Trainers' Manual

Disaster Risk Management for District Authorities

National Disaster Management Authority

(Trainers' Manual)

Disaster Risk Management for District Authorities

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Disaster Risk Management for District Authorities

Building Enabling Governance and Institutions for Earthquake Response
(BEGIN-ER)

Foreword

Pakistan has witnessed at least 139 major disasters over the last 80 years, including floods, drought, landslides, cyclones, river and sea erosion, and earthquakes. In fact, Pakistan is the fifth most earthquake-prone country in the world. Pakistan is also exposed to man-made hazards such as internal conflicts, environmental pollution, fires, leakage of toxic gases, and progressive environmental degradation due to industrial development and expansion across the country.

In the wake of the devastating earthquake of October, 2005, the government institutions at all levels were unable to respond in an effective and coordinated manner, largely due to the lack of technical capacities of forecasting, responding, and managing such disasters. Nonetheless, the compassionate and collective national response during the emergency phase was tremendous.

In this backdrop and as part of the joint UN earthquake response, the United Nations Development Programme (UNDP) supported the Government in restoring the operations of local government institutions for the planning and implementation of recovery activities through the Building Enabling Governance and Institutions for Earthquake Response (BEGIN-ER) project. In this project, capacities of elected local representatives, government officials and community-based organizations are to be strengthened in disaster risk management through district-level training workshops in the affected areas of North West Frontier Province (NWPP) and Pakistan Administered Kashmir (P AK).

After the establishment of the National Disaster Management Authority (NDMA) through the National Disaster Management Ordinance in December 2006, UNDP supported the NDMA in putting together its efforts in developing separate Trainer's Manuals and Participants' Workbooks both in English and Urdu languages on Disaster Risk Management for local communities and district government authorities.

I am pleased to present to you these Manuals and Workbooks with the hope that the government officials and local communities in hazard prone areas of the country would augment their technical capacities to minimize risks related to disasters and to help create a safer Pakistan.

I would like to thank our consultants Ms. Marita C. Santos, Ms. Mariser Palencia, Ms. Vidya Rana, and Mr. Abdul Hameed for developing the Manuals and Workbooks. I am indebted to Mr. Mohammad Zafar Iqbal, Assistant Resident Representative, UNDP,

for taking this much needed initiative. Special thanks are due to Mr. Zubair Murshed, Mr. Irfan Maqbool and Mr. Usman Qazi for their untiring efforts during the whole process of developing the outlines, conducting the review sessions, and doing the final editing of all the documents. Mr. Tariq Rafique Khan and Ms. Shaista Hussain deserve special applause for the support they extended to the training team. I am also grateful to Mr. Anwar ul Haq and Mr. Shahid Aziz for organizing training needs assessment sessions with government officials and civil society representatives in Abbottabad and Muzaffarabad respectively.

I am optimistic that under the new leadership of NDMA, the capacity building programme for district government officers, elected representatives, and community based organizations would bring about a significant change in the area of disaster risk management.

Mikiko Tanaka
Acting Country Director
UNDP Islamabad

Message from the Chairman
National Disaster Management Authority

One of the most important lessons learnt from the response to October 2005 earthquake has been the need for formulating an appropriate policy and developing institutional arrangements for disaster risk management in order to deal with any future disaster events in a more professional, organized, and effective manner.

Realizing the significance of this requirement, the Government of Pakistan has established a number of institutions at the national, provincial and district levels. They include: National Disaster Management Commission (NDMC), National Disaster Management Authority (NDMA), Provincial Disaster Management Commissions, Provincial Disaster Management Authorities and the District Disaster Management Authorities. The National Disaster Management Ordinance, which was originally issued by the President's Office on 21st December 2006, provides justification for the establishment of above-mentioned institutions.

Another point of concern emerged during the response activities was the lack of technical capacities on the part of local-level stakeholders, which specifically include the district government institutions. It is believed that a trained human resource could have saved more lives during the search and rescue operation undertaken by the local communities and various government departments in the earthquake-hit areas.

In view of these issues, lessons and priorities the National Disaster Management Authority (NDMA) puts the premium upon the establishment of proactive and useful District Disaster Management Authorities with a substantive focus on building their technical and physical capacities. In this regard, the NDMA with support from the United Nations Development Programme (UNDP) has produced the Trainers' Manuals and Participants' Workbooks for the district government officials and other stakeholders. The idea is to promote common approaches for disaster risk management across the country.

The provincial governments, NGOs and other stakeholders can use these Manuals in order to train the district officials who are involved in the establishment and management of the District Disaster Management Authorities. The Participants' Workbook can serve as a guide for DDMA officials in understanding and implementing disaster risk management strategies at the district level.

The NDMA is circulating these manuals and workbooks to all district officials including the Nazims, District Coordination Officers (DCOs), Deputy Commissioners (in AJ&K)

and Executive District Officers (EDOs) of all line agencies. I hope you will find these publications useful for working with DDMAs in your respective regions. For broader public information, the manuals can also be downloaded from http://www.ndma.gov.pk

Lt. Gen. Farooq A. Khan
Chairman
National Disaster Management Authority (NDMA)

How to use the manual?

This trainers' manual is designed to respond to the needs of trainers who are conducting training workshops on disaster risk management for the district government officials. The structure of the manual is as follows:

Module 0 contains the activities to formally open the training-workshop. It includes the opening program, introduction of participants, expectations from the participants, discussion of the training design, course objectives and programme, schedule, and setting the technical arrangements.

Module 1 describes the disaster management experiences in the community and relates them to the national disaster situation. It also explains the concepts and approaches in disaster risk management.

Module 2 explains the local government system, public departments, structure, roles and responsibilities in areas of disaster management, as provided under the Local Government Ordinance 2001 and the National Disaster Risk Management Framework.

Module 3 introduces the process and tools in conducting participatory risk assessment, which includes hazard assessment, vulnerability assessment, capacity assessment, and people's perceptions of disaster risk. A fieldwork on community risk assessment is also part of this module.

Module 4 explains the importance of risk reduction measures for earthquake, landslide, flood, drought and cyclone, and disaster risk management activities in the district.

Module 5 discusses the importance and process involved in developing a disaster risk management plan at the district level.

Each module and session consists of the following parts:

Modular Objectives 	Explains what the module aims to achieve
Session Objectives 	Explains what the session aims to achieve
Key Notes 	Provides a brief definition of concepts
Methods 	Describes the training methods to be used
Process 	Explains the steps in discussing the topics
Duration 	Indicates the amount of time required in conducting each session
Tips to Facilitator 	Provides useful ideas, suggestions and other learning experiences
Materials Needed 	Lists down the materials and equipment necessary to conduct the session
References 	Indicates the sources of information/data used

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Opening Activities

Objectives:

1. Formally open the training;
2. Introduce the participants and facilitators to each other;
3. Clarify expectations of the participants;
4. Unite on the training objectives and program of activities; and
5. Set technical arrangements such as schedule, formation of host teams, house rules, etc.

Opening Activities:

1. Opening speech
2. Introduction of participants and facilitators
3. Expectation check
4. Orientation on Training Design – objectives, content, methods, schedule
5. Contracting (Do's and Don'ts) and technical arrangements

Methods:

- Games & Exercises (suggestions presented below)

Process:

Ways of participants' introduction and expectation check:

Participants' Introduction

1. Participants draw self-portraits, write their names on the portraits and explain their drawing to the group.

2. For Participants who do not know each other: You can do a "find the missing part". Give them a portion of a shape (e.i. heart, circle, square, diamond, etc), cut the whole shape into 3 or 4 then distribute it to the participants. Let the participants look for their missing part. When they find all their missing part in a shape, they will introduce themselves with the other parts of the shape. Then someone from the group will introduce others in the entire group in the training room.

   or

3. Have participants make their own name tags using colored paper or meta cards. Each participant will then explain why he/she chose the shape or color.

Expectation Check

"Bus Stop". Prepare 4 sheets of brown paper for each of the following questions:

- Bus Stop 1: What do you expect from the training?
- Bus Stop 2: What can facilitate your learning and active participation?
- Bus Stop 3: What can hinder your learning and active participation?
- Bus Stop 4: What can you contribute to the success of the training?

- Post the sheets of brown paper around the room as Bus Stops 1, 2, 3 and 4 or particular places which are usually used as bus stops in the community.

- Divide the Participants into 4 groups. Ask participants to put their answers on the papers. Assign a sequence for discussion, as Bus Stops (BS) 1234, BS 2341, BS 3412, BS 4123.

- Discuss and summarize the expectations of the participants. Compare the expectations with the training objectives, contents, methods and schedule. Run through what expectations can be covered by the training and what is not within the scope of the training. Make a contract with the participants on the "Do's" and "Don'ts" to facilitate sharing and learning.

- Make adjustments to the prepared Training Design as necessary, based on the results of the Expectation Check.

- "Board Work". For the same questions as in number 1, ask participants to write their answers on colored paper or meta cards. Use one color for each question.

- Ask participants to post their answers to each question on the board or wall.

Discuss answers and relate to the Training Design as in number 1.

4. A ball of paper (or small ball or orange) is thrown to each participant in the circle who introduces him/herself and answers the same questions as in No. 1. The facilitator takes notes of the expectations on the board. When all participants are finished, the facilitator discusses the answers and relates to the Training Design as in number 1.

5. The participants add phrases to finish the sentence as follows:
   - I want to improve my knowledge, skills, attitude on _____
   - I will contribute my _____ (knowledge, time, skills, attention, etc.) to make this training successful.
   - I want my co-participants to be _____ to make this training fruitful and successful.
   - I will learn better and participate well in this training, if the facilitator will use the following methods and approaches _____.

6. The answers can be put on meta-cards or presented by team and the Facilitator collates the answers on the board then discusses the answers and relates to the Training Design as in No.1.

Duration : 2 Hours

Tips to Facilitator:

1. The training course is designed for 5 days with 5 modules, excluding Opening and Closing Activities. The training activities can be conducted in the district, where training facilities are available.

2. There should be at least 2 participants from each line agency to participate. It is ideal if all line agencies have a representative in the training

3. Specific objectives indicate the expected outputs for each session. Each session contributes to attainment of each Modular Objective, as contained in the Training Design.

4. In choosing ice breakers, games and exercises to use, facilitators must be sensitive to age, gender and cultural considerations. Various games and exercises are suggested which can be used by the facilitators to introduce sessions or provide ice breakers. Adapt each one to participants' characteristics, experiences and interests, while creating your own set.

5. While the first part of the Opening Activities can be formal with district officials giving messages, it is important to establish an atmosphere of openness and trust among the participants and facilitators at the outset, to have an environment conducive to sharing and learning.

6. If people listen to the information, they remember only 20% of what they hear. If they only look at the information, they remember about 30%. If they combine listening and looking, they remember about 40 to 50%. If they also talk about what they hear and see, they remember 70%. And best of all, if they also use what they have learned, they will remember 90% of it.

Materials Needed:

- Name tags
- Opening programme
- Training design & program of activities
- Easel paper
- Meta cards, colored paper
- Colored marking pens
- Different shapes of paper (heart, diamond, square, circle, etc)

References:

1. Participatory Learning & Action: A Trainer's Guide by J.Pretty et al, 1995.
2. Training for Transformation: A Handbook for Community Workers Book 2 by Hope and Timmel, 1986.
3. Creative Training, International Rural Reconstruction Movement, VSO and PEPE.

Training Design and Programme

Disaster Risk Management Training for District Authorities

General Objective:

The training aims to equip the participants with the knowledge, skills and attitudes in disaster risk management.

Specific Objectives:

At the end of the five day training, the participants should be able to:

1. Define disaster, hazard, vulnerabilities, capacities, disaster, disaster risk reduction, elements at risk;
2. Explain disaster risk management and the Community Based Disaster Risk Management Approach;
3. Explain the district disaster management system and the responsibilities of the District Disaster Management Authority;
4. Understand legal basis for national, provincial and district level DRM under the National Disaster Risk Management Framework;
5. Demonstrate skills in disaster preparedness and mitigation;
6. Demonstrate skills in emergency response; and
7. Demonstrate skills in formulating the district disaster risk management plan.

Schedules and Design

Date/Day	Topic/Activity	Methodologies	Key Persons
Day 1	**Module 0 : Opening Activities** Registration Welcome Remarks Expectation Check Course Overview Technical Arrangement	Game Presentation	Facilitator
	Module 1: Disaster Situation and Disaster Management at the District Level • Basic Concepts (Hazard, Vulnerability, Capacity, etc.) • District Disaster Situation and Disaster Risk Management	Interactive Lecture Workshop/Group Work & Reporting	Facilitator Facilitator / Participants
Day 2	**Module 2: District Disaster Risk Management Framework** • Structures for Disaster Risk Management • Roles and Responsibilities of Key Stakeholders • Local Government System and opportunities for Disaster Preparedness and Mitigation	Lecture Workshop/Group Work & Reporting Interactive Lecture	Facilitators Facilitator / Participants Facilitator/ Participants
	Module 3: Participatory Risk Assessment • Introduction of Risk Assessment • Hazard Assessment • Vulnerability & Capacity Assessment	Interactive Lectures Lecture / Group Work	Facilitator Facilitator & Participants

Date/Day	Topic/Activity	Methodologies	Key Persons
Day 3	**Continuation of Module 3** • **Field Work** **Module 4: Risk Reduction Measures for Earthquake, Landslide, Floods, Drought & Cyclone** • Introduction to Risk Reduction Measures • Disaster Mitigation & Preparedness for: a. Earthquake b. Landslide c. Flood d. Drought e. Cyclone	Actual Data Gathering Interactive Lecture / Discussion	Participants Facilitator
Day 4	Continuation of **Module 4** • Public Awareness • Early Warning System & Evacuation • Emergency Response	Interactive Lecture Games / Interactive Lecture Interactive Lecture	Participants / Facilitator Facilitator Facilitator / Participants Facilitator
Day 5	**Module 5: Disaster Risk Management Plan at District Level** • Process Involved in Disaster Risk Management Planning • Actual Planning **Closing Activities** • Evaluation • Distribution of Certificates	Interactive Lecture Group Work / Workshop	Facilitator / Participants

Facilitating a positive setting during the training:

- Provide learning objectives and an agenda
- Establish ground rules or group guidelines
- Provide comfortable seating and a place for participants' materials
- Ensure the room temperature is comfortable
- Use fan-type or u-shape seating to allow for interaction, easy viewing of audio-visuals, and application of group work
- Incorporate various delivery methods and minimize overuse of media
- Actively involve learners – use case studies, role-plays, games, brainstorming, exercises, participatory discussion, simulations
- Allow for periodic breaks, adhere to start and end times
- Acknowledge all responses and contributions
- Reinforce positive behaviors
- Value diversity

Tasks of Daily Management Teams

The Daily Management Team (or Host Team) is a group of participants that assumes responsibility to assist the Facilitators / Trainers in the daily management of the training with the following tasks:

1. Act as timekeeper for start and end of sessions
2. Provide ice breakers and energizers
3. Distribute Hand-outs
4. Assist Facilitator in posting visuals and cleaning the boards
5. Start daily activities with an invocation, recap of the previous day's sessions and announcements
6. Gather feedback and suggestions from participants and share these with Facilitators or Organizing Group of the training
7. Ensure order and cleanliness of classroom

Other tasks which may be given to daily management teams as necessary:

1. Make arrangements for Solidarity Night
2. Make arrangements for Closing Programme
3. Acknowledge guests and thanking Facilitators and the Organizing Group on behalf of the participants

Disaster Situation and Disaster Risk Management at the District Level

Modular Objectives:

1. Explain concepts of hazard, disaster, disaster risk, vulnerability, capacity and disaster risk reduction / management;
2. Explain the importance, features, process and key stakeholders to be involved in disaster risk management; and
3. Relate disasters and disaster management experiences (individual, family, community, organization / institution) to the district disaster situation.

Number of Sessions: 2

Session 1 – Concepts of hazard, vulnerability, capacity, disaster, risk, disaster risk reduction and CBDRM

Session 2 – District Disaster Situation and Disaster Risk Management

Duration : 4 Hours

Session-1

Basic Concepts

Learning Objectives:

1. Understand the concepts of hazard, vulnerability, capacity, disaster, risk, disaster risk reduction;
2. Understand the importance of Community Based Disaster Risk Management as an approach; and
3. Identify various activities before, during and after the disaster.

Key Concepts:

- Hazard
- Vulnerability
- Capacity
- Disaster
- Disaster Risk
- Disaster Management
- Community Based Disaster Risk Management

Methods:

- Interactive Lectures

Process:

1. Introduce the session and its specific objectives.
2. Ask the participants of their own perception of hazard. Write down all their possible answer on the board, and then present to them the definition of hazard.

Hazard:

Hazard is a phenomena, event, occurrence or human activity which has the potential for causing injury to life or damage to property and the environment. A disaster occurs when a hazard strikes a vulnerable area or community with low capacity resulting in damages, loss and disruption in functioning of daily life activities.

Types of Hazards:

- Natural hazards – Induced by nature such as: Earthquakes, Cyclones, Drought, Tsunami, etc.
- Man-made hazards – Induced by human beings such as: Fire, War/Armed Conflict, Terrorism, Oil Spill, Pollution, Leakage of Toxic Waste, etc.
- Combination of both Natural & Human Made – such as landslides (due to severe rain and cutting of trees in the forest).

