TRAINING MANUAL

Disaster Risk Management (DRM) for Pakistan

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For more information, please contact app@adpc.net

PREFACE

ADPC with support of Bill and Melinda Gates Foundation (BMGF), is undertaking a project *"Strengthening Emergency Response Capacity of Local Humanitarian Actors in Asia"* to improve the emergency preparedness to response and recovery from disasters in Asia. The program aims at improving the humanitarian response to disasters by strengthening the interface between the National Governments, local humanitarian organizations, private sector, academia and media. To address the issues of coordination and knowledge exchange, Asian Preparedness Partnership (APP) has been formed at regional level for strengthening the capacity on preparedness for emergency response.

For implementation of the program at country level, Pakistan Resilience Partnership (PRP) comprising governments, local humanitarian organizations, private sector, academia and media has been established. The program focuses on three key areas including capacity building & training of all stakeholders. The capacity building training being organized by PRP aims to increase the understanding and knowledge of complete spectrum of disaster. For the purpose of standardize training, manual with uniform training material in the country context, is the essential requirements.

The intent of this training manual is to develop an all-encompassing training material for Pakistan, which can be used for training for entire spectrum of disaster management. The manual contains comprehensive substance on preparedness, response and related cross cutting themes. The document is an outcome of extensive desk reviews of policy, strategy, guidelines, manuals and implementation level documents prepared by the National Disaster Management Authority (NDMA).

Hope this training manual will help all in enhancing their knowledge on disaster management and will also provide practical approaches in understanding the DRM concepts and will further help disaster management stakeholders and practitioners to learn and replicate the training in their respective department/organizations.

TABLE OF CONTENTS

ACRONYMS

ADB	Asian Development Bank
ADPC	Asian Disaster Preparedness Center
AIDS	Acquired Immunodeficiency Syndrome
AJ&K	Azad Jammu and Kashmir
CBDRM	Community Based Disaster Risk Management
CBO	Community Based Organization
CEC	Central Executive Committee
CJCSC	Chairman Joint Chief of Staff Committee
CNG	Compressed Natural Gas
CRPD	Convention on Rights of Persons with Disabilities
DC	Deputy Commissioner
DDMA	District Disaster Management Authority
DDMU	District Disaster Management Unit
DEOC	District Emergency Operations Center
DM	Disaster Management
DNA	Damage and Need Assessment
DPO	District Police Officers
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EAD	Economic Affairs Division
EDO	Executive District Officer
EOC	Emergency Operations Center
ERC	Emergency Relief Cell
FAO	Food and Agriculture Organization
FFC	Federal Flood Commission
GB	Gilgit Baltistan
GBDMA	Gilgit Baltistan Disaster Management Authority
GBDMC	Gilgit Baltistan Disaster Management Commission
GHQ	General Headquarters
GLOF	Glacial Lake Outburst Floods
GOP	Government of Pakistan
GSP	Geological Survey of Pakistan
HCT	Humanitarian Country Team
HFA	Hyogo Framework for Action
HIV	Human Immunodeficiency Viruses
HQ	Headquarters
HR	Human Resources
HRF	Humanitarian Response Facility
HVCA	Hazard, Vulnerability and Capacity Assessment

IASC	Inter-Agency Standing Committee
ICCM	Inter Cluster Coordination Meeting
ICRC	International Committee of the Red Cross
ICT	Islamabad Capital Territory
IDNDR	International Decade for Natural Disaster Risk Reduction
IDP	Internally Displaced Person
IEC	International Electrotechnical Commission
IFRC	International Federation of Red Cross and Red Crescent Societies
INGO	International Non-Government Organizations
INSARAG	International Search and Rescue Advisory Group
IOM	International Organization for Migration
IPCC	Intergovernmental Panel on Climate Change
ISO	International Standards Organization
KP	Khyber Pakhtunkhwa
LPG	Liquefied Petroleum Gas
MFA	Ministry of Foreign Affairs
MHVRA	Multi Hazard Vulnerability Risk Assessment
MIRA	Multi Sector Initial Redid Assessment
MoU	Memorandum of understanding
NDMA	National Disaster Management Authority
NDMC	National Disaster Management Commission
NDMP	National Disaster Management Plan
NDRP	National Disaster Response Plan
NEOC	National Emergency Operations Center
NGOs	Non-Government Organizations
NHN	National Humanitarian Network
NIDM	National Institute of Disaster Management
OCHA	Office for the Coordination of Humanitarian Affairs
OHCHR	Office of the United Nations High Commissioner for Human Rights
PC	Principal Component
PDMA	Provincial Disaster Management Authority
PDMC	Provincial Disaster Management Commission
PHF	Pakistan Humanitarian Forum
PMD	Pakistan Metrological Department
PRCS	Pakistan Red Crescent Society
PRP	Pakistan Resilience Partnership
PWD	Persons with Disabilities
RNA	Recovery Need Assessment
SDMA	State Disaster Management Authority
SDMC	State Disaster Management Commission
SERT	Surge Emergency Response Team
SITREP	Situation Report

SOPs	Standard Operating Procedures
SUPARCO	Space and Upper Atmosphere Research Commission
TORs	Terms of References
UN	United Nations
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations International Children's Emergency Fund,
UNISDR	United Nations International Strategy for Disaster Reduction
UNHC	United Nations Humanitarian Coordinator
UNRC	United Nations Resident Coordinator
USAR	Urban Search and Rescue
WAPDA	Water and Power Development Authority
WFP	World Food Programme
WHO	World Health Organization

INTRODUCTION - DISASTER PREPAREDNESS FOR EFFECTIVE RESPONSE MANUAL

Disasters are foreseeable phenomena in today's time and age. The disasters may not be the necessary result of hazards, more often they occur when these hazards intersect with the environment, inappropriate location, inadequate infrastructure development and lack of capacity of responders to deal with the disaster. National Disaster Management Act 2010, envisages a paradigm shift from response centric syndrome to a proactive, holistic and integrated management of disasters with emphasis on prevention, mitigation and preparedness. This National vision, inter alia aims at inculcating a culture of preparedness of all stakeholders. Training of different stakeholders is the most important to achieve this end and in future, efficient disaster response will depend primarily on effectiveness of the training of responder (s).

Asian Disaster Preparedness Center (ADPC) in consultation with Pakistan Resilience Partnership (PRP) partners is undertaking number of capacity building trainings to institutionalize a robust training regime at provincial level to offset existing inadequacies in response against disasters while also strengthening the coordination mechanism amongst the humantrainian community working in Pakistan. In order to standardize the training material to be used for theses training in future, this manual has been developed. This manual focuses on operational aspects of disaster response as well as preparing for disasters.

Goal/Aim of Training

The overall aim of the initiative is to impart training and develop necessary skills of all disaster **practitioners** with regards to disaster preparedness for effective response and recovery.

Objectives of Training

The training aims to enhance the participant's skill, knowledge and increase confidence, moreover at the end of five days training, participants will be able to: -
- Explain the basic concepts and terms related to DRM.
- Describe hazard profile of Pakistan and prioritize province/state/region as per hazards.
- Use DRM framework as proactive approach.
- Evaluate the present humanitarian coordination architecture and information management of Pakistan in emergency.
- Enlist steps of planning and need assessment.
- Outline the policy guidelines on vulnerable groups and integrate gender concerns in disaster planning and response.
- Explain the response management and the role of different stakeholders.
- Suggest different response and recovery measures in given context.

Purpose and Scope

The manual has been devised to improve the quality and overall effectiveness of DRM and developing skills of individuals who have key DRM responsibilities at the provincial/district level. The manual will enable professionals to understand the process and whole spectrum of DRM and preparedness activities for effective response. The manual is more a 'nutritional guide' rather than a 'cook book'. The

manual is in line with other documents/manuals/guidelines prepared at country level by disaster management authorities.

Target Audience of Training

The manual is primarily developed for training of officials from government departments, members of civil society organizations, disaster management practitioners, trainers in disaster management and CBOs. The primary beneficiaries of this manual will be the individuals who have key role in organizations dealing with disaster management, whereas secondary beneficiaries will include the humanitarian partners. This document is for the trainers during a training course and is not a manual of operations.

Summary of the Manual

The trainer's manual is designed to respond to the needs of trainers who are conducting training course on Disaster Risk Management. The structure of the manual is as follows: -

Module 0. It contains the activities to formally open the training course. It includes the opening program, introduction of participants, expectations from the participants, discussion of the training design, course objective and program, schedule and other administrative arrangements.

- **Module 1.** Describe the DRM concept & terms and history of disasters in Pakistan. It also covers the Pakistan's humanitarian structure & coordination architecture and explain DRM cycle and its components
- **Module 2.** Covers the preparedness planning and formulation of DRM at District level. Also discusses the importance of contingency planning and process involved in developing a contingency plan.
- **Module 3.** Introduces the process of DRR, global & national commitments of Pakistan for DRR. The module also explains the prevention and mitigation framework and measures for various hazards, mainstreaming DRR in development process, public awareness in DRM and multi-hazard early warning and dissemination mechanisms.
- **Module 4.** Explain Pakistan response mechanism, process and step involve in evacuation and camp management and responsibilities of various departments. It describes UN's response mechanism being followed in Pakistan. The module also covers disaster recovery and logistics management issues.
- **Module 5.** The module highlights the importance of inclusion/mainstreaming gender, age and disabilities into preparedness, response and recovery phase.
- **Module 6.** Discuss the importance of information management in emergencies and disasters. It also explains steps involve in information management, principles and standards for information management and information management cycle.

