.
- The need for further information or research can be identified.
- The assumption that the activities will help achieve the stated objectives can be verified.

Evaluation is a systematic and objective assessment of an ongoing or completed policy, program or project that considers its design, implementation, and results. It is done to determine:

- The relevance and achievement of its objectives
- Its developmental effectiveness, efficiency, impact and sustainability

Each of these activities – monitoring and evaluation – depends upon the findings of the other. Monitoring produces information which is consequently used for evaluation purposes. As well, the findings of the evaluation are fed back into the program design process, which generates new or modified activities that must be monitored. Where the two activities are, perhaps, most closely related is the emphasis each has on determining impact and accountability.

Exercise 1

Instructions:

- There are many kinds of disasters that occur in the region. Some of these are very probable while some are less probable. Similarly, some cause great damages, while some have low impacts. Use the format given below to identify the disasters according to their probability and impact in the area you live.

- You can use the list of indicative disasters given below the format, and you can add to these if necessary. This exercise is based on your joint perception.

Probability of events	Very Probable				
	Probable				
	Less Probable				
	Improbable	Unimportant	Limited	Serious	Very Serious
Consequences of events					

List of Disasters:

Water and Climate related disasters

Floods

Cyclones

Tornadoes

Sea Erosion

Cloud Burst

Heat Wave and Cold Wave

Snow Avalanches

Hailstorm

Droughts

Thunder & Lightning

Geological disasters

Landslides and Mudflows

Earthquakes

Tsunamis

Dam Failures/ Dam Bursts

Mine Fires

Chemical, Industrial & Nuclear disasters

Chemical and Industrial Disasters

Nuclear risk from region

Accident related disasters

Forest Fires

Urban Fires

Oil Spill

Major Building Collapse

Bomb Blasts

Festival related disasters

Electrical Disasters & Fires

Air, Road and Rail Accidents

Boat Capsizing

Village Fire

Biological disasters

Biological Disasters and Epidemics

Pest Attacks

Cattle Epidemics

Food Poisoning

Exercise 2

Instructions:

- Form yourself into four groups based on the stakeholder type, and pick up flipchart papers and markers for the exercise.
- Use the format given for the purpose of carrying out this exercise.
- Keeping the education sector into perspective, list down the stakeholders. You can use the sample stakeholders given at the bottom of the format.
- Now corresponding to each stakeholder, what does the group thinks about the primary responsibility of each stakeholder in the risk reduction process of education sector? Make a list of these responsibilities. You can use the sample activities given at the bottom of the format, and add more of your own if necessary.
- If any data / information is not available, you may make appropriate assumptions.
- This exercise would bring forth the expectations of the group from each stakeholder in the risk reduction process.

Stakeholders	Activities		
	Assessment	Mobilisation	Planning

List of Stakeholders:

Division / State:

- State Education Officer / Division Education Officer

Township:
- Township Education Officer
- Assistant Township Education Officer
- Township Peace and Development Council

Village:
- Parents Teachers Association (PTA)
- Community leaders
- Local NGO representatives

Schools:
- Principals
- Teachers
- Students
- Administrative staff

**List of Activities:**

Assessment:
- Identification of hazards and vulnerabilities in the area
- Risk mapping of township
- Assessment in classroom
- Safety assessment of school building
- Identification of capacities at neighbourhood level
- Assessment of infrastructure risk
- Identification of seasons of specific hazards

Mobilisation:
- Formation of disaster management task forces in villages
- Installation of fire extinguishers or sand buckets in school
- Allocation of responsibilities in PTA
- Formation of school task forces
- Emergency response equipment at township level – fire, medical
- Search and rescue training
- Fire fighting training
- First aid training
- First aid kits

Planning:
- School disaster management plans
- Family disaster management plans
- Township disaster management plan
- Village contingency planning
- Compilation of directory of important emergency contacts
- Keeping stockpiles of emergency items during particular hazard seasons

SOURCES OF INFORMATION
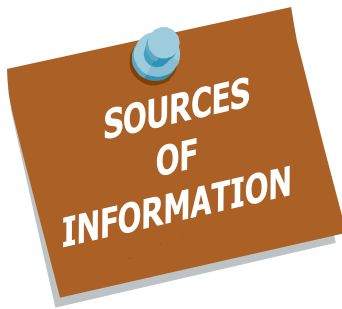
- Asian Disaster Preparedness Centre. Institutional arrangement for disaster management in Myanmar, 2009
- Ministry of Social Welfare, Relief and Resettlement. Myanmar Action Plan on disaster risk reduction (MAPDRR) 2009-2015, July 2009
- Tripartite Core Group. *Post - Nargis Joint Assessment*, July 2008
- Tripartite Core Group. Post - Nargis Recovery ad Preparedness Plan, December 2008
- Tripartite Core Group. *Post - Nargis periodic review* I, December 2008
- Tripartite Core Group. Post - Nargis social impacts monitoring, 2009
- United Nations.Myanmar Revised Appeal - Cyclone Nargis Response Plan, 2008
- United Nations. Myanmar Revised Appeal - Cyclone Nargis Response Projects, 2008
- United Nations International Strategy for Disaster Reduction (UN/ISDR). *Living with Risk: A global review of disaster reduction initiatives*, Geneva, 2004
- Ya Min Thant, Mamoru Kanzaki, Maung Maung Than. Mitigating effects of forests on human mortality in Myanmar during Cyclone Nargis (n.d.)

1. INSTITUTIONAL ARRANGEMENT FOR DISASTER MANAGEMENT

Myanmar has a formal institutional structure for disaster management. The apex body is the National Disaster Preparedness Central Committee chaired by the Prime Minister and Information and Education constitutes part of one of the sub-committee.

2. INSTITUTIONAL TASKS

Institutional tasks at the township level are suggested in this module which comprises of tasks like developing a local strategy and action plan, and creating a pool of trainers

3. MONITORING AND EVALUATION

Monitoring and evaluation are different but related activities. It is essential for educational administration to constantly monitor and evaluate its system.
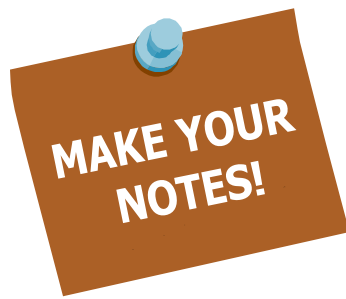
Exercise 1

Probability of events					
	Very Probable			Urban fires Road accidents	
	Probable				Floods
	Less Probable		Thunder and lightning		
	Improbable				Tsunami
		Unimportant	Limited	Serious	Very Serious
	Consequences of events				

Exercise 2

Stakeholders	Activities		
	Assessment	Mobilisation	Planning
Village: Parents Teachers Association Community leaders Local NGO representatives	Identify the risks present around the schools	Generate emergency and contingency funds	Establish Village Disaster Task Forces
Schools: Principals Teachers Students Administrative staff	Safety assessment of school buildings and classrooms	Awareness camps for students and teachers	Training for task forces Conduct regular mock drills
Township: Township Education Officers Assistant Township Education Officers	Risk mapping of township	Emergency response equipments at township level	Township disaster management plan