3. Ask participants what is their understanding of vulnerability? Write down their answers on the board. Present the definition of vulnerability.

Vulnerability:
Vulnerability is a set of prevailing factors, conditions and weaknesses which adversely affects the ability of individuals, households, organizations and the community to prepare for, respond to and recover from disasters.

4. Ask participants what is their understanding of Capacity? Write down their answers on the board. Present the definition of capacity.

Capacity:
Capacities are knowledge, skills, resources, abilities and strengths present in individuals, households, organizations and the community, which enable them to cope with, withstand, prepare for, prevent, mitigate or recover from a disaster.

5. After giving the definition of hazard, vulnerability and capacity, ask participant what is their opinion or definition of Disaster?

Disaster:
- Disaster occurs when a hazard impacts on or strikes a vulnerable community with low capacity resulting in damages, loss and serious disruption of community's functioning.
- The hazard is not a disaster unless it strikes the vulnerable community whose capacity is not enough to cope, thus, it will become disaster.

$$\text{Disaster} = \frac{\text{Hazard x (+) Vulnerability}}{\text{Capacity}}$$

6. Ask participants of their understanding about Disaster Risk, get their answers, and define disaster risk.

Disaster Risk:
Disaster Risk is the likelihood or probability of individuals, households and community suffering

Note:

What we manage now is not the disaster but the disaster risk or the probability of community suffering damage or loss. The higher the vulnerability the lesser the capacity and the disaster risk is also higher. But even if there's a hazard since it is always there especially the natural form (Earthquake, Drought, Cyclone) as long as the vulnerability is less and the capacity is bigger then chances are that the disaster risk is small.

$$DR \Longrightarrow \frac{\text{Hazard x Vulnerability}}{\text{Capacity}}$$

7. What must be done in order for us to manage the disaster or reduce the risk?

Disaster Risk Management:
- Range of activities designed to maintain control over disaster and emergency situations and

to provide a framework for helping at risk persons avoid or recover from the impact of the disaster.

- A collective term for all activities that contribute to increasing capacities and will lead to reducing immediate and long-term vulnerabilities. It covers activities before, during and after a disaster.

8. What are the objectives of disaster risk management?

a. To increase capacities
b. To reduce vulnerabilities
c. To avoid or reduce human, physical and economic losses
d. To speed up recovery
e. To provide protection to refugees or displaced persons

9. What are the disaster risk management activities?

A. Preparedness

Some examples of preparedness activities:

- Disaster preparedness training
- Hazard monitoring
- Early warning system
- Public awareness
- Evacuation to safe evacuation center
- Evacuation drill
- Stockpiling
- Contingency planning
- Emergency response training
- First aid training
- Organizing disaster volunteer teams
- Strengthening organization and institutional arrangements
- Logistics support such as communication equipment, warehouse, transportation
- Networking and coordination

B. Prevention (Human-induced disasters)

Some examples of prevention activities:

- Safety regulations and measures (Land use Planning / Zoning)
- Agrarian reforms
- Peace building and conflict resolution

C. Mitigation (Structural & Non-Structural Measures)

Some examples of structural measures:

- Dikes
- Dams
- Sea wall
- Safe building construction

- Retrofitting/strengthening of buildings

Some examples of non-structural measures:

- Risk assessment
- Risk reduction planning
- Safe building codes / land use planning
- Strengthening food and livelihood security
- Strengthening health and nutrition
- Reforestation
- Environmental protection and management
- Poverty reduction programs
- Micro-finance
- Insurance
- Enabling legislation
- Advocacy

D. Emergency Responses

Some activities for emergency response:

- Search and rescue
- First aid
- Damage needs/capacity assessment
- Evacuation center management
- Medical services
- Relief
- Psychosocial services
- Safe drinking water
- Immediate repair of critical facilities such as electricity potable water supply, communication and connecting bridges and connecting roads.
- Coordination and networking

E. Recovery / Rehabilitation

Some examples of recovery activities:

- Clearing of debris
- Repair of damaged houses and community facilities
- Relocation
- Livelihood assistance such as seeds and animal dispersal
- Health and sanitation such as provision of water pumps
- Training of community health workers/herbal gardens,
- Reconstruction of structures and the economy especially after earthquake, landslide, flood, cyclone and drought

10. Community Based Disaster Risk Management is an approach in disaster risk management.

The importance of involving members of targeted communities and their knowledge in the actions and discussions around risk reduction has become widely accepted. It is now time to implement programs that are truly participatory and that work towards fundamental empowerment of people and communities who are most at risk.

Astrid von Kotze

11. What is Community Based Disaster Risk Management (CBDRM) approach?

Activities, measures, projects and programs to reduce disaster risks are primarily designed by people living in high risk communities, and are based on their urgent felt needs and capacities.

A. What is the CBDRM process and how to do it?

- Initiating the process - selecting the community or community asks for assistance how to have CBDM; building rapport.
- Community profiling - initial understanding of the community situation and an orientation on CBDRM.
- Community risk assessment - hazards, vulnerabilities and capacities assessment and consideration of people's different perceptions of risks.
- Community disaster (risk) management plan - appropriate and do-able measures before, during and after the disaster; focus on prevention, mitigation and preparedness measures; short, medium, and long-term disaster management activities.
- Organizing & strengthening community DRM organization - ensures implementation of Community Disaster Management Plan.
- Community managed implementation - implementation of short, medium, and long-term measures to reduce vulnerability and increase capacity; structural and non-structural measures.
- Monitoring and evaluation - continuous improvement of CBDRM.

B. What are the features of CBDRM?

- People's participation – community as the main actor and propeller; directly shares the benefits of risk reduction and development
- Priority for the most vulnerable - children, women, elderly, farmers and fisher folk, urban poor
- Recognizes existing capacities and survival/coping strategies
- Risk reduction measures are community specific - based on analysis of the community's disaster risk
- Aim of CBDRM – reduce vulnerabilities and increase capacities
- Goal - building safe, disaster resilient and developed communities

C. What are the principles of CBDRM?

- Participatory process and content
- Responsive - based on the community's felt and urgent needs
- Integrated-DM activities before, during and after disaster; linkages with other communities and the various levels of disaster management system
- Proactive - stress on prevention, mitigation and preparedness
- Comprehensive- structural and non-structural risk reduction measures; mix of short-, medium-, and long-term measures to address vulnerabilities
- Multi-sectoral and multi-disciplinary-considers roles of all stakeholders; combines local knowledge and resources with science and technology and support from outsiders
- Empowering people's options and capacities are increased; more access to basic social services; more control over the natural and physical environment; builds confidence to participate in other development endeavors
- Developmental - community development gains are protected; measures to address vulnerabilities are opportunities for development

12. Summarize the session and open the floor for questions, clarifications.

Duration : 1.5 Hours

Tips to Facilitator:

- For the concepts of hazard, vulnerability, capacity, disaster and disaster risk as well as for disaster management activities in the pre, during, and post-disaster period, present examples and cite experiences.

Materials Needed:

- Cut outs of different hazards
- Power point presentation

References:

1. Handouts on Training of Trainers in CBDRM, Thaubang District, Myanmar December 16-21, 2004. Conducted by Center for Disaster Preparedness, Inc.

2. Citizenry-Based Development Oriented Disaster Response, Annelies Heijmans & Lorna P. Victoria.

3. Introduction To Disaster Preparedness: Disaster Preparedness Training Programme, International Federation of Red Cross and Red Crescent Societies.

4. Field Practitioners' Handbook, Imelda Abarquez & Zubair Murshed, ADPC, 2004.

Session-2

District Disaster Situation and Disaster Risk Management

Learning Objectives:

1. To share the experiences and lessons learnt from the past disaster experiences in their respective districts; and
2. Relate disasters and disaster management experiences (individual, family, community, organization /institution) to district disaster situation.

Key Concepts:

- District Disaster Situation (Current)
- Disaster Experiences (Past)
- Pakistan Disaster Situation

Methods:

- Group work
- Presentation and plenary
- "Gallery"
- Paste ups
- Discussion

Process

1. Introduce the module and its overall objectives to the participants.
2. Introduce the first session and its primary objectives.
3. Explain that this session is mainly a group work, discussion and presentation and synthesis. Encourage active participation.
4. Constitute 4-5 groups, with 5 members in each group with a facilitator, documenter and reporter.
5. Issues for discussion:

   a. **Discussion on the district profile, for example:**
   - Geophysical / physical characteristics
   - Population
   - Culture and values
   - Economy / livelihood
   - General health conditions
   - Base map of the district

   b. **District Disaster Situation:**
   - Kinds of disasters the district has experienced in the past
   - When? Where?
   - Intensity in terms of losses
   - Details of damages (human/material)

- The victims?
- Current hazards/dangers
- Current level of disaster preparedness in the district
- List of agencies or district departments that assist community in disasters/emergencies

6. Group Work Presentation:

   Each group should present the result of the discussion in detailed manner, like:
   a. District base map should clearly show details of areas, facilities and families affected by disasters
   b. The level of disaster preparedness and response of the district authorities and line departments
   c. Chronology of disasters (major/minor)
   d. Indicators of major and minor disasters.
   e. Seasonal calendar showing periodic hazards and disasters (like floods/cyclones)

7. After the presentation of each group, leave the forum for open discussion on the presentation and add more details if necessary.
8. More details will be added to the community disaster situation during the discussion in module 3 on participatory risk assessment.
9. Facilitator to present the disaster situation of the district and Pakistan based upon analysis from secondary data.
10. Gallery: Gather 10 to 20 pictures and news clippings of disasters that occurred at various places in Pakistan. Put these on a clothesline or paste them on the walls. Ask the participants to view the exhibition.

11. Ask the participants about their observations:
    - What types of disasters strike the country?
    - What are the damages?
    - Who are affected?
    - What are the causes?
    - What disaster preparedness, emergency responses and recovery activities were undertaken?

12. Summarize the district and Pakistan disaster situation through a brief lecture that highlights the provincial, district and community disaster situation. For the district situation, facilitator can develop a short presentation through analysis of secondary data on disasters in the district.

    ❖ Pakistan is vulnerable to a wide array of natural and human induced hazards. Natural events like floods, earthquakes, landslides, cyclones and drought threatening peoples' lives and livelihoods, as well as man - made hazards such as fires, civil unrest and terrorism, health epidemics, transport accidents, industrial accidents and war.

    ❖ Pakistan is one of the five South Asian countries with the highest annual average number of people affected by floods. Floods occurred in 1950, 1992 and 1998 caused many deaths and huge losses to the national economy. During the decade 1991 to 2001, the estimated damage caused by floods is over Pak Rs. 78 million.

- **Flash floods and landslides** frequently occur in the mountainous north along watersheds. Flash floods also occur in upper plains adjacent to river catchment areas.

- **Earthquakes** occur along the Himalayas, Karakorums and partly Hindu Kush ranges in the north, Koh-e- Sulaiman range in the west with Chaman fault line along Quetta, and Mekran fault line along the sea coast. The October 2005 earth quake is the worst national disaster that the country has ever experienced. It left more than 73,000 people killed.

- **Drought** has become an intermittent problem. It has reported to have brought extensive damages to Balochistan, Sindh and Southern Punjab. Prolonged incidences of drought occur in the poverty ridden arid regions. Drought was most pronounced during the 2000-2003 period when it affected 68 districts in the four provinces.

- History also shows vulnerability to **Tsunami and cyclones** and other sea based hazards along its coastline.

- Disasters occur not only as a result of natural events. **Viral diseases** like avian flu or dengue virus have widespread occurrence in the country, with Karachi and some cities of Punjab being mostly affected by dengue.

- Socio-economic and environmental factors such as poverty, poor state of environment, unplanned development and a poor awareness of hazard prevention have further increased the vulnerabilities of the population.

13. End the session by answering participants' questions and summarize the main points taken up in the session.

Duration: 2 Hours and 30 Minutes

Tips to Facilitator:

- Remembering the experiences of the participants about disasters is the basic theme of this session. What actions the people undertook in the pre-, during and post-disaster periods should be highlighted.

- District / community profile is very important. It helps in understanding the overall condition of the community and the district.

- Whether a disaster is major or minor, of national or local proportion, it is the community who suffers the most.

- The fresh experience of damage and loss from a disaster generates interest in the community to protect themselves from future harm and suffering.

Materials Needed:

- Easel paper
- Different color marking pens
- About 10 to 20 pictures and news clippings on clothesline or on the walls of various disasters
- Straw and clips or masking tape
- Power point presentation

References:

1. Handouts on Training of Trainers in CBDRM, Thaubang District, Myanmar December 16-21, 2004. Conducted by Center for Disaster Preparedness, Inc.

2. Evaluation of Disaster Response Agencies of Pakistan by OCHA, National Disaster Response Advisor, Islamabad, December 2006.

3. EM-DAT: The OFDA/CRED International Database, www.em-dat.net

Top 10 Natural Disasters in Pakistan

(Sorted by numbers of people killed, total affected and economic damage cost)

DISASTER	DATE	KILLED
Earthquake	8 October 2005	73,338
Earthquake	31 May 1935	60,000
Windstorm	15 December 1965	10,000
Earthquake	28 December 1974	4,700
Earthquake	27 November 1945	4,000
Flood	1950	2,900
Flood	8 September 1992	1,334
Flood	2 March 1998	1,000
Flood	June 1977	848
Wind Storm	14 November 1993	609

DISASTER	DATE	TOTAL AFFECTED
Flood	8 September	12,324,024
Flood	9 February 2005	7,000,450
Flood	30 July 1992	6,184,418
Flood	2 August 1976	5,566,000
Flood	August 1973	4,800,000
Earthquake	8 October 2005	2,869,142
Flood	July 1978	2,246,000
Drought	November 1999	2,200,000
Flood	19 August 1996	1,300,000
Flood	22 July 2003	1,266,223

DISASTER	DATE	DAMAGES US $
Earthquake	8 October 2005	5,000,000
Flood	8 September 1992	1,000,000
Flood	August 1973	661,500
Flood	2 August 1976	505,000
Drought	November 1999	247,000
Flood	22 July 2001	246,000
Flood	11 July 1994	92,000
Earthquake	31 January 1991	10,000
Windstorm	12 June 1964	4,100
Earthquake	28 December 1974	3,255

Source: EM-DAT: The OFDA/CRED International Database, www.em-dat.net

Summarized Tables of Natural Disasters in Pakistan

From 1926 to 2006

	# of Events	Killed	Injured	Homeless	Affected	Total Affected	Damage US (000's)
Drought	1	143	0	0	2,200,000	2,200,000	247,000
ave. per event		143	0	0	2,200,000	2,200,000	247,000
Earthquake	22	142,812	88,096	2,853,585	1,294,429	4,236,110	5,019,255
ave. per event		6,492	4,004	129,708	58,838	192,551	228,148
Epidemic	10	283	211	0	16,275	16,486	0
ave. per event		28	21	0	1,628	1,649	0
Extreme Temperature	15	1,406	324	0	250	574	0
ave. per event		94	22	0	17	38	0
Flood	56	11,807	1,562	8,927,685	38,671,447	47,600,694	2,508,030
ave. per event		211	28	159,423	690,562	850,012	44,786
Insect Infestation	1	0	0	0	0	0	0
ave. per event		0	0	0	0	0	0
Slides	13	413	119	3,100	200	3,419	0
ave. per event		32	9	239	15	263	0
Wind Storm	21	11,654	1,183	234,090	715,040	950,313	4,100
ave. per event		555	56	11,147	34,050	45,253	195

Source: EM-DAT: The OFDA/CRED International Database, www.em-dat.net

District Disaster Risk Management Framework

Modular Objectives:

1. Discuss the structures of disaster risk management as provided by the National Disaster Risk Management Framework;
2. Discuss the roles and responsibilities of key stakeholders in the district administrative system for disaster risk management; and
3. Discuss the local government system and identify the opportunities for disaster preparedness and mitigation.

Number of Sessions: 2

Session 1 – Disaster Risk Management Structures
Session 2 – Roles and Responsibilities of Key Stakeholders
Session 3 – Local Government System & Opportunities for Disaster Preparedness & Mitigation

Duration : 5 Hours and 30 Minutes

Session-1

Disaster Risk Management Structures

Learning Objectives:

1. Discuss the structures of Disaster Risk Management as provided by the National Disaster Risk Management Framework; and

2. Discuss an overview of the national, provincial, district, tehsil and municipal disaster management structure/authorities. (NDMC, NDMA, PDMC, PDMA, DDMA as laid down in the National Disaster Management Ordinance 2006).

Key Concepts:

- National Disaster Management Commission
- National Disaster Management Authority
- Provincial Disaster Management Commission
- Provincial Disaster Management Authority
- District Disaster Management Authority

Methods:

- Group Work
- Interactive Lecture, Discussion
- Power point presentation.

Process:

1. Introduce the session and its objectives.

2. Ask the participants about the existing situation in the district – how each department responds to emergency situation?

3. Divide the participants into two groups of equal number and distribute sets of copies of National Disaster Management Ordinance 2006 and Pakistan Disaster Risk Management Framework.