Teaching Methodologies

The following methodologies will be used for conduct of the course: -
- Interactive lectures and presentations.
- Group discussion/group discussion.
- Games and exercises
- Roles Plays
- Videos

Training Agenda

Following is the proposed agenda for 'five days' course: -

Date/Day	Topic/Activity	Methodologies
Day 1	**Module 0** Registration Pre-training test Inaugural session and group photo Course overview and introduction of participants	As per session introduction
	Module 1 Session 1: DRM terms and concepts Session 2: Pakistan/Provincial hazard profile and prioritization Session 3: Pakistan's humanitarian structure and coordination architecture Session 4: DRM cycle and its components	As per session introduction
Day 2	**Module 2** Session 1: DRM planning - An overview Session 2: Developing a DRM Plan at district level Session3: Contingency planning and its importance for disaster preparedness and process	As per session introduction
	Module 3 Session 1: DRR - An overview and Pakistan's global and national commitments for disaster risk reduction	As per session introduction
Day 3	**Module 3** Session 2: Prevention and mitigation framework and measures for various hazards Session 3: Mainstreaming DRR in development process Session 4: Public awareness DRM Session 5: Multi-hazard early warning and dissemination mechanisms	As per session introduction
Day 4	**Module 4** Session 1: Response mechanism Session 2: Evacuation and camp management Session 3: UN's response mechanism Session 4: Disaster recovery	As per session introduction
Day 5	**Module 4** Session 5: Logistics management	As per session introduction
	Module 5 Session 1: Mainstreaming gender, age and disabilities	As per session introduction
	Module 6 Session 1: Information management	As per session introduction
	Post training test **Post course evaluation** **Plan of action** **Closing activities**	

Training Evaluation System

Following methodologies will be adopted for the evaluation purposes: -

- **Pre and Post Course Test**

  The idea of a *"before and after"* test is to find out what trainees know about the topic before training begins, and then to establish how much they learn from the training. While trainees may have differing levels of knowledge before the training about the topic or task to be addressed, the aim of the training is to bring them all to a similar level of knowledge or skill by the time the training ends. The questions in the pre-test and the post-test are identical. Pre-and post-test for this training can be found in **Annex I.** Test score compilation sheet is inserted as an object. Use this sheet to compile test results and make part of training report.

- **Daily Feedback**

  At the end of each day, management team will ask the participants to fill the daily feedback form. Feedback given by the participants will be discussed in the debrief meeting of management team and trainers. The purpose of this feedback is taking corrective or preventive actions if require and make sure that mistake/errors committed last day is not repeated next day. During the recap of last day, trainer will share the important action taken as per the feedback given by the participants by keeping confidentially and dignity principle in mind and practice. Daily feedback form is included in **Annex II.**

- **Course Evaluation**

  Participants will be asked to fill end of the course evaluation. The purpose of this evaluation is get responses of participants what is their opinion about the training logistics and arrangements, classroom management, facilitators knowledge, skills and methodology used. Sample evaluation forms is attached in **Annex III.** Training coordinator will compile all the forms in the given excel sheet at the end of the evaluation. This will do auto-analysis once data will be entered. Trainer will use these analyses in the training report.

- **Certificate Policy**

  Certificate of completion will be awarded to any participant if he/she
  - Has 95% attendance
  - Submitted all assignments given during the training period
  - Cleared the post course test.

Action Planning

At the end of the training, participants will prepare an action plan on how they are going to use learnings of the training to add value in their exiting work. After three months, training management team will send the survey to the participants to know the status of the plan and challenges there are facing participants are facing during implementation. Action plan format is attached in **Annex IV.** These action plans prepared by participants will be complied and annexed in Training Report.

MODULE - 0

OPENING OF THE TRAINING WORKSHOP

Opening Activities

- Formally open the training.
- Introduce the participations and facilitators to each other.
- Clarify expectations of the participants.
- Unite on the training objectives and program of activities.
- Set technical arrangements such as schedule, formation of host team, house rules, etc.

Session at Glance

Timing	Topic	Method
25'	Activity 1: Participants introduction	Exercise
5 '	Activity 2: Sharing of training objectives	Presentation
25'	Activity 3: Expectation check	Game
5'	Activity 4: Setting ground rules	Brainstorming

	60'
	• Name tags. • Opening program. • Training design & program of activities. • Easel paper. • Meta cards, colored paper. • Colored marking pens. • Different shapes of paper (heart, diamond, square etc). • Prizes for the games (may be candies, chocolates, or office supplies).
Preparation	• Prepare 4 sheets of brown paper with content "Bus Stop" 1, 2, 3 & 4. • Prepare power point slides with title of training, training objectives, questions. related to expectation check and ground rules.

Process

- **Participant's Introduction**
  - Participants draw self-portraits write their names on the portraits and explain their drawing to the group.
  - For participants who do not know each other: you can do a *"find the missing part"* giving them a portion of a shape i.e. heart, circle, square, diamonds etc cut the whole shape into 3 or 4 then distribute in the participants. Let the participants

look for their missing part. When they find all their missing part in shape, they will introduce themselves with the other parts of the shape. Then someone from the group will introduce other in the entire group in the training room.

<div align="center">Or</div>

- Have participants make their own tags using colored papers or meta cards. Each participant will then explain why he/she choose the shape of colour.

Sharing of Objectives

The training aims to enhance the participant's skill, knowledge and increase confidence, moreover at the end of five days training, following objectives are intended to be achieved participants will be able to: -

- To know the basic concepts related to DRM.
- To familiarize the participants with explore hazard profile and prioritization of their respective province/state/region.
- To understand the DRM framework and its importance as proactive approach.
- To familiarize the participants with the present humanitarian coordination architecture in the country and information management in emergency through the current architecture.
- To understand the process of planning and need assessment.
- To enable participants to know the policy guidelines on vulnerable groups and integrate gender concerns in disaster planning and response.
- To get the basic knowledge of the response management and the role of different stakeholders.
- To ensure that the participants are aware of response and recover measures.

Expectation Check

- "Bus stop" prepare 4 sheets of brown paper for each of the following question: -
  - **Bus Stop 1:** What do you expect from the training?
  - **Bus Stop 2:** What can facilitate you learning and activate participation?
  - **Bus Stop 3:** What can hinder your learning and active participants?
  - **Bus Stop 4:** What can you contribute to the success of the training?
    - Post the sheet of brown paper around the room as bus stop 1, 2, 3 and 4.
    - Divide the participants into 4 groups. Ask participant to put their answer on the papers. Assign a sequence for discussion, as bus stop 1234, 2341, 3412, 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 necessary, based on results of the expectation check.
    - "Board work" for the same question as above, ask participants to write their answers on colored paper of meta cards. Use one color for each question.
    - Ask the participants to post their answer to each question on the board of wall.
- Discuss answers and relate to the training design.
  - A ball of paper (or small ball or orange) is threw to each participant in the circle who introduces him/herself and answer the same question as in BS 1. The facilitator takes notes of the expectations on the board. When all participants are finished, the facilitator discusses the answer and relates to the training design.

- 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).
  - 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 ----------------.
- The answers can be put on meta-cards or presented by team and the facilitator collates the answer on the board then discusses the answer and relates to the training design.

Setting Ground Rules

Set a ground rule for the training. Ask the participants and write their responses the flip charts. These rules could be punctuality, listening and sharing in the sessions, respecting each other's and switching off mobile phones.

MODULE - 1
INTRODUCTION TO DRM

SESSIONS

Session - 1.1: Key DRM Concept and Terms

Session - 2.1: Pakistan's Risk Situation

Session - 3.1: Pakistan's Humanitarian Structure and Coordination Architecture

Session - 4.1: DRM Cycle and its Components
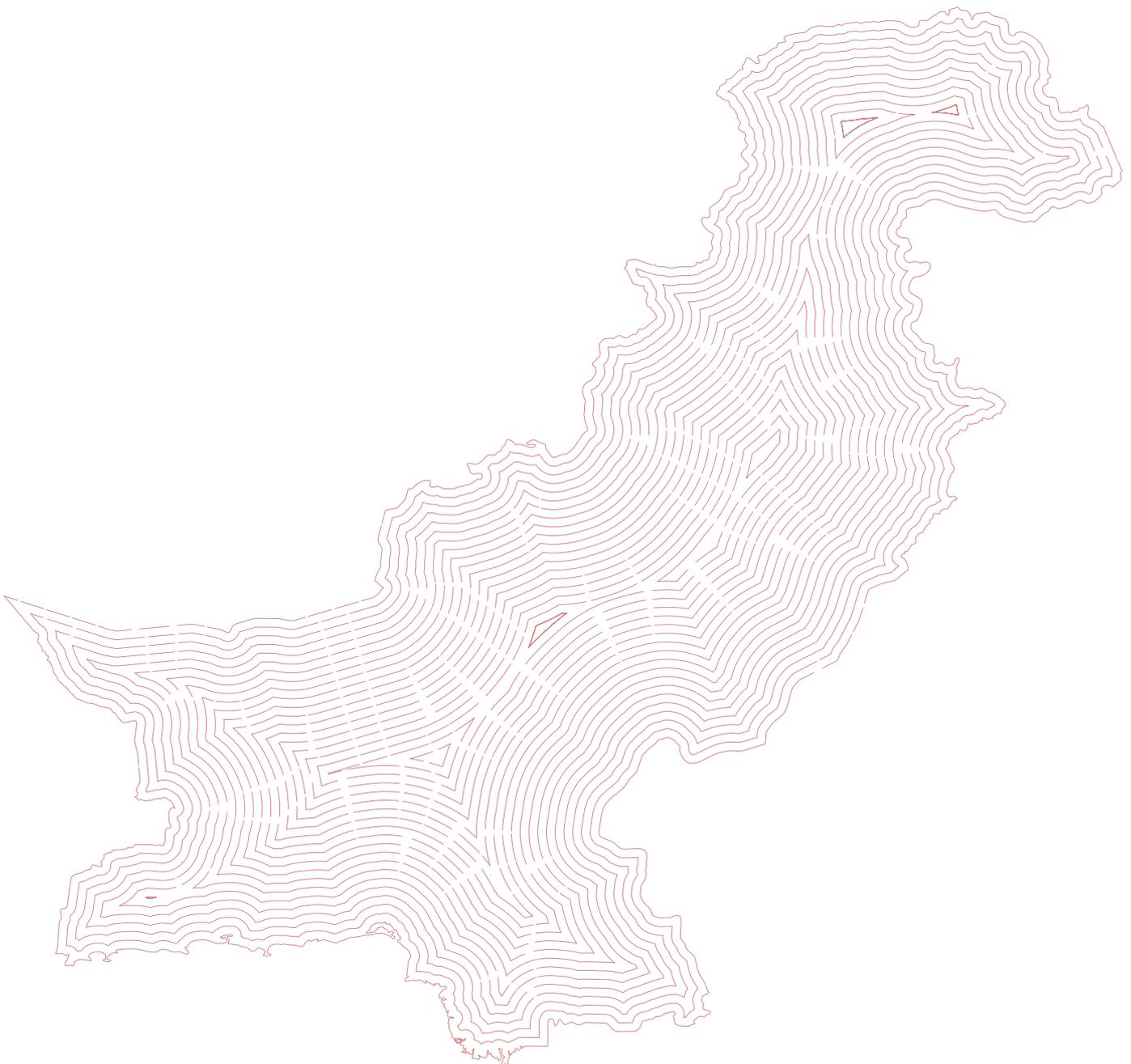
SESSION - 1.1

KEY DISASTER RISK MANAGEMENT CONCEPT AND TERMS

Learning Objectives

At the end of the session, participants will be able to: -
*   Explain the basic terms and concepts related to DRM; e.g. disaster, hazard, vulnerability, capacity, disaster risk, disaster risk assessment and DRR.

Key Messages

*   Hazard is an event that can be injurious to human lives and destructive to property, livelihood and environment.
*   Risk refers to the combination of probability of an event and its negative consequences on people and livelihood. A disaster occurs when a hazard impact upon a vulnerable community and causes damage, casualties and disruption.
*   Vulnerability is a set of prevailing or consequential conditions, which adversely affect the community's ability to prevent, mitigate, prepare for and respond to hazardous events.
*   Capacities are resources, means and strengths, which exist in households and in the community which enable them to cope with, withstand, prepared for, prevent, mitigate or quickly recover from a disaster.
*   DRR includes all activities to minimize the loss of life, property or assets by either mitigating the hazard or reducing the vulnerability of the elements at risk.

Session at a Glance

Timing	Topic	Method
10'	Introduction	Presentation
40'	Activity 1: Basic terms and concepts of DRM	Exercise: Mix & match
10'	Synthesis and session evaluation	Question and answer

	# 60'
	- Easel board and papers. - Different colour marking pens. - Blue and green meta cards. - Power point presentation/slides.
Preparation	- Prepare power point/chart papers with session objectives. - Prepare blue meta cards with concept & terms title and green cards with its relevant definition. - Prepare 5 envelopes for groups with equal division of terms and concepts. - Print handout 1 for each participant.

Process

Introduction **10'**

Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the end of the session, participants will be able to

- Explain the basic terms and concepts related to DRM; e.g. disaster, hazard, vulnerability, capacity, disaster risk, disaster risk assessment and DRR.

Activity 1: Basics Terms and Concepts of DRM **40'**

Divide the participants into 5 groups based on the total number of participants. Each group then receives packs of cards. Divide the definition of terms equally to groups in the following way: -

- Each group will receive blue cards (concept and terms title) and their relevant green card (definition).
- Each group matches the terminologies with the definitions
- Each group will share their understanding of each term with other groups. This is followed with a discussion on the correct combinations and differences in opinion are discussed with further examples. Facilitator will make sure that definition is displayed on the projector while it is being presented.

Synthesis and Session Evaluation **10'**

- Ask the participants if they have questions or clarifications about the topics discussed.
- Answer their questions and provide examples as necessary.
- If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
  - What is
    - o Vulnerability
    - o Social integration
    - o Risk management
    - o Retrofitting
    - o Disaster risk management
    - o Disaster risk reduction
- Thank the participants and inform them of the next session.

Handout

- Handout 1: Key DRM Terms and Concepts

KEY DRM CONCEPT AND TERMS

Group 1

- **Acceptable Risk:** The level of potential losses that a society or community considers acceptable given existing social, economic, political, cultural, technical and environmental conditions.
- **Adaptation:** The adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities
- **Building Code:** A set of ordinances or regulations and associated standards intended to control aspects of the design, construction, materials, alteration and occupancy of structures that are necessary to ensure human safety and welfare, including resistance to collapse and damage.
- **Capacity:** The combination of all the strengths, attributes and resources available within a community, society or organization that can be used to achieve agreed goals. Capacity may include physical, institutional, social or economic means as well as skilled personal or collective attributes such as leadership & management. Capacity may also be described as capability.
  - **Coping Capacity:** The ability of people, organization and system, using available skill and resources, to face and manage adverse conditions, emergencies or disaster.
  - **Capacity Development:** The process by which people, organizations and society systematically stimulate and develop their capacities over time to achieve social and economic goals, including through improvement of knowledge, skills, systems, and institutions.
    Capacity development is a concept that extends the term of capacity building to encompass all aspects of creating and sustaining capacity growth over time. It involves learning and various types of training, but also continuous efforts to develop institutions, political awareness, financial resources, technology systems, and the wider social and cultural enabling environment.
- **Climate Change**
  - The IPCC defines climate change as: *"a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forces, or persistent anthropogenic changes in the composition of the atmosphere or in land use"*.
  - The UNFCCC defines climate change as *"a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods"*.
- **Contingency Planning:** A management process that analyses specific potential events or emerging situations that might threaten society or the environment and establishes arrangements in advance to enable timely, effective and appropriate responses to such events and situations.
  Contingency planning results in organized and coordinated courses of action with clearly- identified institutional roles and resources, information processes, and operational arrangements for specific actors at times of need. Based on scenarios of possible emergency conditions or disaster events, it allows key actors to envision, anticipate and solve problems that can arise during crises. Contingency planning is an important part of overall preparedness. Contingency plans need to be regularly updated and exercised.

- **Crisis:** A crisis is any event that is, or is expected to lead to, an unstable and dangerous situation affecting an individual, group, community, or whole society. Management often requires decisions to be made within a short timeframe & often an event has already taken place. Generally, impact of a crisis situation is localized requiring immediate attention. Crisis situation may lead to a disaster if not managed appropriately.

Group 2

- **Disaster:** A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources.
  Disasters are often described as a result of the combination of: the exposure to a hazard; the conditions of vulnerability that are present; and insufficient capacity or measures to reduce or cope with the potential negative consequences. Disaster impacts may include loss of life, injury, disease and other negative effects on human physical, mental and social well-being, together with damage to property, destruction of assets, loss of services, social and economic disruption and environmental degradation.
- **Disaster Risk:** The potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period.
  The definition of disaster risk reflects the concept of disasters as the outcome of continuously present conditions of risk. Disaster risk comprises different types of potential losses which are often difficult to quantify. Nevertheless, with knowledge of the prevailing hazards and the patterns of population and socio-economic development, disaster risks can be assessed and mapped, in broad terms at least.
- **Disaster Risk Management (DRM):** The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disasters. DRM aims to avoid, lessen or transfer the adverse effects of hazards through activities and measures for prevention, mitigation and preparedness.
- **Disaster Risk Reduction (DRR):** The concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.
- **DRM Cycle:** The spectrum of disaster management is generally divided into pre, during and post disaster interventions. The pre-disaster activities are risk assessment, preparedness and early warning, whereas the post disaster activities include relief, recovery, rehabilitation and long term reconstruction as per needs of the affected populations in accordance with international standards. This cycle which covers the whole spectrum of DM is known as the disaster management cycle.
- **DRR Plan:** A document prepared by an authority, sector, organization or enterprise that sets out goals and specific objectives for reducing disaster risks together with related actions to accomplish these objectives.
- **Early Warning System:** The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss.