4. Ask the participants to study it thoroughly and with concentration for 60 minutes.

   Group A: Ask the group to divide all the chapters among the members of the group and read carefully all those provisions of the National Disaster Management Ordinance that relate to their departmental roles and responsibilities with regard to disaster risk management in the district and to prepare a comprehensive summary of the Ordinance.

   Group B: Ask the group to divide all the chapters among the members of the group and read carefully all those provisions of the National Disaster Risk Management

disaster risk management in the district and to prepare a comprehensive summary of the Ordinance.

5. After the group work is over, ask both the teams to present their work and if there are suggestions to improve the roles and responsibilities of the concerned district departments, include all those suggestions in the section for recommendations.

6. Ask the host team to document all the activities of the group work presentation.

7. The central theme of the lecture would be The National Disaster Management Ordinance 2006 but the main focus will remain on the district and municipal disaster management structure, its powers and functions.

Vision of the framework:

- To achieve sustainable social, economic and environmental development in Pakistan through reducing risks and vulnerabilities, particularly those of the poor and marginalized groups, and by effectively responding to and recovering from disaster impact .

- This vision would be achieved by "Materializing a paradigm shift in Pakistan through moving away from response and relief oriented approaches and adopting a disaster risk management perspective".

Key principles of the framework:

- Promoting multi-stake holder, multi-sectoral and multi-disciplinary approaches;
- Strengthening community based and local level risk reduction;
- Developing culturally, economically and environmentally relevant technologies etc.;
- Combining scientific and people's knowledge;
- Strengthening sustainable livelihood practices; and
- Establishing and strengthening partnerships.

Priority areas are as follows:

- Hazard and vulnerability assessment for disasters;
- Multi hazard early warning system;
- Institutional arrangements for disaster risk management;
- Promotion of disaster preparedness planning;
- Local level risk reduction programming;
- Awareness, education and training;
- Integration of disaster risk reduction into development planning; and
- Emergency response system and capacity development for post disaster recovery.

Scope of the framework:

- "implementation of policies, strategies, programmes and activities for all the three phases of disaster risk management; including pre-disaster (risk reduction and preparedness), during disaster (response and relief) and post-disaster (rehabilitation, recovery and risk reduction)"

A. National Disaster Management Commission (NDMC)

Composition:

- The Prime Minister as its Chairperson
- Leader of Opposition in Senate
- Leader of Opposition in the National Assembly
- Minister for Defense
- Minister for Health
- Minister for Foreign Affairs
- Minister for Social Welfare and Special Education
- Minister for Communication
- Minister for Interior
- Minister for Finance
- Governor of NWFP (for FATA)
- Chief Ministers of all the provinces
- Prime Minister of AJ&K
- Chief Executive of Northern Areas
- Chairman, JCSC or his nominees
- Representative of civil society or any of the person appointed by the Prime Minister

Powers and Functions:

- Shall have the responsibility for laying down policies, plans and guidelines for disaster management;
- Approve the National Plan;
- Approve plans prepared by the Ministries or Divisions of the Federal Governments;
- Lay down guidelines for Federal Government and Provincial Authorities;
- Arrange for and oversee, the provision of funds for the purpose of mitigation measures, preparedness and response;
- Provide such support to other countries affected by major disasters as the Federal Government may determine; and
- Take such other measures for the prevention of disaster, or the mitigation, or for preparedness and capacity building for dealing with disaster situation as it may consider necessary.

B. National Disaster Management Authority (NDMA)

Composition:

- The NDMA shall consist of such number of members as may be prescribed and shall include Director General as its Chair Person. The Chairperson shall be appointed by the Federal Government.

Powers and Functions:

- Act as coordinating, implementing and monitoring body;
- Prepare national plan to be approved by the national commission;
- Implement, coordinate and monitor the implementation of the national policy;
- Provide guidelines for preparing disaster management plans by different ministries, departments and provincial authorities;

authorities for preparing their disaster management plans in accordance with the guidelines laid down by the National Commission;
- Coordinate response in the event of any threatening disaster situation or disasters;
- Lay down guidelines for / or give directions to the concern ministries of Provincial Governments and the Provincial Authority regarding measures to be taken by them in response to any threatening disaster situations or disasters;
- For any specific purpose or for general assistance requisition of services of any person and such person shall be a coopted member and exercise such power as conferred upon him by the Authority in writing;
- Promote general education and awareness in relation to disaster management; and
- Perform such other functions as the National Commission may require it to perform.

C. Provincial Disaster Management Commission (PDMC)

Composition:
- The Provincial Commission will comprise of Chief Minister who will be the Chairperson
- Leader of Opposition and one member nominated by him
- Other members to be nominated by the Chief Minister
- The Chairperson will also appoint a Vice Chairperson

Powers and Functions:
- Lay down provincial disaster management policy;
- Lay down the provincial plan;
- Approve disaster management plans prepared by the provincial departments;
- Review the implementation of the plan;
- Oversee the provision of funds for mitigation and preparedness measures;
- Review the development plans of different departments of the provinces and ensure that prevention and mitigation measures are integrated therein; and
- Review measures being taken for mitigation, capacity building and preparedness by the departments of the provincial government and issue necessary guidelines.

D. Provincial Disaster Management Authority (PDMA)

Composition:
- The PDMA shall consist of such number of members as may be prescribed. The Chairperson would be either the Provincial Director General or Provincial Relief Commissioner.

Powers and Functions:
- Formulate the provincial disaster management policy obtaining the approval of the Provincial Commission;
- Coordinate and monitor the implementation of the National Policy, National Plan and Provincial Plan;
- Examine the vulnerability of different parts of the Province to different disasters and specify prevention or mitigation measures;
- Lay down guidelines to be followed for preparation of disaster management plans by the Provincial Departments and District Authorities;

- Evaluate preparedness at all government or non-governmental levels to respond to disaster and to enhance preparedness;
- Coordinate response in the event of disaster;
- Give directions to any Provincial Departments or Authority regarding the actions to be taken in response to disaster;
- Promote general education, awareness and community training in this regard;
- Provide necessary technical assistance or give advice to the District Authority and local authority for conveying out their functions effectively;
- Advice the Provincial Government regarding all financial matters in relation to disaster management;
- Examine the constructions in the area and if it is of the opinion that the standards laid down have not been followed it may direct the same to secure compliance of that standards;
- Ensure that communication systems are in order and disaster management drills are being carried out regularly; and
- Perform such other functions as may be assigned to it by the National or Provincial Authority.

E. District Disaster Management Authority (DDMA)

Composition:

- The DDMA shall consist of District Nazim as its Chairperson
- The District Coordination Officer
- The District Police Officer
- Executive District Officer, Health
- Such other district level officers to be appointed by the District Government

Powers and Functions:

- Formulate district/municipal disaster risk reduction and preparedness plans, based upon hazard and vulnerability analysis of the district/municipality;
- Coordinate and monitor implementation of district/municipal plan in accordance with the National Framework and Provincial plan;
- Continuously monitor hazards, risks, and disaster threats and the conditions of vulnerable population within the district or municipality;
- Prepare guidelines for risk reduction, preparedness and response;
- Identify training needs and conduct education, training and public awareness programs;
- Conduct training in disaster risk reduction and relief administration for local government officials, public and civil society representatives, and at-risk communities;
- Set up, maintain, review and upgrade district level early warning and communication systems for effective dissemination of warning messages;
- Coordinate with local authorities to ensure that post disaster activities are carried out promptly and effectively;
- Implement disaster risk management as decided in the district /municipal disaster risk management plans;
- Review development plans of government departments at the district/municipal level and provide guidance on mainstreaming disaster risk reduction measures in these plans;

- Encourage the involvement of non-governmental organizations and community groups in disaster risk reduction and response;
- Identify buildings and places in the district/municipality that could be used as evacuation sites or relief centres in case of a disaster, and make arrangements for water supply and sanitation in such buildings or places;
- Establish stockpiles of relief and rescue materials or ensure preparedness to make such materials available at a short notice;
- Identify alternative means for emergency communications, should the regular communications be disrupted;
- In the event of a disaster/ emergency, the DDMAs / MDMAs in the affected District/Municipality will take operational control of the situation to ensure that support is delivered promptly to the affected communities;
- Keep linkages with the Provincial Disaster Management Authority and the Relief Department;
- Mobilize and coordinate all interventions from other agencies at the time of emergencies;
- Mobilize needed financial and material resources for disaster risk management; and
- Perform such other functions as the Provincial Government or Provincial Authority may assign to it or as it seems necessary for disaster management in the district.

Tehsil Structures:

Composition:

- Tehsil Nazim would lead the disaster mitigation and relief operations with the assistance of Tehsil Municipal Officer and would work in consultation of District Disaster Management Authority. Key players like, CBOs, traditional local leaders, religious organizations, NGOs / CCBs and volunteers would also assist the Tehsil Nazim.

Role and Responsibilities:

- Preparation of plans and procedures for disaster management programs in their areas;
- Responsible for operational control in the event of disaster or emergencies;
- Mobilization of needed financial and material resources for disaster management;
- Identification and mapping of all hazards in their areas;
- Conduct risks and vulnerability analysis; and
- Establishment of civic groups for disaster reduction and relief operations.

Zila Council in a City District:

- Approve master plan, zoning, land use plans, environment control, urban design etc.;
- Review and implementation of rules and by-laws governing land use, housing, markets, zoning, environment, traffic, infra-structure and public utilities; and
- Review development of integrated system of water reservoirs, water sources, treatment plants, drainage, sanitation and other municipal services.

Tehsil Municipal Administration:

- Water supply and control and development of water sources;
- Sewerage, sewage and its treatment and disposal;
- Storm water drainage; and
- Fire fighting.

Tehsil Council:

- To approve land use, zoning; and
- Preparation of master plan of Tehsil development and maintenance programs or projects.

Union/Council Administration:

- To assist relevant authorities in disasters and natural calamities and assist in relief activities, including de-silting of canals.

Union Nazim:

Union Nazim shall report to the concerned authorities in respect of:

- Encroachment on state and local government property;
- Violation of land use and building laws, rules and by-laws; and
- Environment and health hazards.

Union Council:

Under the Local Government Ordinance 2001, the union council is to:

- Promote plantation of trees;
- Landscaping; and
- Beautification of public places.

Village Council:

- To develop and improve water supply sources;
- Make arrangements for sanitation, cleanliness and disposal of garbage and carcasses; and
- Take steps to prevent water contamination.

Duration: 2 Hours and 30 Minutes

Tips to Facilitator:

- The lecture would be interactive and the participants would be encouraged to raise questions and give opinions.
- The expected participants will be professional, educated and experts of their respective departments. Therefore, getting their opinion frequently will be productive in identifying the existing gaps in coordination and roles and responsibilities among various authorities and line departments at district level.
- Keep participants engaged in constructive debate on various provisions of the Disaster Management Ordinance.

Materials Needed:

- Multi-Media
- Whiteboard
- Flip Charts
- Multi - color markers

References:

1. National Disaster Risk Management Framework, 2006.
2. National Disaster Management Ordinance, 2006.

Session-2

Roles and Responsibilities of Key Stakeholders

Learning Objectives:

1. Identify roles and responsibilities of key stakeholders at District Level in relation to Disaster Risk Management; and
2. Enable the participants to have a clear picture of their respective roles and responsibilities before, during and after the disaster.

Methods:

- Group Work
- Interactive Lecture
- Discussion
- Power point presentation.

Process:

1. Discuss the objectives of the session.
2. Ask participants to group themselves according to the nature of their work in the district. Four to five groups would be ideal.
3. Ask each group to write the things they did before, during and after the past earthquakes, floods, drought, landslide and cyclone.
4. Let the group decide what kind of disaster they will take.
5. The facilitator will refer to their meta cards and thus begin the session on the roles and responsibilities. This could be his / her jumping board to discuss the topic.
6. Begin the session on the key stakeholders in disaster risk management.

Roles and responsibilities of district authorities, local government and line departments

1. Education

BEFORE	DURING	AFTER
* Schools as training centers for disaster risk management * Teach disaster risk management to students and villagers * Take actions to reduce the vulnerability of the built infrastructure of the education sector * Conduct orientation programs on disaster risk management to raise awareness of the education authorities, professors and teachers	* Use of schools as shelters * The school building can be used as relief center	

2. Health

BEFORE	DURING	AFTER
* Keep all hospitals prepared for any kind of disaster * Stockpile medicines * Keep ambulances in good working conditions * Vaccination of the population before flood season * Enhance disaster capacities of women	* Emergency treatment to the victims/injured	* Prevent spread of epidemics

3. Police

BEFORE	DURING	AFTER
* Assist local administration in maintaining law and order * Provide human and logistic support * Keep people peaceful and stop anti social activities	* Assist in evacuation and rehabilitation * Protect relief items from looting and stealing	

4. Local Government and Rural Development

BEFORE	DURING	AFTER
* Responsible for Disaster Risk Management * Arrangement of logistic support * Stockpiling of food and other items	* Collection of data and reporting * Evacuation * Relief distribution	* Debris removal in case of landslides and demolition of residential building * Rehabilitation of rural access roads (link roads) * Rehabilitation of water supplies * Provision of shelters

5. Civil Defense

BEFORE	DURING	AFTER
* Training on search and rescue and first aid * Mobility and organization of volunteers	* Relief operation * Rescue and evacuation in case of disasters like flood, landslides and earthquakes * Provide first aid to injured persons and transport them to nearest hospital; * Coordinate transport of relief goods to affected communities; * Supplement disaster response equipment of the armed forces	* Assist communities in clearing of debris brought about by the disaster

6. Public Works Department

BEFORE	DURING	AFTER
* Maintain all telephone, mobile and internet communication in order * Collection and dissemination of information * Supervise the protection of roads and structures in the community	* Provision of communication facilities to the victims and their relatives in other parts of the country	* Repairs of damaged telephone lines * Repairs of roads, bridges and other infra-structure * Coordinate assessment of the extent of damage to roads and structures in the community. * Organize emergency repairs to restore public transport routes.

7. Forestry

BEFORE	DURING	AFTER
* Stop deforestation * Plant new saplings * Provision of seeds and pesticides * Advocacy and awareness on environmental protection * Undertake vulnerability assessment of natural resources (forest, lakes, streams, mangroves, coral reefs, protected areas, coastal areas) to natural and human induced hazards * Implement programmes for conservation and rehabilitation of natural resources in order to reduce risks of natural hazards, e.g., reforestation, mangrove plantation, etc.		* Develop mechanisms for assessment of environmental losses and damages in the aftermath of disasters and their rehabilitation

8. Agriculture and livestock

BEFORE	DURING	AFTER
* Protection of agriculture land from floods * Maintaining and repairing water channels * Promote flood and drought resistant crops * Provision of seeds and fertilizers * Training of farmers in cultivation of drought and flood resistant crops * Breeding and vaccination of livestock * Research and education * Advocacy and awareness * Ensure sustainable livelihoods in areas of recurring climate risks (e.g., arid and semi arid zones, flood and drought prone areas) by promoting supplementary income generation from off-farm and non-farm activities (e.g., animal husbandry)	* Assist in saving crops, agricultural land and livestock in disaster situation	* Assess the extent of damage and loss to crops and livestock * Provide inputs like seeds, fertilizers and agriculture equipment to those affected by disasters

9. Role of Local Media

BEFORE	DURING	AFTER
* Provide information on the sources and processes of risk generation and patterns of risk * Provide information on potential dangers, risks to communities * Disseminate warning messages through multiple channels * Information provision about precautionary measures to avoid human and material loss	* To inform the public with factual information about the extent, losses and current disaster situation * Information on safe shelters places, evacuation and routes * Efforts of local government to facilitate people * Information on rescue and recovery and evacuation * Facilitate communication between affected people, their relatives and friends in other parts of the country * Highlight needs of the survivors so that all survivors receive appropriate aid, irrespective of their social, economic, ethnic, religious or political status	* Appeal for assistance * Communicate about rehabilitation and reconstruction plans of district authorities * Encourage survivors participation in recovery and rehabilitation * Influence for integrating risk reduction and prevention in rehabilitation and reconstruction

Duration: 1 Hour and 30 Minutes

Materials Needed:

- Multi-Media
- Whiteboard
- Flip Charts
- Multi-color markers

References:

1. National Disaster Risk Management Framework, 2006.
2. National Disaster Management Ordinance, 2006.
3. Local Government Ordinance, 2001.

Session-3

Local Government System and Opportunities for Disaster Preparedness and Mitigation

Learning Objectives:

1. Discuss and identify opportunities for disaster risk management under local government ordinance; and
2. Identify resources for disaster risk management at the district level.

Key Concepts:

- Local Government System
- Opportunities for Disaster Risk Management
- Resource Generation

Methods:

- Lecture, Discussion
- Group Work Exercises
- Power point presentation

Process:

1. Discuss the session and its objectives
2. Divide the participants into four groups; each group would consist of a small number of participants (4-5). Each group would be asked to select one topic among the following options:

   Group A: Ask the group to write a detailed note on the existing local government disaster management system, its merits and de-merits and how can its working be improved?

   Group B: Ask the participants to discuss and write a detailed note on what opportunities and avenues exist in the local government system to promote disaster risk management in a district?

   Group C: Ask the group to draw district disaster risk reduction and management mechanism (Structure).

3. After the group work is completed ask the participants to compile their group work and present it before the other participants.
4. Detailed discussion on various provisions of the Local Government Ordinance would be part of this session.