- This definition encompasses the range of factors necessary to achieve effective responses to warnings. A people-centered early warning system necessarily comprises four key elements: knowledge of the risks; monitoring, analysis and forecasting of the hazards; communication or dissemination of alerts and warnings; and local capabilities to respond to the warnings received. The expression *"end-to-end warning system"* is also used to emphasize that warning systems need to span all steps from hazard detection through to community response.

Group 3

- **Elements at Risk:** The People, infrastructures, crops, and livelihoods exposed and are likely to be adversely affected by the impact of hazards.
- **Emergency Management:** *"The organization and management of resources and responsibilities for addressing all aspects of emergencies, in particular preparedness, response and initial recovery steps."* A crisis or emergency is a threatening condition that requires urgent action. Effective emergency action can avoid the escalation of an event into a disaster. Emergency management involves plans and institutional arrangements to engage and guide the efforts of government, non-government, voluntary and private agencies in comprehensive and coordinated ways to respond to the entire spectrum of emergency needs. The expression *"disaster management"* is sometimes used instead of emergency management.
- **Emergency Services:** The set of specialized agencies that have specific responsibilities and objectives in serving and protecting people and property in emergency situations.
  Emergency services include agencies such as civil protection authorities, police, fire, ambulance, paramedic and emergency medicine services, red cross and red crescent societies, and specialized emergency units of electricity, transportation, communications and other related services organizations.
- **Environmental Degradation:** The reduction of the capacity of the environment to meet social and ecological objectives and needs.
- **Environmental Impact Assessment:** Process by which the environmental consequences of a proposed project or program are evaluated, undertaken as an integral part of planning and decision making processes with a view to limiting or reducing the adverse impacts of the project or program.
- **Exclusion:** The process where people living in high risk areas also have poor housing, inadequate social services, weak political voice and lack of decent work all combine to create an experience of marginalization is called exclusion.
- **Exposure:** People, property, systems, or other elements present in hazard zones that are thereby subject to potential losses. Measures of exposure can include the number of people or types of assets in an area. These can be combined with the specific vulnerability of the exposed elements to any particular hazard to estimate the quantitative risks associated with that hazard in the area of interest.
- **Forecast:** Definite statement or statistical estimate of the likely occurrence of a future event or conditions for a specific area
- **Hazard:** A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage. Hazard can be single, sequential or combined in their origin and effects. Each hazard is characterized by its location, intensity, frequency and probability. Hazards have following two types: -

- **Types of Hazards**
  - **Natural:** Natural process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.
  - **Human-induced:** Conditions that may have disastrous consequences for a society. These are associated with industries or energy generation facilities and include explosions, leakage of toxic waste, pollution, dam failures. Complex Emergency is included in this category.
- **Categorization of Natural Hazards**
  - **Geological:** Geological process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.
  - **Socio-natural:** The phenomenon of increased occurrence of certain geophysical and hydro-meteorological hazard events, such as landslides, flooding, land subsidence and drought, that arise from the interaction of natural hazards with overexploited or degraded land and environmental resources. Socio-natural hazards can be reduced and avoided through wise management of land and environmental resources.
  - **Hydro-meteorological:** Process or phenomenon of atmospheric, hydrological or oceanographic nature that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.
  - **Biological:** Process or phenomenon of organic origin or conveyed by biological vectors, including exposure to pathogenic micro-organisms, toxins and bioactive substances that may cause loss of life, injury, illness or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage. Examples of biological hazards include outbreaks of epidemic diseases, plant or animal contagion, insect or other animal plagues and infestations.

Group 4

- **Categorization of Human-induced Hazards**
  - **Technological:** A hazard originating from technological or industrial conditions, including accidents, dangerous procedures, infrastructure failures or specific human activities, that may cause loss of life, injury, illness or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage
  - **Complex Emergency:** A complex emergency is a major humanitarian crisis that is often the result of a combination of political instability, conflict and violence, social inequities and underlying poverty
  - **Forest/Urban Fire:** A large, destructive fire that spreads over a forest or area of woodland, whereas urban fire occur primarily in cities or towns with the potential to rapidly spread to adjoining structures. These fires damage and destroy homes, schools, commercial buildings and vehicles etc.
- **Hazard Assessment:** The process of estimating, for defined areas, the probabilities of the occurrence of potentially damaging phenomena of given magnitude within a specified period of time. Hazard assessment involves analysis of formal and informal historical records and skilled interpretation of existing topographical, geological, hydrological and land-use maps.
- **Heterogeneous Vulnerable Groups:** Those groups whose needs do display many similarities but are nevertheless divergent as well e.g. Children, older people and person with disabilities. For example, older people tend to be more

vulnerable but with this there are also older people who have physical disability, visual and hearing impairment, are minorities, internally displaced people or refugees. So this makes them heterogeneous.

- **Internally Displaced People (IDP):** Are individuals or groups of individuals who have been forced or obliged to flee or to leave their homes or places of habitual residence due to conflicts and natural calamities., who have not crossed an internationally recognized state border.
- **Inclusion:** In DRM inclusion means that especially at-risk groups take decision that affect them jointly with local, national and international decision makers, and that they are involved in planning and implementing relevant activities.
- **Land-use Planning:** The process undertaken by public authorities to identify, evaluate and decide on different options for the use of land, including consideration of long term economic, social and environmental objectives and the implications for different communities and interest groups, and the subsequent formulation and promulgation of plans that describe the permitted or acceptable uses.
- **Mitigation:** The lessening or limitation of the adverse impacts of hazards and related disasters. The adverse impacts of hazards often cannot be prevented fully, but their scale or severity can be substantially lessened by various strategies and actions. Mitigation measures encompass engineering techniques and hazard-resistant construction (i.e. structural measures) as well as improved environmental policies and public awareness (i.e. non-structural measures). It should be noted that in climate change policy, *"mitigation"* is defined differently, being the term used for the reduction of greenhouse gas emissions that are the source of climate change.
- **Preparedness:** The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions.
  Preparedness action is carried out within the context of DRM and aims to build the capacities needed to efficiently manage all types of emergencies and achieve orderly transitions from response through to sustained recovery. Preparedness is based on a sound analysis of disaster risks and good linkages with early warning systems, and includes such activities as contingency planning, stockpiling of equipment and supplies, the development of arrangements for coordination, evacuation and public information, and associated training and field exercises. These must be supported by formal institutional, legal and budgetary capacities. The related term *"readiness"* describes the ability to quickly and appropriately respond when required.
- **Prevention:** The outright avoidance of adverse impacts of hazards and related disasters. Prevention expresses the concept and intention to completely avoid potential adverse impacts through action taken in advance. Examples include dams or embankments that eliminate flood risks, land-use regulations that do not permit any settlement in high risk zones, and seismic engineering designs that ensure the survival and function of a critical building in any likely earthquake. Very often the complete avoidance of losses is not feasible and the task transforms to that of mitigation. Partly for this reason, the terms prevention and mitigation are sometimes used interchangeably in casual use.
- **Public Awareness:** The extent of common knowledge about disaster risks, the factors that lead to disasters and the actions that can be taken individually and collectively to reduce exposure and vulnerability to hazards.
  The process of informing the general population, increasing levels of consciousness about risk and how people can reduce their exposure to hazard.

This is particularly important to public officials in fulfilling their responsibilities to save lives and property in the event of a disaster.

- **Recovery:** *"The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors."* The recovery task of rehabilitation and reconstruction begins soon after the emergency phase has ended, and should be based on pre-existing strategies and policies that facilitate clear institutional responsibilities for recovery action and enable public participation. Recovery programmes, coupled with the heightened public awareness and engagement after a disaster, afford a valuable opportunity to develop and implement disaster risk reduction measures and to apply the *"build back better"* principle.

- **Refugees:** Are persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights, or natural or human-made disasters and who have crossed an internationally recognized state border.

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

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

  Resilience means the ability to *"resile from"* or *"spring back from a shock"* the resilience of a community in respect to potential hazard event is determined by the degree to which the community has the necessary resources and is capable of organizing itself both prior to and during times of need.

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

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

- **Risk:** The combination of the probability of an event and its negative consequences. This definition closely follows the definition of the ISO/IEC Guide 73. The word "risk" has two distinctive connotations: in popular usage the emphasis is usually placed on the concept of chance or possibility, such as in *"the risk of an accident"*; whereas in technical settings the emphasis is usually placed on the consequences, in terms of *"potential losses"* for some particular cause, place and period. It can be noted that people do not necessarily share the same perceptions of the significance and underlying causes of different risks.

  Risk is expressed as Risk = Hazard x Vulnerability. Some experts also include the concept of exposure when referring to the physical aspect of vulnerability.

Group 5

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

- **Risk Management:** The systematic approach and practice of managing uncertainty to minimize potential harm and loss.

- **Risk Transfer:** The process of formally or informally shifting the financial consequences of particular risks from one party to another whereby a

household, community, enterprise or state authority will obtain resources from the other party after a disaster occurs, in exchange for ongoing or compensatory social or financial benefits provided to that other party.

- **Social Integration:** Social integration has been defined as *"the process of promoting the values, relations and institutions that enable all people to participate in social, economic and political life on the basis of equality of rights, equity and dignity"*.
- **Structural and Non-structural Measures**
  - Any physical construction to reduce or avoid possible impacts of hazards, or application of engineering techniques to achieve hazard- resistance and resilience in structures or systems;
  - Any measure not involving physical construction that uses knowledge, practice or agreement to reduce risks and impacts, in particular through policies and laws, public awareness raising, training and education.
- **Sustainable Development:** Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of *"need"*, in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization of the environment's ability to meet present and the future needs (Brundtland Commission, 1987).
- **Voluntary Exclusion:** Some minority groups voluntarily exclude themselves from wider society. This phenomenon should be distinguished from social exclusion, which occurs for reasons that are beyond the control of those subject to it.
- **Vulnerability:** The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard. The vulnerability can also be defined as the conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community or society to the impact of hazards. It can also be termed as the extent to which an individual, community, sub group, structure, service, or geographic area is likely to be damaged or disrupted by the impact of a particular hazard.
- **Categorization of Vulnerabilities**
  - **Physical Vulnerabilities:** Are the hazard-prone locations of settlement, insecure and risky sources of livelihood, lack of access to basic production resources (such as land, farm inputs, and capital), knowledge and information, access to basic services.
  - **Social Vulnerabilities:** Are reflected in the lack of institutional support structures and leadership, weak family and kinship relations, divisions and conflicts within communities, and the absence of decision- making powers.
  - **Attitudinal Vulnerabilities:** Are seen in dependency, resistance towards change, and other negative beliefs. People who have low confidence in their ability to affect change or who feel defeated by events are harder hit by disasters than those who have sense of their ability to bring the changes they desire.
  - **Economic Vulnerabilities:** Pertain to how people make their living and from where they get their livelihood. Determining which type of livelihood is easily affected by disasters (e.g. fishing, tricycle driving, etc.) is a key issue to be considered in determining the magnitude of economic vulnerability.

- **Vulnerabilities Assessment:** The process of estimating the vulnerability to potential disaster hazards of specified elements at risk. For engineering purposes, vulnerability analysis involves the analysis of theoretical and empirical data concerning the effects of particular phenomena on particular types of structures. For more general socio-economic purposes, it involves consideration of all significant elements in society, including physical, social and economic considerations (both short and long term), and the extent to which essential services, traditional and local coping mechanisms are able to continue functioning.
- **Vulnerable Groups:** Person or a group having less or no coping capacity to respond to a certain hazardous phenomenon. In local context these includes, women, children, disabled and elderly persons.
  "Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments. Most developed world countries have accepted the chronological age of 65 years as a definition of 'elderly' or older person, but like many westernized concepts, this does not adapt well to the situation in Africa. While this definition is somewhat arbitrary, it is many times associated with the age at which one can begin to receive pension benefits. At the moment, there is no U N's standard numerical criterion, but the UN agreed cutoff is 60+ years to refer to the older population".

Note: *For further detail definitions and concepts clarity, please visit United Nation International Strategy (UNISDR) website* http://www.unisdr.org/eng/terminology/terminology-2009-eng.html

SESSION - 2.1

PAKISTAN'S RISK SITUATION

Learning Objectives

At the end of the session, participants will be able to: -
- Explore the nature and impacts of existing and potential disaster risk in Pakistan.
- State an account of some of the key disaster that hit the country in the past.
- Identify the districts prone to various disasters.

Key Messages

- Pakistan is prone to different types of hazards like flood, earthquake, landslide, cyclone, and drought. It is one of the five South Asian countries with the highest annual average number of people affected by floods.
- Other events that threaten the country are human induced hazards like technological, oil spill, urban & forest fire and complex emergency.
- The country is characterized by topographic and climatic contrasts - low rainfall and extreme variation in temperature between the northern and southern areas. The topography varies from coastal beaches, sand deserts, plateaus, plains, high mountains to snow-covered peaks.

Session at a Glance

Timing	Topic	Method
5'	Introduction	Presentation
40'	Activity 1: Historical perspective of hazards in Pakistan	Presentation Exercise: Mapping on timeline
35'	Activity 2: Vulnerable districts of Pakistan	Participatory mapping of vulnerability
5'	Activity 3: Factors contributing to vulnerabilities	Brainstorming and discussion
5'	Synthesis and session evaluation	Question and answer

	90'
	• Easel board and papers. • Different colour marking pens. • Map of Pakistan (district-wise). • Charts. • Colour meta cards. • Power point presentation/slides.
Preparation	• Prepare power point/chart papers with session objectives, major past events and their statistics, vulnerable districts of Pakistan. • Prepare meta card with printing the following years on them i.e. 1945-1970, 1971-1990, 1991-2005, 2006-2010, 2011-2019. • Print map of Pakistan (district-wise) on A4 paper or even bigger pages if possible. • Print hazards in Pakistan and handout 2 for each participant.

Process

Introduction   5'
- Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the end of the session, participants will be able to: -
    - Explore the nature and impacts of existing and potential disaster risk in Pakistan.
    - State an account of some of the key disaster that hit the country in the past.
    - Identify the districts prone to various disasters.

Activity 1: Historical Perspective of Hazards in Pakistan   40'
Paste/place time-cards (1945-1970, 1971-1990, 1991-2005, 2006-2010, 2011-2019) on the sticky sheet or on the floor or wall. Ask participants to write past disasters on the card (one disaster on each card) and place/paste them in front of timeline as per their occurrence.

Activity 2: Vulnerable Districts of Pakistan   35'
- Provide map of Pakistan to each group and ask them to map different districts which prone to different hazards. Use different symbol/colour for kind of hazards.
- Ask participants to have gallery walk to see the work of other groups.
- Facilitator will conclude this activity by sharing the major past events and their statistics.

Activity 3: Factors Contributing to Vulnerabilities   5'
Ask the participants 'what are the contributing factors of vulnerabilities? 'and write their responses on the board. Conclude the discussion if participants missed one of the factors given in explanation below.

Synthesis and Session Evaluation   5'
- Ask the participants if they have questions or clarifications about the topics discussed.
- Answer their questions and provide examples as necessary.
- If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.

- Name natural hazards
- Name human induced hazards
- Share the districts of Pakistan which are prone to flood
- Share the districts of Pakistan which are prone to earthquake
- Share the districts of Pakistan which are prone to human induced hazards
- Share the districts of Pakistan which are prone to drought
- What are the contributing factors to vulnerabilities?
- Thank the participants and inform them of the next session.

Handout

- Handout 2: Hazards in Pakistan

PAKISTAN'S RISK SITUATION

- Pakistan is ranked in the top ten countries that are most vulnerable to climate change effects, the country's exposure to natural & human induced hazards and disasters could be ranked between moderate to severe. A range of natural hazards threaten Pakistan. In addition, a variety of human induced hazards also threaten the economy and environment of the country. The highest priority hazards from the perspective of DRR include earthquakes, droughts and flooding that can cause widespread damage and losses when they occur. The earthquake of 8th October 2005 highlighted Pakistan's vulnerability to disaster risks. This has been further evidenced by the devastation from the Floods 2010, 2011 and 2012. Pakistan has been hampered by damage from a wide range of natural disasters in the past.
- The profile of natural disasters in Pakistan shows that among all types of natural disasters, Pakistan experienced floods most frequently with earthquakes causing the most loss of lives. Droughts have also affected widespread areas and a large number of people.

Natural Hazards

- **Earthquakes**

Major Earthquakes those hit areas of Pakistan includes the great Quetta Earthquake-1935 and the earthquake in the Northern part of Pakistan in October-2005. Besides these mega earthquakes, the country has experienced numerous small to medium magnitude quakes with localized impacts. **Seismicity is especially high in the Northern and Western parts of the Country.** Earthquakes with magnitudes larger than 7, such as the 1935 Quetta Earthquake and the 2005 Earthquake, caused significant damage including a number of human lives lost. This fact can be attributed to the vulnerability of the building structures to earthquakes.

- **Major Past Events**

Year	Location	Magnitude	Deaths	Losses (Rs in Million)
Oct 2015	KP, Punjab, AJ&K and GB	8.1	280	98,069 houses and 479 schools
Sep 2013	Awaran	7.7	376	6842 houses
Oct 2008	Ziarat	6.4	160	5943 houses
Oct 2005	KP & AJK	7.6	73,338	208,091
Dec 1974	Northern Area	7.4	5,300	4400 houses
Nov 1945	Makran Coast	8.3	4,000	-
May 1835	Quetta	7.7	60,000	-

Source: NDMP and NDMA reports

- **Vulnerable Districts**

Province	District
Balochistan	Quetta
KP	Abbottabad, Bajaur, Bannu, Charsadda, Chitral, Dir Lower, Malakand, Mardan, Nowshera, Peshawar, Sawat, Shangla and Swabi
Punjab	Gujrat, Narowal, Okara, Rawalpindi and Sialkot
Sindh	Karachi
AJ&K	Bagh, Hattian, Haveli, Kotli, Muzaffarabad, Poonch and Sudhnoti
GB	Astore, Diamer, Gilgit and Ghanche

Source: NDMP

- **Floods**

Pakistan is among first five South Asian Countries with the highest annual average number of people affected by floods. Flooding is the most recurring natural disaster causing devastation & damaging tremendous human lives, infrastructure and property. Normally tropical monsoon depression systems which originate from the Bay of Bengal during the months from July to September is the main cause of floods in Pakistan. Flood characteristics can be classified into three main categories namely Riverine Floods, Flash Floods and Urban Floods.