District Government:

Structure:

The District Administration shall comprise the district offices, including sub-offices of the Departments decentralized to the District Government and other offices set

up by the Government and grouped under the Executive District Officers and coordinated by the District Coordination Officer.

District Coordination Officer:

- Prepare a report on the implementation of development plans of the District Government for presentation to the Zila Council in its annual budget session.

Executive District Officer (EDO):

- Prepare development plans and propose budgetary allocations for their execution;
- Implement approved plans and policies;
- prepare proposals for expenditures necessary for the proper conduct of programs, projects, services, and other activities.

Tehsil and Municipal Administration:

Structure:

Tehsil Nazim as head of Tehsil Municipal Administration
Offices & Sub-Offices of Urban Local Councils
Offices & Sub-Offices of Urban Government
Rural Development Department
Public Health Engineering
Housing and Physical Planning

Tehsil Municipal Officer

Officer (Municipal Regulations)
Tehsil Officer (Infrastructure and Services)
Tehsil Officer (Planning)
Tehsil Officer (Finance)

Powers and Functions:

- Prepare spatial plans for the tehsil in collaboration with Union Councils, including plans for land use, zoning and functions for which the Tehsil Municipal Administration is responsible;
- Exercise control over land-use, land-subdivision, land development and zoning by public and private sectors for any purpose, including agriculture, industry, commerce, markets, shopping and other employment centers, residential, recreation, parks, entertainment, passenger and freight transport and transit stations;
- Storm water drainage; and
- Fire fighting.

Town Municipal Administration:

Powers and Functions:

- Prepare spatial plans for the Town in collaboration with Zila Council including plans for land use, zoning and functions for which the Town Municipal Administration is responsible;
- Within the framework of the spatial and Master plan for the City District, exercise control over land use, land sub-division, land development and zoning by public and private sectors for any purpose, including agriculture, industry, commerce markets, shopping and other

employment centers, residential, recreation, parks, entertainment, passenger and transport freight and transit stations;
- Inform the most vulnerable groups;
- Prevent and remove encroachments in hazards prone areas;
- Develop and manage schemes, including site development in collaboration with City District Government and Union Administrations; and
- Provide, manage, operate, maintain and improve the municipal infrastructure and services.

Tehsil Nazim:
- To oversee formulation and implementation of long term and annual municipal d development programs;
- To oversee the delivery of services by the Tehsil Municipal Administration and implementation of the laws governing the municipal services; and
- To present the budget proposals to the Tehsil Council for approval.

Tehsil and Town Council:
- To approve long and short term development plans; and
- To approve land use, zoning and master plan of the tehsil development and maintenance programs or projects proposed by the Tehsil Municipal Administration.

Union Council:
- To collect and maintain statistical information for socio-economic surveys and to collect data regarding the most vulnerable groups in the district;
- To consolidate village and neighborhood development needs, disaster risk management needs and prioritize them into union-wide development proposals with the approval of the Union Council and make recommendations thereof to the District Government or Tehsil Municipal Administration, as the case may be;
- To provide and maintain sources of clean drinking water supply system before, during and after disaster, including wells, water pumps, tanks, ponds and other works for the supply of water; and
- To assist the relevant authorities in disasters and natural calamities, and assist in relief activities, including de-silting of canals.

Union Nazim:
- Organize the management of inter-villages municipal infrastructure;
- Assist the Tehsil Municipal Administration in spatial planning process; and
- Stop encroachment on State and local government property and violation of land use and building laws, rules and bye-laws.

Village Council:
- Develop and improve water supply sources;
- Make arrangements for sanitation, cleanliness and disposal of garbage and carcasses;
- Develop sites for drinking and bathing of cattle;
- Take measures to prevent contamination of water;
- Mobilise voluntary resources, including physical labor, property and cash contributions for municipal activities in the Village and Neighborhood;
- Facilitate the formation of co-operatives for improving economic returns;

- Promote plantation of trees, landscaping and beautification of the Village and Neighborhood; and
- Conducting surveys in the Village and Neighborhood and collecting socio-economic data.

Suggested Resource Generation Strategies for Disaster Risk Management:

- Although no separate funds have been allocated for the specific purpose of disaster risk reduction, yet disaster risk management has been made part and parcel of the overall development planning of the district/Tehsil and Union Councils (National Disaster Management Framework, December 2006 page57).
- Tehsil Nazim is responsible for mobilization of needed financial and material resource for disaster risk management.
- District Coordination Officer is responsible to assist the Zila Nazim in accomplishment of administrative and financial discipline of the district.
- District Nazim is responsible to propose projects and other development plans for the overall development of the district and resource allocation for the implementation of such plans. Disaster risk management activities and strategies are integral part of the district planning.
- If the district development plans are prepared in line with the principles as laid down in the National

Disaster Management Framework, then there is no need to allocate separate funds for Disaster Risk Management.

5. Summarize session and end module 2

Duration : 1 Hour and 30 Minutes

Tips to Facilitator:

- The group work session would enable the participants to identify opportunities for disaster risk management in all the three phases of disaster (pre, during and post disaster) as provided in the Local Government Ordinance 2001.
- This session would enable the participants to devise a comprehensive disaster risk management plan for district at the end of 5 days training which would be in consistence with the National Disaster Risk Management Framework of Pakistan.
- A group work session would identify opportunities to assign disaster risk management related roles and responsibilities to various authorities of the local government system.

Materials Needed:

- Multi-Media
- Whiteboard
- Flip Charts
- Multi-color markers

References:

1. National Disaster Risk Management Framework, 2006.

2. National Disaster Management Ordinance, 2006.
3. Local Government Ordinance, 2001.

Participatory Risk Assessment

Modular Objectives:

1. Explain the importance of risk assessment and people's perception of risks;
2. Describe the process of risk assessment including hazard, vulnerability and capacity assessment; and
3. Describe and practice various tools in assessing disaster risks in the community.

Number of Sessions: 2

Session 1 – Introduction to Risk Assessment
Session 2 – Hazard Assessment
Session 3 – Vulnerability and Capacity Assessment
Session 4 – Risk Assessment Field Work

Duration : 8 Hours

Session-1

Introduction to Risk Assessment

Learning Objectives:

1. Explain the purpose of risk assessment;
2. Identify the components of risk assessment; and
3. Understand the differences in people's perceptions of risks.

Key Concepts:

- Risk
- Assessment
- Community risk assessment
- Hazard assessment
- Vulnerability assessment
- Capacity assessment
- People's perceptions of risk

Methods:

- Show pictures "What do you see?"
- Interactive Discussion

Process:

1. Present the session objectives to the participants.
2. Show the picture below and ask the participants "What do you see?"

3. Ask them to point the features of what they see. Ask the participants to explain why there are differences in what they see in the picture, and relate it to the different perceptions of disaster risks among the people living in the same community. Ask the participant why there are different perceptions of disaster risks.
4. Begin the discussion with introduction to risk assessment.

A. What is Risk?

Risk refers to the probability of something happening in the future, which has a negative consequence.

B. What is Assessment?

Assessment is a participatory process undertaken in phases, and involves on-the-spot collection of information from various sources, its interpretation and analysis.

C. What is Risk Assessment?

Risk Assessment is a participatory and systematic process carried out by district government to identify and analyze disaster risks.

D. Risk Assessment involves 4 steps:

1. Hazard assessment
It is an analysis of past patterns of hazards and threats at the local level combined with an understanding of the underlying causes of why hazards become disasters.

2. Vulnerability assessment
Identifying elements-at-risk and also as to why they will be damaged.

3. Capacity assessment
Available resources in the district for reducing risks.

4. People's perception of disaster risk and how different people perceive and measure risks.
   - People's perception of disaster risks is influenced by the following:
     - gender
     - age
     - culture
     - ethnicity
     - educational background
     - economic status
     - occupation
     - length of stay in the area
     - experience

It is important to recognize differences in people's perception, because it is the basis to identify actions that will address disaster risk reduction.

E. Purpose of Risk Assessment:

- Basis for planning concrete actions to reduce disaster risks;
- Unites the people in understanding current disaster risks as well as future threats in the district;

- Provides useful information for rehabilitation and long-term development interventions;
- Provides baseline data to measure changes in people's vulnerability and capacity over time.

5. Summarize the discussion by stressing the following points:
   - Disaster risk assessment is about assessing the hazard, vulnerability and capacity, with consideration of stakeholders' perceptions of risk;
   - Must be participatory – i.e., risk assessment must involve the key stakeholders and community members;
   - Uses a variety of participatory tools in data gathering and analysis;
   - Must combine technologies, which are brought in by outsiders to the indigenous knowledge and experiences.

Duration: 1 Hour

Tips to Facilitator:

1. Refer to Module 1 and ask participants to recall discussion of basic disaster risk management concepts and then discuss the three components of disaster risk: hazard, vulnerability and capacity.

2. At the end of the disaster risk assessment process, the participants must be able to accomplish the following objectives and outputs:

Disaster Risk Assessment Design

	Objectives	Outputs
Step 1	Describe hazards in the district	List and nature of hazards
Step 2	Conduct hazard mapping	Hazard map Resource map Digitized map
Step 3	Describe vulnerabilities and capacities in the district	Capacities and Vulnerabilities Analysis (CVA)
Step 4	Determine disaster risks	Comprehensive list of risks faced by the district
Step 5	Rank disaster risks	Prioritized list of risks
Step 6	Decide on acceptable level of risk	Agreed levels of risk for security of family and community
Step 7	Decide whether to prevent, reduce, transfer, or live with disaster risks	Agreed strategies

3. Distribute participatory tools for hazard, vulnerability and capacity assessment as there will be no time to discuss each tool thoroughly. It will be helpful if the participants take time to study the tools before the next three sessions.

Materials Needed:

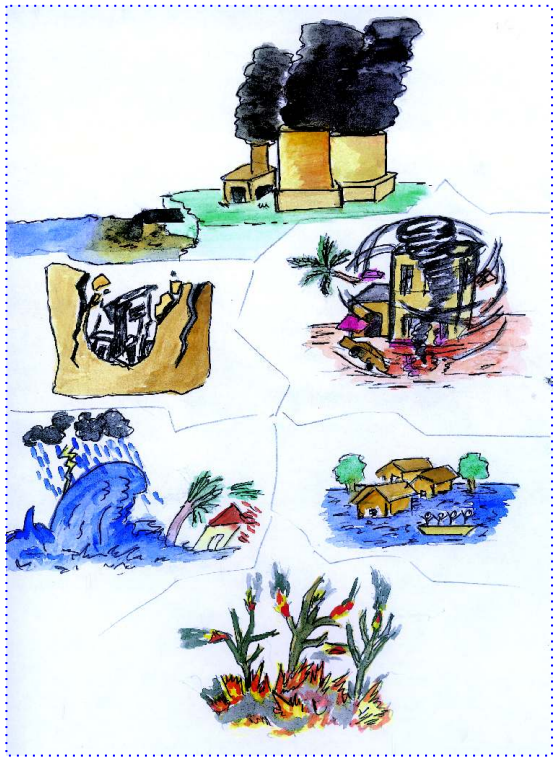
- Meta cards for interactive discussion
- Key points for distribution
- Pictures for "What do you see?"

References:

1. Thabaung Rural Community Capacity Development Project Training of Trainers in Community Based Disaster Management, 16-21 December 2004, Thabaung Township, Ayeyarwady Division, Conducted by World Vision Myanmar & Center for Disaster Preparedness Foundation, Inc., Philippines.

2. CBDRM Field Practitioner's Handbook, ADPC, Abarquez, I. & Murshed Z., 2004.

3. Good Practice Review: Disaster Risk Reduction, John Twigg, Good Practice Review 9, Humanitarian Practice Network, Overseas Development Institute.



Session-2

Hazard Assessment

Learning Objectives:

1. Described the nature and behavior of hazard;
2. Identify and rank the hazards in the district;
3. Explain the process of conducting the hazard assessment; and
4. Discuss the participatory tools which can be used in hazard assessment.

Key Concepts:

- Hazard assessment
- Analysis of the nature and behavior of hazards
- Participatory tools in hazard assessment

Methods:

- Interactive Lecture
- Group work on actual hazard assessment

Process:

1. Present the session objectives to the participants.
2. Ask the participants to recall the disasters that they have experienced in the past. Ask questions on how the participants knew that there was impending danger. Stress that to prepare for and to reduce damage and loss from disasters, understanding the nature and behavior of hazards and threats is important.

A. What is Hazard Assessment?

- Hazard assessment involves the identification of hazards or threats which may damage the community or infrastructure, facilities or an environment.
- Hazard assessment looks into the disaster history of the area – what disasters have been experienced in the past, as well as other hazards or threats which the community may not be aware of.
- Hazard assessment also involves the study of the nature and behavior of the hazards or threats taking into consideration the following:
  - **Origin:** the factor or factors which create/result in a hazard;
  - **Warning signs & signals:** scientific and indigenous/local signs that hazard is likely to happen;
  - **Forewarning:** time between warning and impact;
  - **Forces:** factors which can damage: wind (for typhoon and tornado); water (heavy rain, flood, river overflow, giant waves, dirty water causing epidemic); land (slide, erosion, mudflow), seismic (ground shaking, ground rupture, tsunami), conflicts (war, terrorism); industrial/technological (pollution, radioactive leaks);

- **Speed of onset:** rapidity of arrival of hazard and its impact (very slow such as 3-4 months in the case of drought; 3-4 days in the case of cyclone; very rapid for earthquake);
- **Frequency:** does the hazard occur seasonally, yearly, once every 10 years, once in a lifetime, etc.;
- **Seasonality:** does the hazard occur at a particular time of the year (wet or dry season; in November to April);
- **Duration:** how long the hazard is felt (earthquake and after shocks; days/weeks/months that area is flooded).

- In doing hazard assessment, the following have also to be considered:
  - Secondary hazards: earthquake can cause landslides; flood can cause epidemics, etc.
  - Intensities of hazards: earthquake and cyclone
  - Hazards or threats which the community or area has not experienced yet
  - Combining scientific and technical information with local knowledge
  - Use of hazard assessment results for public awareness, designing early warning, and evacuation plans

B. Tools for Hazard Assessment

1. Time line / Historical Profile

What: gathering information about what happened in the past

Why:

(1) To get insight into past hazards, changes in their nature, intensity and behavior,
(2) Understand present situation in the area (causal link between hazards and vulnerabilities)
(3) To make people aware of changes

When: At initial phases

How:

(1) Plan a group discussion and ensure that key-informants (old people, leaders, and teachers) are present. Invite as much people as possible, especially the young ones, for them to hear the history of their community or area.
(2) Ask people if they can recall major events in the community / area, such as:

- major hazards and their effects
- changes in land use patterns (crops, forest cover, etc.)
- changes in land tenure
- changes in food security and nutrition
- changes in administration and organization
- major political events

(3) The facilitator can write the stories down on a blackboard or craft paper in chronological order

Life histories: another method is to ask individual informants to give a detailed account of their life or regarding a specific issue from a historical perspective

History tracing: ask individuals or group to begin with current and past experiences.

The purpose is to find reasons / causes which contributed to the occurrence of a certain experience.

2. Hazard Mapping
What: Making a spatial overview of the area's main features
Why: Maps facilitate communication and stimulate discussions on important issues in the community. Maps can be drawn for many topics:

- ❖ spatial arrangement of houses, fields, roads, rivers, and other land uses
- ❖ hazard map, elements at risk, safe areas, etc.
- ❖ resource map showing local capacities
- ❖ mobility map

When: In initial phase when you enter community, and during community risk assessment
Who: Community members

How:

(1) Decide what kind of map should be drawn
(2) Find men and women who know the area and are willing to share their experiences
(3) Choose a suitable place (ground, floor, paper) and medium (sticks, stones, seeds, pencils, chalk) for the map
(4) Help the people get started but let them draw the map by themselves

3. Hazard Assessment Matrix for nature and behavior of hazard

Sample of Hazard Assessment Using Hazard Matrix

Hazard Assessment Table - DROUGHT						
Hazard Threats	Force	Warning and Signals	Speed	Frequency	Occurrence	Duration
Drought Famine Hunger Civil war Mass migration	Low/no rainfall Dry climate Water table level decrease Deforestation	Hydro meteorology Institutional/Communal memory Migration of birds	Slow onset	Once in ten years	November to April	Upto 5 years

Forest Fire						
Nature/Type of Hazard	Forces	Warning signs and signals	Period/speed	Frequency	Time	Duration
Forest fire	Fire Thunderbolt Wind	Smoke Rising temperature	Rapid onset	Seasonal variable	Autumn / winter	A few days depending on accessibility

Hazard Assessment	Origin	Warning signs and signals	Period /speed	Force	Frequency	Time	Duration
Flood	Rainfall Snowmelt	Monsoon Sudden rise in temperat-ure	Rapid onset	Water volume	Seasonal/ annual		Weeks
Epidemic	Water contaminati-on No sewerage Pollution of water channels	Monsoon flooding Disease outbreak	Rapid onset	Pathogeni-c vectors/ microbes	seasonal		months

7. Group the participants to do the hazard assessment using the different tools:
8. After groups have finished their discussion and visuals, each group presents to the plenary body and groups actively validate or change the information provided by the reporting group.
9. Summarize session by reviewing the hazards which have caused and which can cause damages in the community and local area.