- **Major Past Events**

Year	Deaths	Villages Affected (numbers)
2014	367	3,100
2013	243	8,297
2012	571	14,159
2011	520	38,700
2010	1,985	17,553
2009	99	89
2008	157	8,00
2007	586	6,498
2006	541	2,477
2005	59	1,931
2004	85	47
2003	484	4,376
2001	219	50
1995	591	6,582
1992	1,008	13,208
1988	508	1,000
1978	393	9,199
1976	425	18,390
1973	474	9,719
1957	83	4,498
1956	160	11,609
1950	2,190	10,000
Total	**11,744**	**182,482**

Source: NDMP and NDMA reports

- **Vulnerable Districts**

Province	River/Flash Flood
Balochistan	Bolan, Chagai, Gwadar, Jaffarabad, Jhal Magsi, Kech, Kharan, Khuzdar, Lasbela, Nasirabad, Nushki and Sibi
KP	Buner, Charsadda, Chitral, Dera Ismail Khan, Dir Upper, Dir Lower, Khyber, Kohistan, Kurram, Lakki Marwat, Malakand, Mansehra, Mardan, North Waziristan, Nowshera, Orakzai, Peshawar, Shangla, South Waziristan, Swabi, Swat and Tank
Punjab	Bakkar, Dera Ghazi Khan, Gujranwala, Gujrat, Jhang, Khushab, Layyah, Miawali, Muzaffargarh, Narowal, Rahim Yar Khan, Rajanpur, Rawalpindi, Sialkot and Sheikhupura
Sindh	Badin, Dadu, Ghotki, Jacobabad, Jamshoro, Kamber, Karachi, Kashmore, Khairpur, Larkana, Sanghar, Shahdadkot, Shikarpur, Sukker, Tando Muhammad Khan and Thatta
AJ&K	Bagh, Bhimber, Muzaffarabad, Neelum, and Poonch
GB	Astore, Chilas, Diamer, Ganche, Gilgit, Ghizer Hunza, Nagar and Skardu

Source: NDMP

- **Droughts**

In Pakistan rainfall variability is quite high due to its topography, which makes droughts an intermittent phenomenon in the Country. In recent years, droughts are reported to have brought extensive damage to Balochistan, Sindh and Southern Punjab where average annual rainfall is as low as 200-250 mm. Drought differs from other natural disasters in effects which often accumulate slowly over a considerable period of time and may linger on for years even after the termination of the event. Because of this, drought is often referred to as a *"Creeping Phenomenon."* The impacts of drought are less obvious and are spread over larger geographical areas.

- **Major Past Events**

Year	Deaths	No Affected	District Affected
1997-2002	145	3.3 million	23

Source: NDMP

- **Vulnerable Districts**

Province	Districts
Balochistan	Sever - Awaran, Gawader, Kech, Kharan, Nushki, Panjgure and Washuk
	Moderate - Chaghi, Killah Abdullah and Pishin
Punjab	Sever - Bahawalnagar, Bahawalpur, Bhakkar, Dera Ghazi Khan, Muzafargarh, Rajanpur and Rahim Yar Khan
	Moderate - Attock, Chakwal, Jhelum, Khushab, Layyah and Mianwali
Sindh	Sever - Dadu, Jamshoro, kambar-Shahdad kot, Kharparkar and Umerkot
	Moderate - Badin, Benaziabad, Karachi, Khairpur, Mirpur Khas and Thatta

Source: NDMP

- **Glacial Lake Outburst Floods (GLOFs)**

The bursting of glacial lakes in the upstream reaches of the Indus River basin due to heat waves, a phenomenon termed GLOFs, is one of the natural disasters to be concerned with in Pakistan. In particular, the Karakoram Region is noted for the destructive effects of GLOFs from naturally dammed lakes. The lower parts of large glaciers in the Upper Indus River basin can severely disrupt and modify river courses in the valleys below.

In case of GLOF, some slides and debris torrents are large enough to dam rivers, such as the landslides in 1841, which blocked the Indus River and formed a lake upstream. When the dam was breached, a catastrophic flood wave resulted. Similar events occurred from 1852 to 1858 on the Hunza River. In 1977, a landslide dam was formed, possibly in association with a glacier surge (Hewitt, 1968-1969).

A recent study on Indus River basin system flooding and flood mitigation by H. Rehman and A. Kamal found that, out of the 2,420 glacial lakes in the Indus basin, 52 are potentially dangerous and could result in GLOFs with serious damage to life and property.

- **Sediments/Landslides**

Pakistan is at considerable risk to sediment disasters. Sediment disasters are defined as the phenomena that cause direct or indirect damage to lives and property through a large-scale movement of soil and rock. Sediment disasters are likely to occur in mountainous areas of Pakistan, due to the particular organic phenomena and downspouts resulting in destabilization of the slope. Sediment disasters occur after heavy rains which weaken the soil/ ground. In particular, the northern regions of Pakistan (GB, AJ&K and KP) are vulnerable to landslides because of their steep hilly/ mountainous topography.

- **Major Past Events**

Year	Area	Deaths	No Affected
2010	Attabad (GB)	18	1285
2005	Hattian Bala (AJ&K)	1,000	3,600

Source: NDMP

- **Avalanches**

GB and Kashmir regions and northern parts of KP experience avalanches on seasonal basis. Local communities surrounding the avalanche prone areas are vulnerable to this disaster. Avalanches are a kind of local natural disaster and their impact is localized to the communities living nearby or in areas where avalanches happen on a regular basis. Therefore, the impact of avalanches is minimal.

- **Vulnerable Districts**

Province	Districts
KP	Chitral and Kohistan
AJ&K	Hattian Bala and Neelum
GB	Astore, Gilgit, Ganche, Ghizer and Skardu

Source: NDMP

- **Cyclones**

Cyclones have caused large-scale damage to the coastal areas in Pakistan. The coastal belt of Pakistan, especially in Sindh Province, is highly vulnerable to tropical cyclones and associated storm surges. The climate changes result in an increase in frequency, intensity and changes in tracks of storms.

- **Major Past Events**

Year	Death	No Affected	District Affected
2010	15	0.2 million	Balochistan - 30 Sindh - 3
2007	Balochistan - 380 Sindh - 250	1.5 million	Balochistan - 10 Sindh - 4
1999	202	0.6 million	Thatta and Badin

Source: NDMP

- **Vulnerable Districts**

Province	Districts
Balochistan	Awaran, Gwadar, Katch and Lasbela
Sindh	Badin, Hyderabad, Karachi and Thahtta

Source: NDMP

- **Tsunami**

Due to the tectonic setting in the Arabian Sea where the Arabian Plate subducts beneath the Eurasian Plate, large earthquakes along the Arabian Coast have occurred historically. However, all of the earthquakes have not generated tsunamis. Besides earthquakes, tsunamis can be generated by volcanic activity. 1945 Tsunami caused by Makran Subduction Zone, located 70 km from the Pakistan Coast, hit the coastal line in less than 20 minutes; however distant tsunamis have not affected Pakistan so far.

- **Major Past Events**

Date	Time	Magnitude	Run Up (in meters)	Location
27 Nov 1945	21:56:40	8.3	15.24	Karachi, Ormara and Pasni
27 Aug 1883	02:59	Volcano	0.50	Karachi

Source: National Geophysical data Centre

- **Vulnerable Districts**

Province	Districts
Balochistan	Gwadar and Lasbela
Sindh	Badin, Karachi and Thahtta

Source: NDMP

- **Extreme Temperature**

In 2015, a severe heat wave with temperatures as high as 51 °C (124 °F) hit Pakistan, especially its southern parts. This heat wave broke the old temperature records of many cities in the country. A few cities in the province of Sindh, experienced the temperatures as high as 51.0 °C.

Human Induced Hazard

- **Industrial and Technological Disasters**

This includes industrial incidents, oil spills, chemical, biological, radiological and nuclear incidents. Industrial cities like Karachi, Lahore, Faisalabad, Gujrat, Gujranwala and Sialkot are prone to industrial disasters. The chemical industry faces the potential threat of disasters because of possible explosions. Pakistan's ports are at risk from marine accidents. In July 2003, in Karachi, the wreckage of Tasman Spirit, an old Greek Ship caused colossal environmental losses and health hazards for the businesses, port workers and adjacent communities. About 28,000 tons of oil spilled all over the harbor area, which adversely affected marine life. The residents in the area reported headaches, nausea and respiratory problems in the weeks following the accident. It took months for the authorities to clear the oil affected areas.

- **Urban and Forest Fires**

Urbanization has progressed in Pakistan over the last two decades, which has put a lot of pressure on the urban areas of Pakistan thereby creating more slum areas in the cities. In addition, there is a lot of construction activities taking place without following/ abiding by the Building Codes. Over and above, mushrooming of unplanned CNG gas filling stations in urban areas and unauthorized LPG stores are quite common. The sale of petroleum products in the residential areas is also widespread in the cities. These practices pose major fire risk in urban areas. While the risk of fire exists in all dwellings, the cities with more industrial units, CNG stations/ petrol Pumps, godowns/warehouses are comparatively more fire prone.
Moreover, Pakistan has different types of forests, ranging from Mangroves in the south to Alpine vegetation in the north. Out of all these types, sub-tropical broad leave ever green scrub forest and sub-tropical (Chir) Pine are the most fire prone Forests. Over the past 10 years, 2040.25 acres of forest area in Margalla Hills National Park rest area has been burnt in 309 fire incidents.