Duration: 1 Hour

Tips to Facilitator:

1. Hazards may cause secondary hazards - like earthquakes may cause landslides, drought may cause epidemics and pest infestations; floods might bring about pollution and cause epidemics, etc.
2. Do secondary data gathering for details of hazards, especially for those which have not yet happened and may occur. Check with various government agencies on hydro-meteorological and environmental hazards.
3. Consult both indigenous knowledge and scientific data to better understand features and effects of specific disasters. Scientific data must be translated into practical information for local users and community members.
4. Pointers in making a community / district hazard map
   - Orientation: indicate the north side in the map
   - Reference points: landmarks like school, river, mountains, roads
   - Legend: symbols and captions
   - Political boundaries
   - Safe and unsafe areas
   - Others: street names, minor captions
   - Plan ahead! How big a map do we want to make? Make the legends first, including agreeing on colors to use.

Materials Needed:

- Spot map of the community/district/city
- Flip chart/easel paper, different colored markers or pencils, plastic sheets for overlay on base map
- Hazard Assessment Matrix (See Reference)
- Visual or description of tools to be used in hazard assessment.

References:

1. Living With Risk, UN ISDR, 2002.

2. Major Hazards, Family and Community Disaster Preparedness: Guide for Training Families and Communities, Department of Social Welfare and Development, Philippine.

4. Guidelines for Elaborating a Community Risk Map by René Martorell and Rocio Sáenz, UNISDR Latin America & the Caribbean. http://www.crid.or.cr/crid/CD_EIRD_Informa/ing/No3_2001/Pagina15.htm

5. Guidelines for Producing a Community Risk Map, UNISDR Latin America & the Caribbean, Disaster Risk Reduction 1994 – 2004, UN ISDR.

Session-3

Vulnerability and Capacity Assessment

Learning Objectives:

1. Explain the process and tools of conducting vulnerability and capacity assessment;
2. Identify the elements-at-risk which can be damaged by hazards (who, what, where, and why they can be damaged?);
3. Discuss how the community prepared for hazards, what is their coping mechanism; and
4. Identify capacities and resources available / present in the district which can be used for disaster risk management.

Key Concepts:

- Vulnerability assessment
- Elements-at-risk
- Participatory tools for vulnerability assessment
- Capacity Assessment
- Coping

Methods:

- Interactive lecture
- Group work on actual vulnerability and capacity assessment

Process:

1. Present the session objectives to the participants.
2. Review with participants the concepts of vulnerability.

What is vulnerability?

Vulnerability is a complex set of interrelated factors and conditions which affects the ability of community and local government to mitigate and prepare for or respond to hazard events. These are also weaknesses present in individuals, households and the community.

Some examples of vulnerable conditions and factors:

a. Disaster-prone locations
b. Houses made of light materials
c. Conflict in the community
d. Lack of knowledge and skills on preparedness and protective measures
e. Attitude of helplessness and dependency

A. What is Vulnerability Assessment?

A participatory process to identify what elements are at risk per hazard type, and to

B. Elements at risk

- People
- Houses
- Property
- Crops
- Livelihood
- Community facilities
- Environment

During vulnerability assessment, the elements at risk are detailed and why these can suffer damage and loss are studied. Basically, vulnerability assessment answers the following questions:

- Who are at risk or can incur damage and loss?
- What are other elements at risk?
- What damage or loss can these people or elements at risk suffer/incur?
- Why will these people or elements at risk suffer or incur loss/damage?

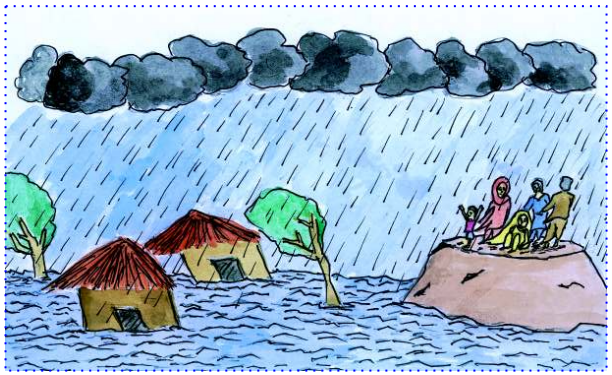
For instance, why are houses and fields destroyed by landslides?

There are several possible answers, such as:
- because of inappropriate land development
- because of deforestation
- because houses are on dangerous location, etc.

Analysis is important to determine what preparedness and mitigation measures can be most effective in the short and long term.

C. Vulnerabilities can be broadly categorized as:

- Physical/material
- Social/organizational
- Attitudinal/motivational



Categories and Factors for Vulnerability Analysis

Physical/material	Social /Organizational	Motivational/Attitudinal
▪ disaster-prone location ▪ insecure sources of livelihood ▪ lack of access and control over means of production (land, farm inputs, animals, capital, etc.) ▪ lack of adequate skills and educational background ▪ lack of basic services: education, health, safe drinking water, shelter, sanitation, roads, electricity, communication, etc. ▪ malnutrition, diseases, ▪ overexploited natural resources	▪ weak family/kinship structures ▪ lack of leadership, initiative to solve problems or conflicts ▪ unequal participation in community affairs ▪ divisions, conflicts: ▪ uinjust practices, lack of access to political processes ▪ absence or weak community organizations ▪ no or weak relationship with government, administrative structures ▪ isolated from outside world	▪ negative attitude towards change ▪ fatalism, ▪ lack of 'fighting spirit' ▪ unawareness about hazards and consequences ▪ dependence on external support

3. Wrap up discussion on vulnerability assessment and begin discussion on capacity assessment
4. Review with the participants the concept of capacity.

What is Capacity?

Capacities are the strengths which individuals, households, community and local government possess.

Capacities relate to resources, skills, knowledge, organizations and institutions, practices, attitudes and values. Coping refers to managing resources or survival strategies in adverse or crisis situations.

Mostly, notion of coping is positive (and is therefore a capacity), but it can also come to a point when it leads to increasing of vulnerabilities, as in selling of productive assets or engagement in anti-social or destructive activities (prostitution, crime).

A: What is Capacity Assessment?

- Participatory analysis to determine the resources, abilities, knowledge, skills, means and strengths of families, community and local government departments which have been used in the past.
- Involves an understanding of how the community has survived disasters and coped with hazards in the past. What were actions of households and the community to reduce damaging effects and protect and secure their livelihood and community services?
- Involves identifying resources, abilities, knowledge, skills, means and strengths which can enable the community or government to prevent, prepare for, withstand, survive and recover from a disaster. How can these resources be made available for disaster risk management (before, during and after a disaster)?

For capacity assessment, these resources, strengths, coping/ survival mechanisms and strategies are studied. Basically capacity assessment answers the following questions:

- What are existing coping strategies and mechanisms during times of crisis?
- How have individuals, households and the community survived and responded to disasters in the past?
- What are resources, strengths, local knowledge and government resources that can be used for disaster preparedness, mitigation and prevention?

Categories for capacity assessment are the same as with vulnerability assessment:

- Physical/material: economic and natural resources such as funds, machinery equipment, trained manpower,
- Organizational: good leadership, volunteers, and clear roles and functions of disaster risk management
- Attitudinal/motivational: people are aware of their abilities and have confidence in themselves, people have a sense of control over events and power to change their conditions.

B. Tools for Vulnerability & Capacity Assessment

1. Transect Walk

What: Systematic walk with key-informants through the community to explore spatial differ ences or land use zones by observing, asking, listening and producing a transect diagram

Why:

(1) Visualizes interactions between physical environment and human activities over space and time.

(2) Identifies danger zones, evacuation sites, local resources used during emergency periods, land use zones, etc.

(3) Seeks problems and opportunities

When: In initial phase when you enter community, and during community risk assessment

Who: Team with six to ten community members representing the cross-section of the area

How:

(1) Based on map, select a transect line (can be more than one)

(2) Select a group of six to ten people who represent the cross-section, and explain purpose

(3) During walk, take time for brief and informal interviews at different places in the transect

(4) Focus on issues like land use, proneness to particular disasters, land tenure, and even changes in the environment to draw a historical transect

2. Seasonal calendar

What: Making a calendar showing different events, experiences, activities, conditions through out the annual cycle

Why:

(1) Identify periods of stress, hazards, diseases, hunger, debt, vulnerability, etc.

(2) Identify what people do in these periods, how they diversify sources of livelihood, when do they have savings, when do they have time for community activities, what are their coping strategies

(3) Identify gender specific division of work, in times of disasters and in normal times

Who: Team and community members; have separate sessions for men and women

How:

(1) Use 'blackboard' or craft paper. Mark off the months of the year on the horizontal axis. Ask people to list sources of livelihood, events, conditions, etc., and arrange these along the vertical axis

(2) Ask people to enumerate all the work they do (e.g. planting, weeding, etc.) for each source of livelihood / income by marking months and duration, adding gender and age

(3) Facilitate analysis by linking the different aspects of the calendar: how do disasters affect sources of livelihood? When is workload heaviest? Ask for seasonal food intake; period of food shortage, out-migration, etc.

(4) You can continue the discussion on coping strategies, change in gender roles and respon sibilities during times of disasters,or other issues you think are relevant

3. Resource mapping

What: Making a map showing local resources and capacities, and gender differences in access to and control over resources

Why:

(1) Identify available local capacities and resources people rely on in times of disasters
(2) Identify which resources are easily affected by disasters
(3) Identify resources available with community and government

Who: Team and selected individual households belonging to different income groups

How:

(1) Ask persons to draw a map of their household and resources / capacities on which they depend for their livelihood / survival (remember material/physical, social / organiza tional, motivational / attitudinal capacities)
(2) Ask household how they contribute to / support other households, community, larger economic/ social environment
(3) Ask people to use arrows to indicate flow of resources to and from household
(4) Ask household member(s) who uses and controls resources (consider gender, class, ethnicity, religion, age)
(5) Ask questions to accompany the making of the maps, and put answer on the map

4. Institutional & Social Network Analysis

What: Making a diagram that shows key-organizations, groups and individuals in a community, nature of relationship and level of importance

Why:

(1) Identify organizations (local & outside), their roles/importance, and perceptions that people have about them
(2) Identify individuals, groups, organizations that play a role in disaster response and can support community

Who: team and community members

How:

(1) Become familiar in advance with the names of the organizations
(2) Ask people to determine criteria for the importance of an organization and to rank them according to these criteria
(3) Ask people to what extent organizations are linked to each other; note kind of relation ship
(4) Draw circles to represent each organization or group; size of circle indicates importance
(5) Continue focus group discussion on history of organizations; activities undertaken in community; how well do they function; how is coordination; which organizations, groups, individuals are important in times of disasters, community level decision making mechanisms, etc.

5. Livelihood / coping strategies analysis

What: Combination of individual household interview and making diagrams presenting different income or food sources

Why: To understand livelihood strategies, behavior, decisions and perceptions of risk, capacities and vulnerabilities of households from different socio-economic background

Who: Team can split up in smaller teams to conduct individual household interview simultaneously

How:

(1) Review hazard map, seasonal calendar, and resource map, and determine criteria to select households belonging to different socio- economic groups (sample should not be at random)
(2) Decide which households you will interview and how many
(3) Conduct the interview (1 hour); introduce yourself and reason for interview
(4) Start with getting to know household members, composition, age, gender, followed by questions about livelihood and coping strategies
(5) Draw block or pie diagrams to facilitate discussion on livelihood sources
(6) Continue discussion on how household cope in times of stress (material-social-motivational)

6. Problem tree

What: Flow diagram showing relations between different aspects

Why: Identify local major problems / vulnerabilities as well as root causes and effects

When: During later part of situational analysis or community risk assessment

Who: Team facilitates community members' meeting (optional to have separate meeting for men and women)

How:

(1) From other tools and interviews, various concerns and problems are identified
(2) Give all people small pieces of paper and ask them to write one major problem on each card, and to put these on the wall (people can draw problems in case they do not know how to write and read)
(3) Ask two or three volunteers to group the problems according to similarity or interrelationship
(4) Now the making of the 'problem tree' can start: the trunk represents the problems; the roots are the causes; the leaves are the effects
   - ❖ Ask why issues on the cards are problems. Ask 'but why?' after each explanation to arrive at the root causes
   - ❖ To arrive at the effects, ask for the consequences of each problem

7. Semi-Structured Interviews (SSI)

What: Semi-structured interviews are discussions in an informal and conversational way. They do not use a formal questionnaire but at the most a checklist of questions as a flexible guide. There are different types of semi-structured interviews:

(1) group interview
(2) focus group discussion
(3) individual interview
(4) key-informant interview

Why: To get info (general and specific), to analyze problems, vulnerabilities, capacities and

perceptions, to discuss plans, etc. Each type of semi-structured interview has its specific purpose:

- ❖ Group interview: to obtain community level information, to have access to a large body of knowledge
- ❖ Individual interview: to obtain representative, personal info. May reveal differences / conflicts within community
- ❖ Key-informant interview: to obtain special knowledge about a particular topic; you interview a nurse if you want to know more about epidemics, a farmer about cropping practices, a village leader about procedures and policies
- ❖ Focus group discussion: to discuss specific topics in detail with a small group of persons who are knowledgeable or who are interested in the topic. People can also be grouped according to gender, age, owners of resources

Who: Team of 2 - 4 people

How:

(1) Prepare key issues in advance
(2) Select one person to lead the interview
(3) Ask questions in an open-ended way (what, why, who, when, how, how do you mean, anything else?)
(4) Ask for concrete information and examples
(5) Try to involve different people (if present)
(6) Pay attention to group dynamics
(7) Ask new questions, arising from answers given
(8) Make notes

8. **Hazard Mapping** (Please see Hazard Assessment Session)
9. **Timeline / Historical Profile** (Please see Hazard Assessment Session)

Categories and Factors for Capacities and Vulnerabilities Analysis

Physical / Material

- Location and type of housing/building materials
- Land, water, animals, capital, other means of production (access and control)
- Infrastructure and services: roads, health facilities, schools, electricity, communications, transport, housing, etc.
- Human capital: mortality, diseases, nutritional status, literacy, poverty levels
- Environment factors: forestation, soil quality, erosion

Social / Organizational

- Family structures (weak/strong)
- Leadership qualities and structures
- Legislation
- Administrative structures and institutional arrangements
- Decision-making structures (who is left out, who is in, effectiveness)
- Participation levels
- Divisions and conflicts: political groups, language groups, and structures for mediating conflicts

- Access to political process
- Organizations
- Relationship with government
- Isolation or connectedness

Motivational / Attitudinal

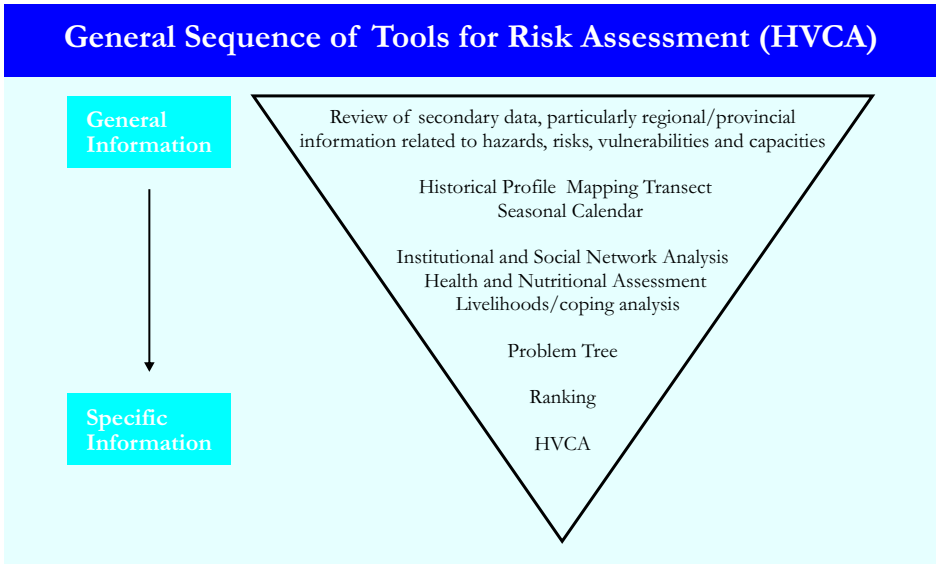
- Attitude towards change
- Sense of ability to affect their world, environment, get things done
- Initiative
- Faith, determination, fighting spirit
- Fatalism, hopelessness
- Dependent / independent (self-reliant)
- Consciousness, awareness
- Cohesiveness, unity, solidarity, cooperation
- Orientation towards past, present, future

Data Gathering Plan for Risk Assessment

- Formation and orientation of the risk assessment team/s
- What are the data and information needed?
- What are the tools which can be used? Recognize that not all tools are suited to all situations and social groups
- Who and where are the sources of the information needed? From whom or where can the data be gathered?
- When will these participatory tools be used? What is the sequence of tools to be used?
- What are the roles of team members? If more than one team, which team will do what? Within each team, who will act as the facilitator & process observer, documenter?

Data Gathering Plan for Risk Assessment

Information needs	Tools	Info source / informant	Schedule /Sequence	Which team? Assignment among Teams	Who does what? Tasking within Team
Data for hazard, vulnerability & capacity assessment People's perception of their disaster risk	Which tools can be used to collect the needed informati-on?	From whom or where will we collect the data (sources) ?	When will you apply tools (start, middle or end)? Arrange tools according to sequence	Which team will do what?	



5. Divide participants into 5-6 groups to work on the Vulnerability Assessment and Capacity Assessment
6. Ask participants to present their group work to the plenary body and invite questions from the participants.
7. Summarize discussion

Duration : 1 Hour and 30 Minutes

Tips to Facilitator:

1. Commonly used tools for assessing vulnerability are:
   - community mapping, visualizing land use patterns, mobility and elements at risk
   - transect walk gives a better understanding of the map done by the community and provides opportunities to ask more questions regarding physical/material vulnerability
   - seasonal calendar gives insight in periods of stress, diseases, hunger, debt, etc.
   - livelihood analysis shows that not everybody is equally affected by hazards
   - institutional and social network analysis can show us the lack of coordination among organizations and government agencies
   - semi-structured interviews can assess the motivational vulnerabilities of the community
   - problem tree and ranking enables stakeholders to express their main vulnerabilities and root causes of their vulnerabilities

2. Remind the participants that even the most vulnerable families in the community possess capacities – in terms of physical, social, or attitudinal. It is important to

recognize and build on people's existing capacities to avoid creating conditions of vulnerability.

3. For assessing people's capacities, similar tools as for the vulnerability analysis are applied.

Materials Needed:

- Hazard map from previous session
- Flip chart/Easel paper
- Colored markers or pencils
- Plastic sheets/cover for overlay on base map

References:

1. Living With Risk, UN ISDR, 2002.

2. Major Hazards, Family and Community Disaster Preparedness: Guide for Training Families and Communities, Department of Social Welfare and Development, Philippine.

4. Guidelines for Elaborating a Community Risk Map by René Martorell and Rocio Sáenz, UNISDR Latin America & the Caribbean.

5. Guidelines for Producing a Community Risk Map, UNISDR Latin America & the Caribbean, Disaster Risk Reduction 1994 – 2004, UN ISDR.

Session-4

Risk Assessment Fieldwork

Learning Objectives:

1. Conduct hazard, vulnerability and capacity assessment at the community level;
2. Validate with the members of the community the results of the HCVA undertaken inside the training venue and revise it accordingly; and
3. Raise awareness of the community members on the disaster risks in the community and on the need to implement disaster risk reduction measures.

Process:

1. Present the session objectives to the participants.

2. Coordinate with community leaders about the purpose, content, method and process of the community risk assessment, long before the conduct of the fieldwork. Date and time of the visit, venue for meetings and other logistical needs must be agreed. Preparation includes the grouping of the local people as resource persons for the participants during the data-gathering. Grouping may be according to gender, age, occupation and institutions. It could also be mixed, but should ensure that men, women, children and the elderly are properly represented.

3. Organize the participants into data-gathering team before leaving for the field.

4. Instruct all teams to agree on what data they should gather, and not to forget to take with them the results of the classroom hazard, vulnerability and capacity assessment.

5. Run through the principles of community work regarding participation, proper behavior and correct attitude in fieldwork. Remind the participants to be sensitive to culture and gender aspects. Though they know each other well, remind them that this time they are learners and this is an opportunity for gathering people's perceptions of risk besetting the community. Also remind them to take the results seriously as this will be the basis for community risk reduction planning.

6. Review the corresponding tools to generate information:
   - hazard assessment: hazard matrix, hazard map, seasonal calendar, historical profile
   - vulnerability assessment: hazard map showing elements at risk, transect, seasonal calendar, historical profile, timeline, institutional and social network analysis, livelihood analysis, problem tree, focus group discussion
   - capacity assessment: all tools for vulnerability assessment, gender resource mapping
   - people's perception of risk: ranking of hazards/community problems according to priority risk
7. Agree which team will be assigned to particular groups.

8. Teams are composed of at least five members – lead facilitator, co-facilitator, two documenters and an observer. The community leader or designated official serves as the overall coordinator of the data-gathering team.

9. The community leader or designated official should welcome everyone to this exercise and should reiterate the purpose of the fieldwork. It should be explained that though this is a field practice, the results will be used by the community and government for identifying risk reduction measures, therefore the community leader should encourage the participation of everyone.

10. After the general meeting, the teams get to their respective groups. In the small groups, the facilitators start the discusion, after a brief warm-up. As they discuss, the documenters take notes. Some of the information generated during the classroom exercise may or may not be validated. The documenters also take note of that. Participatory tools are used, ensuring that people participate in the discussion, drawing, sketching, etc. At the end of each meeting, the facilitators summarize the findings and ask if there are any corrections.

11. After the small group meeting or activity, each team will meet to collate and assess the data gathered. Each team will then present the findings to the community using the risk assessment format.

12. After thanking the community, the whole group goes back to the classroom setting.

13. After getting back to the training venue, discuss the process and results of the community risk assessment. Learn from the field practice by pointing out what went well and what went wrong during the activity.

Tips to Facilitator:

1. During the fieldwork, the classroom/data information from the HCVA sessions are validated by the members.

2. Assign facilitators for the fieldwork who are good at involving people in the discussion.

3. This is the opportunity for the participants to practice the tools that they have read and learned.

4. The participants should familiarize themselves with the materials on "Data-Gathering Plan for Risk Assessment" and the Suggested Format for Risk Assessment. This should be distributed at the beginning of the module.

5. The results of the risk assessment are important for the risk reduction planning in module 5.

Duration : 4 Hours

Materials Needed:

- Visuals and/or descriptions of tools for hazard, vulnerability and capacity assessment
- Flip chart/Easel paper, colored markers or pencils

Risk Reduction Measures For Earthquake, Landslide, Flood, Drought & Cyclone

Modular Objectives:

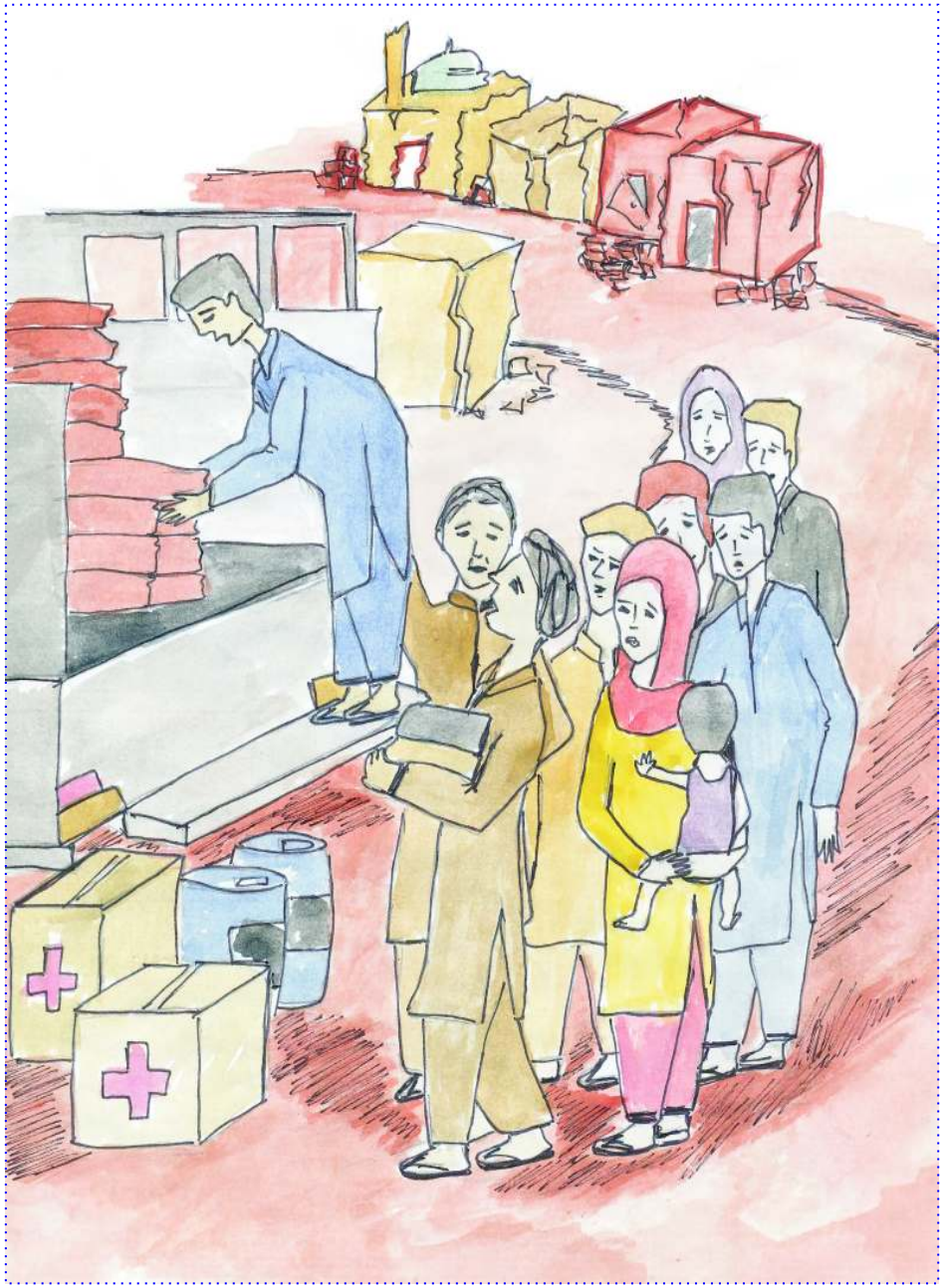
1. Identify adequate and appropriate disaster risk reduction measures and activities for earthquakes, landslide, flood, drought, and cyclone; and

2. Enhance capacities in disaster risk management of line agencies.

Number of Sessions: 5

Session 1 – Introduction to Risk Reduction Measures
Session 2 – Disaster Mitigation and Preparedness strategies for earthquake, landslide, flood, drought and cyclone
Session 3 – Public Awareness
Session 4 – Early Warning System and Evacuation
Session 5 – Emergency Response

Duration : 7 Hours



Session-1

Introduction to Risk Reduction Measures

Learning Objective:

1. Overview of structural and non structural measures in disaster mitigation and emergency response.

Key Concepts:

- Risk Reduction measures
- Structural Mitigation
- Non-structural Mitigation

Methods:

- Discussion

Process:

1. Introduce the session and its objective.
2. Start the session by asking the participants their experiences in data gathering through filed work. At this point they already know the risk that they are facing. Begin the session in module 4 session 1 by asking the participants the following questions:

A. What is Risk Management?

The strategies and actions aimed at mitigating hazards and reducing vulnerabilities.

B. What is Disaster Risk Reduction?

The policies, strategies and practices to minimize vulnerabilities and disaster risks throughout a society. Risk reduction measures are generally referred to as preparedness, mitigation and prevention.

These are measures to reduce the impact of hazards, vulnerability reduction and capacity building (including reinforcing people's existing coping strategies)

C. Examples of Do-able Risk Reduction Measures

- Structural & Non-Structural prevention and mitigation measures such as:
  - Dams
  - Dikes
  - Sea walls
  - Mangroves reforestation
  - Permanent houses
- Safe building design
- Safety measures at home, in the community and at work places,

- Strengthening livelihood and community health
- Food security
- Nutrition improvement
- Awareness about hazards and vulnerability preparedness
- Relocation to safer location
- Advocacy for environmental protection and development issues
- Preparedness activities such as:
  - Public awareness
  - Early warning
  - Evacuation drill
  - Strengthening coordination and institutional arrangements
  - Stockpile of supplies and logistics
- Emergency Responses such as:
  - Search and rescue
  - First aid
  - Evacuation center management
  - Damage needs capacity assessment (DNCA)
  - Immediate repair of community facilities and services
  - Relief delivery
  - Clearing the debris
  - Psycho-social counseling & stress debriefing
  - Medical services
- Post disaster or recovery period such as:
  - Rehabilitation
  - Reconstruction

Duration: 1 Hour

Tips to Facilitator:

1. Since the time for this session is short, just mention the doable risk reduction measures that the agencies in the district are doing.

2. Ask the participants what do they think the district needs to do to reduce the risk in the hazards they are facing like, earthquake, landslide, flood, drought and cyclone?

Materials Needed:

- Power Point Presentation / Slides

References:

1. Handouts on Training of Trainers in CBDRM, Thaubang District, Myanmar December 16-21, 2004. Conducted by Center for Disaster Preparedness, Inc.

2. UN Strategy for Disaster Risk Reduction: Living with Risk.

Session-2

Disaster Mitigation & Preparedness for Earthquake, Landslide, Flood, Drought & Cyclone

Learning Objective:

1. Discuss mitigation and preparedness strategies for earthquake; landslide; flood; drought; and cyclone.

Key Concepts:

- Mitigation
- Preparedness
- Earthquake
- Landslide
- Flood
- Drought
- Cyclone

Methods:

- Interactive Lecture

Process:

1. Introduce the session and its objective.

2. Ask participants about their experience of a disaster, for instance:
   - Where they were when it happened?
   - What were their reactions?
   - How did they survive?

3. Use their answers to link the discussion on disaster experience and the risk reduction measures for it. Start the discussion as given in the following paragraphs:

A. What is Earthquake?

Earthquakes are earth vibrations produced when the stability of rock masses under the surface of the earth is disturbed. These disturbances usually occur along existing fault lines or zones of structural weaknesses

B. Why Earthquakes occur?

Most earthquakes happen near the boundaries of tectonic plates, both where the plates spread apart and where they crunch or grind together (although large temblors also strike from time to time in the normally stable interior of continents). Along plate boundaries, the brittle outer part of the Earth fractures along faults. As plates move, blocks of crust shift along the faults.

C. Can earthquake be predicted?

Many seismologists would probably answer, "Not yet, but eventually." But to date, nobody has been able to predict earthquakes reliably enough and over short enough time scales to allow the evacuation of threatened cities. Some scientists have entirely lost faith in earthquake prediction.

D. What are the possible risk reduction measures for earthquake?

1. Hazard mapping
2. Public awareness program and training
3. Land use control or zoning building codes
4. Insurance for crops and houses
5. Retrofitting – masons training on safer construction
6. Resilient construction of houses, infrastructure

4. Ask participants if they have questions. Summarize and proceed to the next topic --- Landslide

A. What is a Landslide?

Landslide is a general term used to describe the down-slope movement of soil, rock and organic materials under the influence of gravity.

B. What causes landslide?

Some slopes are susceptible to landslides whereas others are more stable. Many factors contribute to the instability of slopes, but the main controlling factors are the nature of the underlying bedrock and soil, the configuration of the slope, the geometry of the slope, and ground-water condition.

C. What are the possible risk reduction measures for landslide?

1. Hazard mapping
2. Land use regulation
3. Insurance for crops and houses
4. Community education/training
5. Early Warning Systems & Evacuation
6. Reforestation
7. Gabion wall / boxes (a water retention filter system filled with rock particles for receiving storm water runoff to stabilize slopes, riverbanks and reconstruct roads.)

5. Ask participants if they have questions. Summarize and proceed to the next topic --- Flood

A. What is a Flood?

Flood is a condition that occurs when water overflows a stream or river, or when run-off from heavy rainfall accumulates over low-lying areas.

B. Can a flash flood be predicted?

Flash floods represent different forecast and detection challenges because they are not always caused by meteorological phenomena.

Flash floods result when favorable meteorological and hydrological conditions exist together. Although heavy rainfall is necessary, a given amount and duration of rainfall may or may not result in a flash flood, depending on the hydrological characteristics of the watershed where it is raining.

Variables include knowing how much water runs off (as well as where it runs to), how strong the stream is flowing, how wide an area is getting rain, how hard and fast it is raining, how long it has been raining in a particular drainage basin, where the storm is located and how fast or slow it is moving, how porous the soil is and how much water it already holds, the amount of vegetation covering the soil, and how much surface is paved, etc.

C. What are the possible risk reduction measures for flood?

1. Flood control (channels, dikes, dams, erosion control, etc.)
2. Flood detection and warning systems.
3. Community participation and education
4. Development of master plan for floodplains management
5. Construction of flood resilient houses
6. Using flood resilient crop varieties in farming

6. Ask participants if they have questions. Summarize and proceed to the next topic --- Drought

A. What is a Drought?

Drought is a period or condition of unusually dry weather within a geographic area where rainfall is normally present. During a drought there is a lack of precipitation. Droughts occur in all climatic zones. However, its characteristics vary significantly from one region to another.

Drought usually results in a water shortage that seriously interferes with human activity. Its seriousness depends on the degree of the water shortage, size of area affected, and the duration and warmth of the dry period. In many underdeveloped countries, such as India, people place a great demand on water supply. During a drought period there is a lack of water, and thus many of the poor die.

B. Can drought be predicted?

Scientists can predict the likelihood of a drought by careful monitoring of rainfall, river flow and soil moisture.

C. What are the possible risk reduction measures for drought?

1. Construction of reservoirs (to hold emergency water supplies, or harvesting of rainwater).

2. Education to avoid over cropping and overgrazing.
3. Programmes to limit settlement in drought-prone areas.
4. Keep the livestock population in accordance with carrying capacity of range lands
5. Alternative livelihoods during drought periods.
6. Drought and famine early warning systems.