- **Complex Emergency**

Pakistan law enforcing agencies are fighting against terrorist in the country since years. These conflicts have caused loss of life and damage to property and have created insecurity for various social groups in the affected areas. Pakistan has also borne the brunt of Afghan War in the form of hosting about 6 million refugees for more than two decades. About two million Afghan Refugees still live in various parts of Pakistan. This mass scale invasion has damaged the social fabric of Pakistan.

- **Accidents**

Transport accidents includes both land and air accidents. Road accidents, are common in Pakistan. The major reasons for this are poor road conditions, single road tracks, and unsafe driving practices. In 2017, a tanker truck exploded in Bahawalpur District, killing 219 people and injuring at least 34 others.

Factors contributing to Vulnerabilities

- **Population Growth**

The population of Pakistan has grown by 361 percent since 1947. The growth of population has negatively affected the Socio-economic development of the country resultantly most of the population has settled in the areas that are more vulnerable to various of hazards like Floods (Riverine & Flash), Fires, GLOFs, Landslides, Avalanches, and Epidemics.

- **Unplanned Industrialization and Migration**

Rural to Urban areas migration has resulted in the uneven growth of urban centers in Pakistan. Changes in consumption patterns, lifestyles and demand for better services has led to increased pressure on natural resources. Growing industrialization requires more water, timber, and other natural resources. All this has increased stress on natural resources manifold and degraded the environment through cutting of trees, land erosion, which is the main cause of landslides, depletion of groundwater, and industrial waste pollution in the rivers and sea.

- **High Dependency on Agriculture and Livestock**

Agriculture and livestock are main sources of income particularly in floods and drought prone areas of Pakistan as there is no visible diversity in their livelihoods. Therefore, the impact of floods and drought is very high for these communities. When they are hit by any disaster, their recovery takes unusually longer time. Disaster-impact-assessment studies indicate that these communities suffer more from floods because of agriculture-based livelihoods.

- **Poverty in Hazard-Prone Areas**

Poverty is one of the major factors contributing to the vulnerability, under development and exposing communities to disasters. Poverty reduces the capacities of the communities to resist, mitigate and respond to hazard. Absence of safety nets and limited access to assets, shrinks the people's capacity to sustain the brunt of disasters. The poor living in hazard-prone areas are badly exposed to disaster affects in one way or the other.

- **Lack of Institutional Capacity to Deal with DRR**

Institutional capacity of different government departments/agencies is quite limited to deal the disasters, particularly at district levels. Lack of coordination between response agencies at provincial/ federal level and limited early warning system are the main grey areas. There is a lack of focus on preparedness because of the capacity and scarcity of resources. All these factors ultimately increase the vulnerability of local population to different disasters.

- **Climate Change and its Impacts**

Global warming is causing severe damage to the natural environment. The impact includes losses in biodiversity, rise in the sea level, frequent cyclones, drought and abnormal shifts in the weather pattern. As a result, increased flooding changes the freshwater supply and increase severe weather events. This can also lead to the alteration of forest and crop yields.

- **Land Use Planning**

The vulnerabilities in different regions of the Country for various hazards are absolutely distinct. The main reasons are: 1) growing urbanization, 2) mushrooming of slum areas and 3) lack of implementation civic laws. In the flood plains, people have occupied river/nullah beds and blocked natural drainage system (nullahs/ water channels) thus making themselves vulnerable to all type of floods. Moreover, communities occupying active seismological active zones are vulnerable to the effects of earthquakes. Furthermore, due to over population, agricultural lands and green/ vegetated areas are being converted to residential areas (concrete jungles); thus, deforestation is causing river erosion etc which is further increasing vulnerability to floods.

SESSION - 3.1

PAKISTAN'S HUMANITARIAN STRUCTURE AND COORDINATION ARCHITECTURE

Learning Objectives

At the end of the session, participants will be able to: -
- Explain the disaster management and humanitarian structure that exists in Pakistan.
- Distinguish the role and responsibilities of national, provincial, district authorities and other stakeholders.

Key Messages

- National Disaster Management Authority was established in 2007 under the National Disaster Management Ordinance, 2006 which was later enacted by National Parliament as the *"National Disaster Management Act"* in 2010.
- NDMA acts as the secretariat of NDMC and is the apex federal agency to act as the planning, implementing, coordinating and monitoring agency for disaster management.
- Provincial/State/Gilgit-Baltistan Disaster Management Commissions and the Authorities were established in varying timeframe.
- The main responsibility of the Provincial/State/Gilgit-Baltistan Disaster Management Commissions is to lay down policies and plan for disaster management in province/regions/state/capital territory. Whereas the authorities are responsible for implementing policies and plans for DRM in their respective province/region/state/territory in line with the policy and strategic guidance of the respective commissions.
- In 2012, the Provincial assembly of KP made few changes in National Disaster Management Act, 2010 and passed Provincial Disaster Management Act 2012. In KP, the district authorities prescribed as DDMA have been renamed as DDMUs.
- An elaborate humanitarian coordination architecture exists in the country, which consists of Government departments, UN agencies, international and national forum/network and civil society organization.

Session at a Glance

Timing	Topic	Method
10'	Introduction	Presentation
15'	Activity 1: Pakistan humanitarian structures	Exercise: Mix & match
50'	Activity 2: Actors and coordination/working groups mapping	Group work: Mapping
10'	Activity 3: Humanitarian structure and coordination architecture	Presentation
5'	Synthesis and session evaluation	Question and answer

	90'
	• Easel board and papers. • Different colour marking pens and charts. • Colour meta cards. • Power point presentation/slides.
Preparation	• Prepare power point of session objectives, evolution of disaster management image, NDMA organogram, humanitarian architecture image, UN cluster image, Government-UN coordination mechanism. • Prepare meta cards with printing the titles (blue card) and definitions (green card) of NDMC, NIDM, NDMA, provincial/region/state disaster management commission, PDMA/SDMA/GBDMA/ICTDMA, armed forces, UN, NHN, media, private sector, civil defense and firefighting services. • Print handout 3 for each participant.

Process

Introduction   **10'**
Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session.

Activity 1: Pakistan Humanitarian Structures   **15'**
At the end of the session, participants will be able to explain the disaster management and humanitarian structure that exists in Pakistan and discuss the role and responsibilities of national, provincial, district authorities and other stakeholders.
• Give each person either: a blue card (name of actor in a humanitarian emergency in Pakistan) or a green card (actor definition). These cards will have NDMC, NIDM, NDMA, Provincial/Region/State disaster management commission, PDMA/SDMA/GBDMA/ICTDMA, Armed Forces, UN, NHN, Media, Private, Civil Defense, Fire Fighting Services
• Ask participants to find the person with a matching card (an actor or a definition) and walk to the wall and put your cards up together as a pair
• Support participants who struggle to find relevant person. Once they complete the task, ask participants to spend 5 minutes to read the other cards also.

Activity 2: Mapping of Actors and Coordination/Working Groups   **50'**
Divide participants into three groups and ask them to map actors and coordination/working groups present in emergencies in Pakistan.
Group 1: Small scale natural disaster
Group 2: Large scale natural disaster
Group 3: Complex emergency
Ask them to create a visual representation showing which actors or coordination/working groups might be involved in a response for your scenario. Ask them to consider showing actors or coordination/working groups by when they will be active.

Likely Actors for Response

Actors/work groups likely to be Active

Activity 3: Humanitarian Structure and Coordination Architecture   **10'**
Give interactive presentation using the power point slides of disaster management image, NDMA organogram, humanitarian architecture image, UN cluster image, Government - UN coordination mechanism

Synthesis and Session Evaluation   **5'**
- Ask the participants if they have questions or clarifications about the topics discussed.
- Answer their questions and provide examples as necessary.
- If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
    - What is the role/function of NDMA and its organigram?
    - What is the existing Government-UN coordination mechanism?
- Ask Thank the participants and inform them of the next session.

Handout

Handout 3: Pakistan's Humanitarian Structure and Coordination Architecture

PAKISTAN'S HUMANITARIAN STRUCTURE AND COORDINATION ARCHITECTURE

Despite being prone to natural and human induced hazards, no proper humanitarian structure existed in Pakistan until December 2006. Emergency relief cell in the Cabinet Division was responsible to deal with post disaster situation (s) as a national response agency, in collaboration with Relief Commissioners at provincial level. However, in the backdrop of HFA and response phase of October 2005 Earthquake, Government, NGOs and humanitarian response agencies felt a dire need of national level humanitarian structure in Pakistan.