7. Ask participants if they have questions about the sub session. Summarize and proceed to the next topic --- Cyclone

A. What is a Cyclone?

Cyclone is an intense weather disturbance such as typhoon and storm composed of a big whirling mass of wind and rains, similar to whirlwind, tornado or waterspout but having immense dimensions. It has violent winds which flow around and towards the center and is associated with torrential rains often accompanied by thunderstorms.

B. Can cyclone be predicted?

Over the years, forecast methods have moved from simple subjective deductions based on observations of specific parameters such as cloud types and motions, sea swells, and pressure, to more sophisticated techniques which use complex computer models of the atmosphere. Until recently, predictions were centered on the motion of the cyclone, but both motion and intensity are now being routinely predicted.

A tropical cyclone forecast involves the prediction of several interrelated features, including the track, winds, rainfall, and storm surge and, of course, the areas threatened.

C. What are the possible risk reduction measures for cyclone?

1. Risk assessment and hazard mapping
2. Land use control and flood management
3. Reduction of structural vulnerability
4. Improvement of vegetation cover
5. Public warning systems & Evacuation plans
6. Training and community participation
7. Mangrove plantation

8. Ask participants if they have any questions, clarification regarding the session and summarize it.

Duration : 2 Hours & 30 Minutes

Tips to Facilitator:

1. Don't deal so much with the technicalities of each hazard; focus mainly on how can we mitigate or minimize the losses in case it occurs.
2. The tips on what to do before, during and after each hazard will be included in the workbook.

3. Always ask participants about their experience of each hazard.
4. Try to give simple examples of the hazards, real examples, and pictorials if possible.
5. Experience of local people is significant.

Materials Needed:

- Power Point Presentation / Slides

References:

1. http://www.em.gov.bc.ca/Mining/Geolsurv/Surficial/landslid/default.htm

2. Handouts on Training of Trainers in CBDRM, Thaubang District, Myanmar December 16-21, 2004. Conducted by Center for Disaster Preparedness, Inc.

3. UN Strategy for Disaster Risk Reduction: Living with Risk.

4. http://ndcc.gov.ph/ndcc/index.php?module=pagemaster&PAGE_user_op=view page&PAGE_id=17&MMN_position=47:47

5. http://library.thinkquest.org/16132/html/drought.html

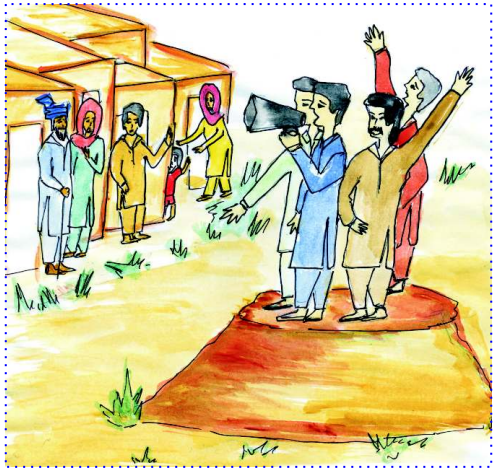
6. http://www.nssl.noaa.gov/primer/flood/fld_predicting.html

7. http://www.niwascience.co.nz/edu/students/faq/drought

8. http://www.oas.org/cdmp/document/forecast/forecast.htm

Session-3

Public Awareness



Learning Objectives:

1. Understand the importance of public awareness;
2. Enumerate mediums to be used for public awareness; and
3. Discuss District's awareness strategy as laid down in the National Disaster Risk Management Framework.

Key Concepts:

- Public Awareness
- Mediums

Methods:

- Interactive Lecture

Process:

1. Introduce session and its objectives.
2. Ask participants what is their understanding of public awareness.
3. Write down their answers and begin the session.

A. What is Public Awareness?

- A systematic distribution of information about potential hazards and threats and what people can do about them, in order to encourage people to act to protect their lives and property (CDRC).

- The process through which people living in hazard-prone areas come to realize and understand that they live in areas of risks, know the specific dangers that they are exposed to and the warnings that are issued, and know the appropriate actions to be taken to protect their live and minimize property damage (ADPC).

B. Objectives of Public Awareness

1. To increase the public knowledge about hazards, their nature and the consequences of their impact;
2. To increase knowledge about practical preparedness measures;
3. To inform the public about the warning system that will be employed and what they should do when
   they receive it;

4. To increase knowledge on how to respond to an emergency situation;
5. To mobilize support for disaster risk management plans or response activities.

C. Elements of Public Awareness

- Message
- Means (posters, radio, calendars)
- Audience
- Intended result

D. Features of an Effective Public Awareness Programme

- Ongoing Process - Public awareness is an on-going process, not simply a set of products such as posters, brochures, etc.
- Participatory - Target population are active participants in program design and implementation phases, in partnership with individuals having the necessary technical skills.
- Community specific - Culture and disaster history of the community should be considered.
- Hazard specific - An assessment of specific hazards is the essential basis for developing public awareness programme.
- Target population specific -Must be based on need of specific group for information essential to them.
- Integral part – Public awareness is an integral part of warning and response system.

E. Some Channels and Forms

- Community meetings, house-to-house campaign;
- Posters, poster making contest among school children;
- Plays, drama/skits, songs;
- Leaflets, brochures, comics, calendar, manuals, books;
- Radio program, television features, tapes, CD;
- Earthquake safety day, disaster consciousness day/week/month;
- Photo exhibit, forum, public speeches;
- Press releases, letters to the editor, articles in printed media;
- Disaster management orientation, disaster preparedness training.

F. District strategy in awareness raising of vulnerable communities and stakeholders: (based on NDRMF, 2006)

1. Identify key social groups that should be targeted for awareness raising about disaster risk management;
2. Identify information needs of the selected target groups on disaster, risk and risk reduction;
3. Identify the appropriate channels of communication for awareness raising of local groups;
4. Produce printed, and audio-visual materials or develop activities for face to face communication;

5. Implement awareness raising campaigns with the selected stakeholders;

Duration: 1 Hour

Tips to Facilitator:

1. Public Awareness plays a vital part in risk reduction.
2. Bring different kinds of public awareness materials and different forms (calendar, poster, t-shirt, etc.)
3. Stress that awareness raising of vulnerable communities and stakeholders is included in the National Disaster Risk Management Framework, 2006 and the DDMA is the lead agency for this endeavor.

Materials Needed:

- Power Point Presentation / Slides
- Sample of Public awareness materials in different forms (calendars, t-shirts, posters, etc.)

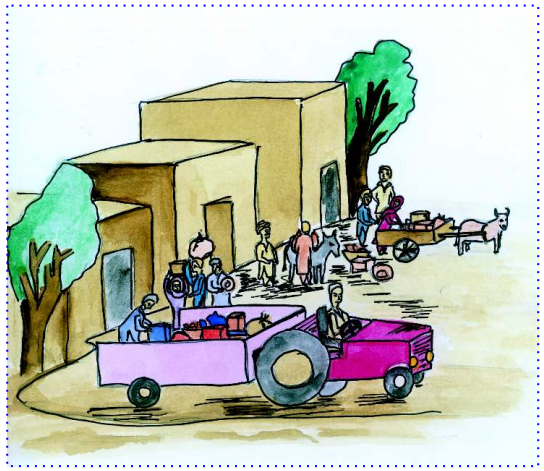
References:

1. Handouts on Training of Trainers in CBDRM, Thaubang District, Myanmar December 16-21, 2004. Conducted by Center for Disaster Preparedness, Inc.

2. Asian Disaster preparedness Center, 4th Regional Course on CBDM, 2000.

Session-4

Early Warning System & Evacuation



Learning Objectives:

1. Understand the importance of warning system;
2. Explain the process of evacuation; and
3. Identify role of District Authorities in developing warning system.

Key Concepts:

- Warning system
- Evacuation

Methods:

- Interactive lecture
- Games (relay of message)

Process:

1. Discuss session and its objectives.
2. Group the participants into 3 and let each group form a straight line. Call the first person in each line/group and give a sheet of paper that contains the message for relay. Give them two minutes each to capture the word in the paper. After the two minutes capturing the message in the paper they will pass the message to the person next in line with out interfering to their group. The message will be transferred one after the other, the last person on the line will write in an easel the message she/he got. Give them at least seven minutes to finish the game. Check each group answer, check whose group got more correct answer.
3. Process the game and ask participants how do they feel? Ask the group who got the most correct answer that why they got it right and ask the group who got lesser right information. Use this game as jumping board for the topic early warning system and evacuation.

A. What is early warning?

Early warning is the relay of messages about the existence of danger and what they need to do to prevent, avoid or minimize the danger

B. Why do we give warning?

1. To inform about:

- hazards
- elements at risk (who and what might be affected)
- risks
- the environment
- potential needs

2. To advise on:
   - means of protection

Example:
Warning on contamination of water sources either from natural or human made activities (contamination due to parasites/bacteria etc., contamination due to mining)

   - means of preparedness

Example:
Preventive evacuation due to severe weather forecast/warning,

   - means of mitigation

Example:
Sandbagging to reinforce the dikes

   - means of response to threat

Example:
Warning that floodwater is about to breach dike that there is need to reinforce dike (sandbag)

3. To instruct:
   - what
   - when
   - how
   - who
   - where

C. Different forms of giving warning and/or receiving warning

- Village/community meetings
- Notices/posters/billboards
- Verbal or pictorial messages
- Cartoon series
- Radio
- Television
- Newspaper
- Films
- Announcements
- Sirens
- Other indigenous forms and channels

D. Things to consider when giving warning

1. Inform the people of the different phases of warning and their meaning.
2. Inform or update the evacuees/community of the forecast and the warning using symbols or sounds that every body can understand.
   a. If symbols are to be used, these can be painted or mounted in plywood or boards that can be read or seen even from afar
   b. Make sure to change the symbol or sound when a change in the warning or forecast is made by warning agencies or by the community monitoring team

3. "Information Boards" can be placed in strategic or conspicuous areas/places like:
   - ❖ mosques, schools or government buildings, mountains or high places
   - ❖ stores / transportation facilities
   - ❖ other places where people frequently pass or gather

4. Organize a committee on information

The task of this committee will be to monitor and prepare all paraphernalia for the dissemination of information regarding the warning/forecast or the monitoring of all hazards (natural or human-made).

The flow of information from the "field" until it is processed and packaged for information dissemination to the community should be clear.

5. Identify roles and responsibilities:

- For any one element, an organization or an individual must be able to determine that it has:
  a. primary role – responsibility for initiating and maintaining action;
  b. secondary role – responsibility for undertaking tasks in support organization or individual with a primary role; or
  c. no role at all.

- Two methods of describing these roles and responsibilities can be used by the information committee:
  1. List organizations involved and describe their roles for each hazard
  2. List hazards and identify the lead/support organizations for each hazard

- The description of roles and responsibilities by organization is useful for each team leader, coordinator, organizations involved to review their (individually and) organization's overall involvement

6. The warning should be:
   - Area specific and people specific
   - Hazard specific
   - Based on the Hazard, Capacity and Vulnerability Assessment
   - Able to give advise on what to do
   - Able to inform community of the possible effects / risks that may cause them if they

7. Community should know the meanings of actions to be taken (What ready, get set and go mean?). Or recommended action should be specific like: pack-up things, proceed to pick-up point or proceed to evacuation site

8. Warning is given in simple form and in the local dialect

4. Ask participants if they have any questions or clarifications and then proceed to the next topic -- -- Evacuation.

5. Ask participants if they have an experience of evacuation. Use this time to let the participants share their own experience of evacuation and then start the topic.

A. What is Evacuation?

The evacuation is an organized movement of people from an area of risk to a safer location.

B. When is the Time to Evacuate?

- Inundation of living areas by flood, storm surge or tsunami
- Volcanic eruption
- Serious damage to construction of houses (typhoon, earthquake, etc)
- Fire
- Situation of armed conflicts/civil war

C. Phases of Evacuation

1. Warning
2. Order to Move
3. Actual Evacuation
4. Evacuation Center Management
5. Return to former or new place

D. Plan for Actual Evacuation

1. Identify a safe place for evacuation
2. Identify shortest and safest route
3. Identify and prepare alternative routes
4. Identify pick up points or assembly points for people
5. Place "road signs" along evacuation routes
6. Prepare master list of evacuees and check at each pick-up point if the group is complete
7. Prepare evacuation schedules and groupings in case transportation is to be used
8. Set provisions and plan evacuation of animals and other properties of evacuees
9. Organize an Evacuation Committee among community members
10. Identify and prepare requirements during evacuation (transport, gasoline, food, water, medicine, road signs, communication systems, etc.)

E. Task of Evacuation Committee

Pre-evacuation:

- Prepare evacuation plan including warning system
- Training and education of community members
- Identify and prepare logistical needs for evacuation
- Networking, coordination and resource generation for the purpose of evacuation

During evacuation:

- Give order to move
- Manage logistical needs for the evacuation
- Ensure orderly evacuation
- Act as marshals/guides during evacuation
- Search and rescue

In Evacuation Center:

- Coordinate with health, food, sanitation, security, information committee
- Manage relief operations while in evacuation center
- Networking, public information, advocacy, resource generation

F. Evacuation Center Management by District

Before:

- Criteria for evacuation center selection:
  - Availability of water
  - Accessibility
  - Topography and drainage
  - Available space (people, animals, communal services, etc.)
  - Safety
  - Soil type (drainage/farming)
  - Land rights
  - Site assessment
  - Site planning (latrines, cooking, animals, etc.)

During:

- Registration and monitoring of evacuees
- Space assignments to evacuees
- EC management orientation
- Maintain order (people, health, sanitation, garbage disposal, etc.)
- Coordinate delivery of services (relief, medical missions, etc.)
- Provision of information
- Training and education
- Networking and resource generation

After:

- Ensure that return is safe or find alternative place
- Repair damages in community

- Clean evacuation site
- Return to community
- If this is not possible, networking, negotiation, advocacy will be necessary to find alternative

6. Ask participants if they have questions, clarifications, and summarize and end the session.

Duration: 1 Hour

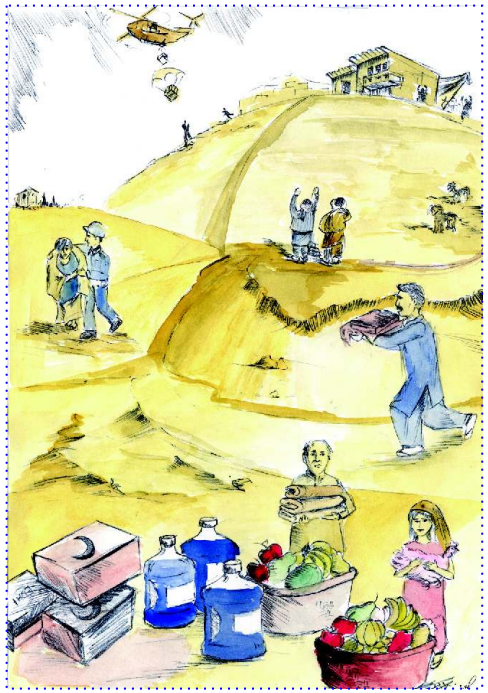
Tips to Facilitator:

1. Ask the participants if there is any existing warning system present in the district.
2. Encourage the district to come up with an effective warning system that is suitable to the districts / communities.
3. Seek local wisdom regarding different signs and signals for local early warning.

4. If time allows and if possible and available, use a video documentation of an evacuation and early warning.

Materials Needed:

- Power Point Presentation / Slides
- Advisory word for the relay games in warning system



References:

1. Asian Disaster Preparedness Center, Community Based Disaster Management – 10 Course Hand-outs, July 8 – 19, 2002.
2. Natural Disasters Organization, 1992, Australian Emergency Manual, Community Emergency Planning Guide 2nd edition.
3. UNDRO, 1987, Disaster Prevention & Mitigation, a compendium of current knowledge, vol. 10, public information aspects.
4. Bagyo, Lindol, Bulkan Atbp., A Disaster Management Handbook, CDRC.
5. CDRC Disaster Preparedness Training Proceedings.

Session-5

Emergency Response

Learning Objectives:

1. Present different activities of emergency response;
2. Explain relief management system; and
3. Explain the importance and management of emergency operation center.

Key Concepts:

- Emergency
- Response
- Emergency Operation Center
- Damage Needs Capacity Assessment
- Relief
- Relief delivery operation

Methods:

- Interactive lecture
- A short video clip can be shown to generate discussion, if available and time allows

Process:

1. Introduce the session and its objectives.
2. Begin the session by asking the participants about their understanding of Emergency. Write down their answers and start the session.

A. What is an Emergency?

- A situation where there is an immediate threat to life or to the survival of victims (Randolph Kent, Anatomy of Disaster Relief).
- Situation where the immediate survival of the affected population is threatened (CDRC).

B. What is the Objective of Emergency Response

To control the further deterioration of the victims' situation.

C. Activities / Components of Emergency Response

- Evacuation
- Evacuation Center Management
- Search and Rescue
- Emergency Health Services such as:
  - First Aid

- Managing mass casualties
- Managing severe nutritional deficiencies
- Sanitation
- Water supply
- Personal hygiene
- Control of communicable diseases

- Psychological first-aid such as:
  - Diagnosis
  - Counseling
  - Therapy (play, music, movement, etc.)
- Provision of food and non-food items
- Temporary shelter
- Emergency repair of critical facilities
- Security measures/tracing/family reunification
- Legal measures
- Advocacy/issue projection especially for human-made disasters

D. Requirements:

- Logistics
- Damage Needs Capacities Assessment (DNCA)
- Monitoring and reporting
- Coordination and communication between and among victims and service agencies
- Resource mobilization
- Emergency Operations Center/Committee Formation

E. When should emergency response commence?

When there is enough monitoring and gathering of relevant and valid data necessary to serve as basis for interventions.

3. Ask participants if they have any questions, clarifications and answer each question. Close this topic and start the next one – Damage, Needs & Capacity Assessment.

A. What is Damage, Needs & Capacity Assessment (DNCA)?

DNCA involves a participatory analysis of the disaster event, of the damages it causes, of the immediate needs and priorities of the affected community and of the remaining capacities people use to cope with the adverse effects.

B. Purpose of DNCA:

1. To identify appropriate emergency assistance
2. To receive timely reports from the community level
3. To generate financial, material and human resources
4. To adequately inform the public on the disaster situation, needs and responses
5. To update the information gathered through the HVCA

C. DNCA contains the following data:

1. **Disaster Event:**
   - What happened?
   - When?
   - Where?
   - How?
   - What are other immediate threats? Who will be affected?

2. **Damages and Losses:**
   - Who suffered losses and damages to life and property?
   - What and where are the damages?
   - What facilities and services are disrupted and non-functional?

3. **Responses of families and the community:**
   - What emergency responses have been undertaken by the affected families and community?
   - What services have been given by the government and NGOs?
   - Emergency responses - evacuation, evacuation center management, search and rescue, monitoring of the disaster situation, relief assistance, assessment of damages, needs and capacity.

4. **Plans of the affected families and community:**
   - What are plans to respond to the emergency situation?
   - Who are involved?

5. **Needs in the emergency period:**
   - What emergency services and responses are needed?
   - How many? How much? When?

Sample of Damage, Needs and Capacity Assessment form:

I. Name of Organization : _____

II. Description of the Disaster Event:

Disaster : _____

Date of Occurrence: _____

Duration: _____

III. Affected Area : _____

(Address: Village / City / District / Region / Province)

Total Land Area: _____

Total Population: _____

Total No. of Families: _____

Total No. of Families Affected: _____

No. of Children Below 15 Years Old: _____

No. of Women Affected: _____

No. of Missing Persons: _____

Usual Family Size or No. of Children per Family: _____

IV. Damage to Structures:

No. of Families Who Own Their Houses: _____

No. of Families Who Lease: _____

Structures Affected	No of Partially Destroyed	No. of Completely Destroyed

A. Men

Type of Economic Activity	Regular Income (Monthly / Daily)	No. Engaged in Livelihood

B. Women

Type of Economic Activity	Regular Income (Monthly / Daily)	No. Engaged in Livelihood

V. Damage to Livelihood :

Sources of livelihood in the Area

VI. Present Location of the Survivors:

Did the affected families evacuate or do they remain in their respective homes?

(If the answer to the above is yes, answer section A or B below.)

A. Evacuation Centers (Specify name, location, distance from the place of origin)

1. When did the families move to the evacuation center? _____
2. How large is the evacuation center (square meter)? _____
3. How many are staying in the center? _____
4. Is there enough ventilation? _____
5. Are there beds to sleep on? _____

   if none, where do the people sleep? _____
6. How are waste and excreta disposed of? _____
7. Are there enough latrines? _____
8. Are there sources of potable drinking water? _____

B. In the absence of an evacuation center, please specify present location of the survivors and give brief description of the physical condition of the place

VII. Organizations Where the Target Beneficiaries are Members:

Name of Organization	Sector	Total No. of Members	No. of Members from Survivors

Can these organizations help in the relief operation? _____

In what way can they help? _____

VIII. Assistance Received from Other Organizations:

Name of Organization	Assistance Extended	Date	Quantity / Estimated Amount

IX. Identification of Needs of Target Beneficiaries:

A. Medical

1.

Present Type of Illness	No. of Cases Per Age Group			
	0 – 5	6 – 15	16 – 65	Over 65

2.

Causes of Death	No. of Cases Per Age Group			
	0 – 5	6 – 15	16 – 65	Over 65

3.

Nature of Injury (Indicate severity)	No. of Cases Per Age Group			
	0 – 5	6 – 15	16 – 65	Over 65

4. Are these people suffering from psychological disturbance? If yes, please state observed abnormal behaviors and how many are exhibiting such behavior.

_____

5. Are there medical personnel who can help in the treatment of ill persons? If yes, how many and what are their field of expertise? Where is the nearest hospital or medical facility (private & Public)?

_____

6. How many need professional medical treatment? _____

7. How many of them need to be hospitalized? _____

B. Water

1. Source of water for drinking and household use _____

2. No. of water pumps – potable: _____

   Not Potable: _____

C. Food

1. Who and how many should receive food relief? Why? _____

3. When will food rations be used and until when? _____

D. Clothing

1. Are there survivors who are in need of clothing assistance? If yes, How many?

_____

2. Clothes that need to be supplied

For	Quantity
Children	
Women	
Men	

E. Other Items Needed

1. Kitchen Utensils: what, how many and why? _____

2. Sleeping materials: What, how many and why? _____

3. No of families in need of materials for temporary shelter _____

XI. Additional Information of the Area

Describe the physical features of the area and the disaster threats / hazards. (e.g., near the riverbank, low-lying, fire / toxic hazard from factory, narrow / congested streets, etc.) Place this at the back of this form.

DATE OF INTERVIEW: _____

RESPONDENT/S: _____

_____

_____

_____

INTERVIEWER: _____

4. Ask participants if they have questions, clarifications and answer each question. Close this topic and begin with the next topic – Relief Delivery.

A. What is Relief Delivery?

- Provision of temporary shelter, medical treatment, food and clothing; without this assistance, conditions will deteriorate (Kent)
- Meeting immediate needs for food, clothing, shelter and medical care of disaster victims

- Assistance given to save lives and alleviate suffering in the days and weeks following a disaster
- For creeping or slow-onset disasters, the relief period may be months or even years after (Asian Disaster Preparedness Center)
- Emergency responses whose aim is to ensure the immediate survival of the threatened population (CDRC)

B. Relief Delivery Operations Process

1. DNCA
2. Planning
3. Resource generation
4. Purchasing
5. Warehousing
6. Repacking
7. Distribution
8. Assessment
9. Reporting

C. Relief as a Tool for Development

- It encourages people's participation
- It facilitates formation of organizations
- It does not create false perceptions and attitude among people (dependency, etc.)
- A consultative process with education component
- It is based on realistic, felt, observed and expressed needs
- It relies on the victims' strong coping mechanisms
- It is sensitive to gender and cultural considerations
- It develops public awareness of the disaster situation, its causes and consequences and it increases knowledge and skills in disaster response
- It mobilizes both the less vulnerable sectors for disaster response

Emergency Operations Center (EOC)

A. What is an EOC?

An Emergency Operations Center (EOC) is a facility for control of operations and coordination of resources. It is the focus of community emergency response and recovery structure. Operational and administrative procedures for the EOC are usually covered in Standing Operating Procedures (SOPs) that lay down prescribed routine actions to be followed by staff during operations (Australian Emergency Manual, National Disasters Organization).

B. Tasks of an EOC

1. Collection and analysis of data for public information and warning
2. Emergencies Assessment or Damage Needs Capacities Assessment (DNCA)
3. Identification of risks and problems
4. Identification of services needed
5. Delivery of relief goods and other services

6. Networking and Management of media and other concerned groups and individuals

C. Criteria in Locating an EOC

1) Safe site:
   - ❖ from physical damage
   - ❖ from public/press
   - ❖ from unauthorized visitors and burglars

2) Accessible
3) In a known location
4) An alternative physical center should be identified

D. Factors / items to consider in operating an EOC

1. Personnel trained in emergency response;
2. A manager who heads the operation. If not, a committee or group of people assigned to manage the operations;
3. Communication facilities. Arrangements for receiving, collating and assessing information and for facilitating decision-making;
4. Work space and office equipment (desk, seats, tables, etc.);
5. Other logistical requirements (food, sleeping quarters, rest area etc.);
6. Maps, pictures, billboards, information boards and other materials. Display facilities (wall displays, etc.) for showing disaster situation (areas affected, etc.) resources available, tasks being undertaken, tasks need to be undertaken, etc.
7. Emergency equipment related to:
   - ❖ First aid
   - ❖ Search and rescue
   - ❖ Emergency foods and other gear

Additional considerations are:
- ❖ Storage space
- ❖ Vehicle access
- ❖ Parking arrangements
- ❖ Emergency power supply
- ❖ Arrangements for official visitors to be briefed

It is also important that arrangements are maintained for the emergency operation centers to be activated on short notice and for designated staff to be alerted accordingly. The building to be used as an emergency operation centers must be clearly identified and made ready as well as periodically checked, to ensure that all is ready to be mobilized.

Communications

The following networks comprise the main communications that are likely to be available for counter disaster use:
a. government communications system
b. defense services network

c. national broadcasting system (especially for conveying information to the public)
d. special networks used for disaster operations purposes by international support organizations
e. other useful sources such as commercial networks, religious networks, amateur radio operators, and traditional means of communications

Management Structure

A. Command, Control, and Coordination

In particular, it is the management structure which prescribes command, control and coordination arrangements to be applied during operations. The emergency operation center will be managed by the District Disaster Management Authority (DDMA). These arrangements include:

- **Command**
  Direction of members and resources of an organization in performance of its agreed roles and tasks. Authority to command is established by agreement within the organization or community. Command relates to an organization and operates vertically within it.

- **Control**
  Overall direction of emergency management activities in a designated emergency situation. Authority for control is established or agreed upon in an emergency plan, and carries with it responsibility for tasking and coordinating other units or organizations in accordance with the needs of the situation. A control relates situations and operates horizontally across organizations.

- **Coordination**
  Bringing together individuals and organizations to ensure effective emergency management response and recovery, and is primarily concerned with systematic acquisition and application of resources (people, material, equipment etc) in accordance with the requirements imposed by the threat or impact of an emergency. Coordination relates primarily to resources and operates vertically within an organization (as a function of the authority to command), and horizontally across organizations (as a function of the authority to control)

B. Activation

- Determine when and who activates these arrangements.
- When do you activate the plan?
- When there is enough monitoring and gathering of relevant and valid data necessary to serve as basis for interventions?

C. Describing Roles and Responsibilities

- Two methods describing these roles and responsibilities can be used by the planning committee:

A) List all involved organizations and describe in detail the complete role of each for all hazards
B) List hazards, identify the lead organization, and support organizations for the particular hazard. This layout allows a controller/coordinator to quickly check which is the relevant organization(s) for a given task or situation.

- The description of roles and responsibilities by organization/unit or individual is useful for each commander to review their organization's overall involvement. The description by hazard allows the coordinator or anyone else to obtain an overview of roles and responsibilities.

Desk Assignments	Functions
Administration	• Manage: ➢ Accounting and clerical procedures ➢ Census data and data collection ➢ Assessment surveys ➢ Record keeping ➢ Public relations
Services	• Restore services: power, water, communication • Maintain law and order (e.g. prevent looting and theft)
Construction	• Clear debris • Repair damaged infrastructure: roads, bridges • Build shelters and other necessary temporary structures • Reconstruct destroyed government buildings and installations • Rebuild private houses

Emergency Operations Centers: Desk Assignment and Functions

Health	• Treat the injured and the sick • Take necessary measures for preventive medicine and anti-epidemic actions • Inspect food and water supplies
Commerce	• Monitor commercial enterprises and industrial activities to prevent price hiking and corruption
Logistics	• Relief supplies: receive, store, secure, transport and distribute • Coordinate supplies distributed directly by Government, NGOs and other organizations • Ensure proper maintenance of vehicles and Equipment
Agriculture	• Rehabilitate agricultural production • Ensure interim crop production

1. Sum up the session and open the floor for questions and answers.

Duration : 1 Hour and 30 Minutes

Materials Needed:

- Power Point Presentation / Slides

References:

1. Asian Disaster Preparedness Center, Disaster Management Course Hand-out.

2. Citizens' Disaster Response Center, Emergency Response Workshop.

3. Handouts on Training for Public & Public Sector in Sri Lanka, Colombo December 2005.

Disaster Risk Management Plan at the District Level

Modular Objectives:

1. Explain the component and process in formulating the disaster risk management plan;
2. Come up with a district disaster risk management plan; and
3. Link disaster risk management planning to development.

Number of Sessions: 2

Session 1 – Disaster Risk Management Plan
Session 2 – Actual Disaster Risk Management Planning by the District

Duration : 4 Hours

If you fail to PLAN, You plan to FAIL!

Session-1

Disaster Risk Management Plan
[Why, What, and How to Plan?]

Learning Objectives:

1. Explain the component and process in formulating the disaster risk management plan; and
2. Link disaster risk management planning to development.

Key Concepts:

- Planning

Methods:

- Game
- Interactive lecture

Process:

1. Introduce the module and its overall objectives.
2. Group the participants into 4.
3. Ask them to draw a house as a group by letting each member to contribute one line. Each member of the team will draw one line each up to the last member. See whose group makes / draws a good house.
4. Ask them what make them drew a good house, why they came up with a complete or good drawing of a house, and then ask others why they were not able to make good house. Use this activity to start the session in risk management planning.

Disaster Risk Management Plan

A. Why plan?

If participatory risk assessment unites the district in understanding their risks (hazards, vulnerabilities, and capacities), elements at risk and why these are at risk, local coping strategies and resources, the disaster risk management plan unites the district in commitment and actions to reduce these risks.

The disaster risk management plan can be called by various names such as disaster preparedness and mitigation plan, counter disaster plan, disaster risk reduction plan or even district development plan.

What is essential is that the Disaster Risk Management Plan is a blueprint or guide in charting the district / community's progression to safety, disaster resilience and community development (sustainable and equitable).

B. What to plan?

Using the results of the risk assessment, the plan contains measures, activities to

The plan contains the mix of do-able structural and non-structural measures or interventions necessary for the community's safety, protecting and strengthening well being and development at the individual, household and community levels.

Immediate, short-term, medium-term and long-term activities and measures are identified together with the supporting mechanisms to make the plan a reality.

C. How to plan?

Key steps in formulating the Disaster Risk Management Plan:

1. Participatory Risk Assessment
2. Identify objectives and targets (aims and goals)
3. Identify risk reduction measures (strategies in the pre-, during emergency, post-disaster phase)
4. Determine resources needed
5. Assign responsibilities for various activities
6. Determine schedules and deadlines
7. Lay down operational policies and procedures
8. Identify and address critical elements and barriers to plan implementation
9. Discuss with and gather commitment and support of district line agencies and other stakeholders
10. Implementation, period review and plan improvement

LAST WORD ON PLANNING

A Plan must therefore
be written,
so that it will be remembered;
Simple,
so that it can easily be followed;
Communicated,
so that everyone will know about it;
Tested,
so that its theory can be proved;
Revised Regularly,
So that it will be up-to-date;
and
easily Accessible to those who need it.

Source: ADPC/MDRN Planning Concepts and Disaster Management Framework

(Sample Format)

Disaster Risk Management Plan
(Timeframe October – December 2007)

Objectives:

Hazard:

Elements At Risk	Activities	Schedule/ Timetable	Responsible	Resources		Support Agency
				Existing	To Look For	
	Before Disaster					
	During Disaster					
	After Disaster					

5. Summarize session and open the floor for questions and answers

Duration: 1 Hour

Tips to Facilitator:

1. This session is the application of all the theories that they acquired.
2. Always remind participants of the results of the risk assessment that they conducted.

Materials Needed:

- Easel paper
- Different color marking pens
- Power point Presentation / Slides

References:

1. Handouts on Community Based Disaster Management Training for Ceylon Chamber of Commerce & Public Sectors. Funded by UNDP Sri Lanka & South South Unit – Regional Center, Bangkok.

2. ADPC/MDRN Planning Concepts and Disaster PMP Management Framework.

Session-2

Actual Disaster Risk Management Planning

Learning Objective:

1. Come up with the district disaster risk management plan

Key Concepts:

- Actual Disaster Risk Management plan

Methods:

- Group Activity

Process:

1. Introduce the session and its specific objectives.
2. Guide the participants to do the plan according to their agencies.
3. From the results of risk assessment they conducted, they will apply doable risk reduction measures.
4. Divide participants into appropriate number of groups and supervise the planning activity.

Duration: 3 Hours

Tips to Facilitator:

Emphasize that the plan should be SMART. Usually this means SPECIFIC, MEASURABLE, ACHIEVABLE, REALISTIC, TIME BOUND. In participatory planning, the A in SMART can also mean ACCEPTABLE TO ALL CONCERNED.

- Encourage participants to think various doable risk assessments for hazards such as earthquake, landslide, drought, flood and cyclone.
- This is the culmination or the application of all the theories they learnt during the past 4 days.
- This is the moment of truth for all participants to put into action all the knowledge that they acquired in this training.

Materials Needed:

- Easel paper
- Multi-color markers

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