To respond to the needs of the affected population government departments, UN agencies, NGOs civil society/philanthropist organizations work together to minimize the negative impact of the disasters and provide assistance to those affected. This is achieved by close coordination of all stakeholders through an established framework. This humanitarian architecture allows an effective, coordinated response when disaster strikes.
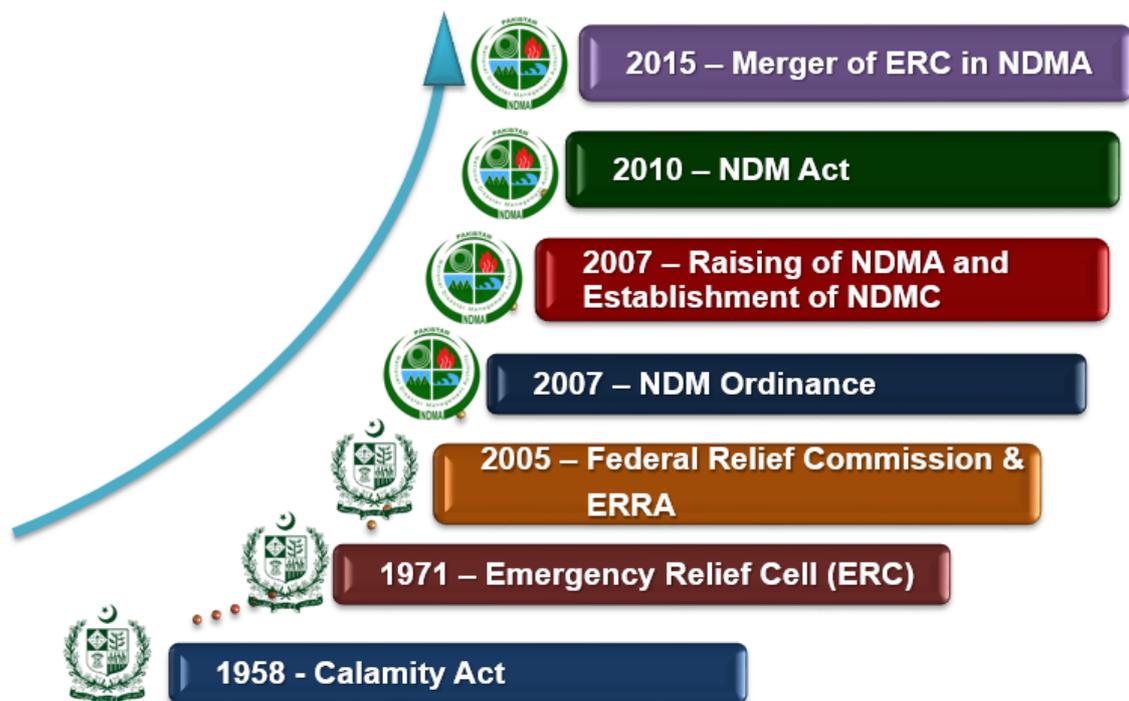
Source: NDRP 2019

- **Evolution of DM Systems.** The West Pakistan National Calamities Act of 1958 and Civil Defence Act-1952 provides for the maintenance and restoration of order in calamities affected areas, by relief against such calamities and focuses on emergency response. Based on the Act, an ERC was created within the Cabinet Division in 1971 and was responsible for disaster relief at the National level. It provided assistance in cash and kind to supplement the resources of the Provincial Government and administered the Prime Minister's Flood Relief Fund.

In the backdrop of earthquake of 2005, the National Disaster Management Ordinance was promulgated in 2006, was approved by Parliament and became the National Disaster Management Act in 2010. In line with the provisions of National Disaster Management Ordinance Ordinance-2006, the Government of Pakistan approved the following three tiered structure at the national, provincial and district levels.
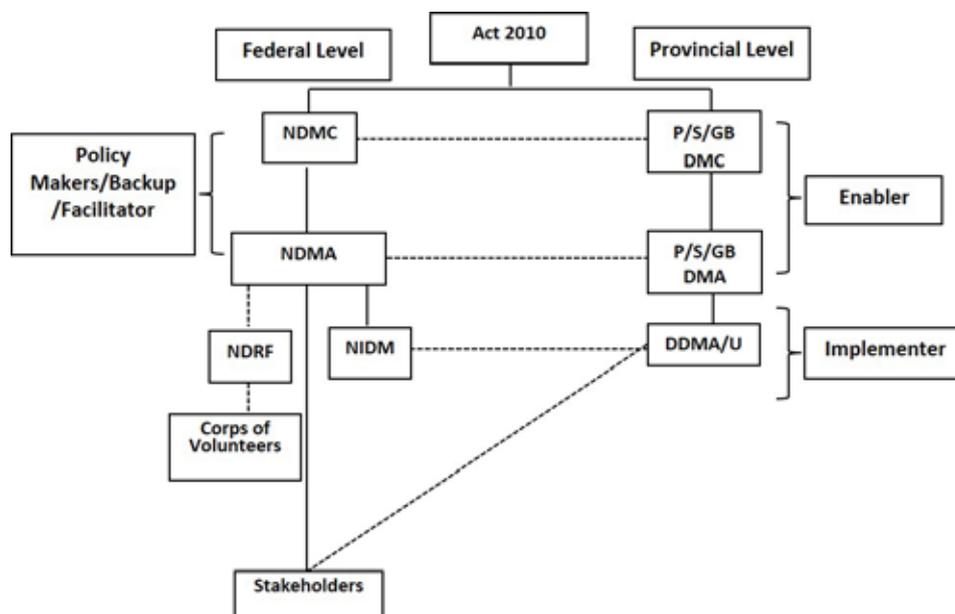

Source: NDRP 2019

National Level

- **NDMC:** Headed by the Prime Minister as its chairperson, the NDMC is the highest policy and decision making body for DRM. Other members include opposition leaders of both the houses; chief ministers of four provinces and GB; Prime Minister AJ&K; CJCSC or his nominee. Additionally, key federal ministers and civil society representative are also part of the commission. Chairman NDMA acts as secretary of the commission. The major functions of the commission are as follow: -
    - Lay down policies on disaster management.
    - Approve the National Plan.
    - Approve plans prepared by the ministries or divisions of the federal government in accordance with the National Plan.
    - Lay down guidelines to be followed by the 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.
    - Take such other measures for the prevention of disaster, or the mitigation thereof, or for preparedness and capacity building for dealing with disaster situations as it may consider necessary.

- **NDMA:**
  - **Organization:** NDMA was established in 2007 as a lead agency at federal level to implement, coordinate and monitor the whole spectrum of disaster management including preparedness, prevention, mitigation, response, recovery, rehabilitation and reconstruction program. As per the National Disaster Management Act 2010, the Authority is headed by Chairman while it has three members heading three wings. The Chairman also acts as an ex-officio Secretary of the NDMC and NDMA serves as a secretariat of NDMC. Organizational structure of NDMA is as under: -
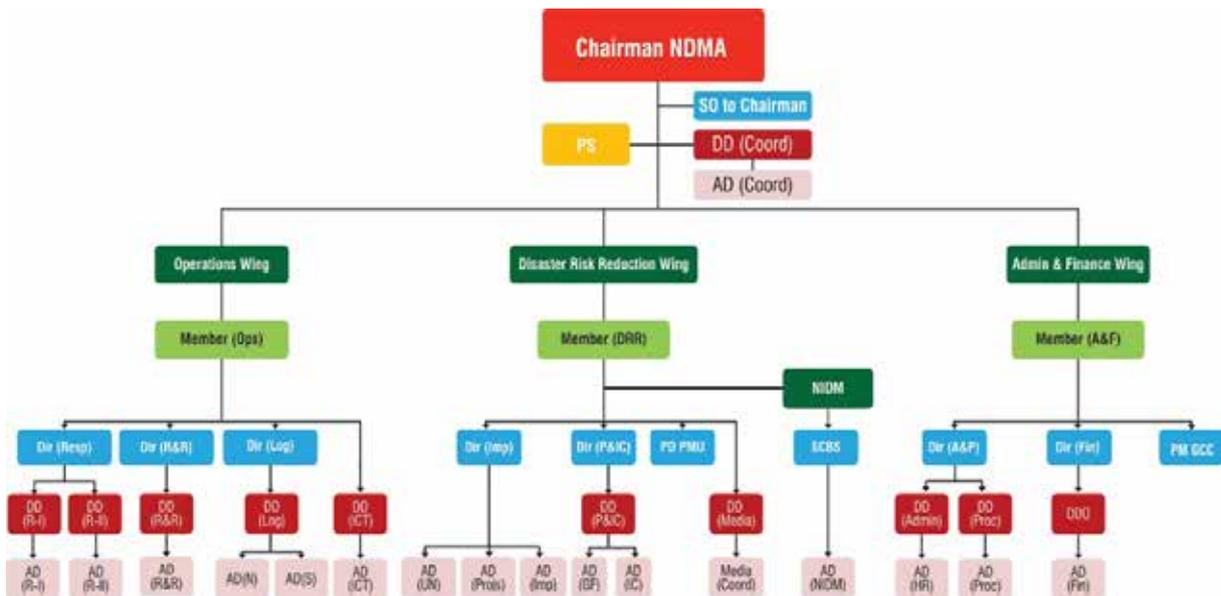
Source: NDRP 2019

  - **NIDM:** In order to promote and strengthen DRR/DRM through research, training and knowledge management, the National Disaster Management Act, 2010, requires the establishment of the NIDM at the national level. It is the lead institute responsible for planning and promoting disaster management training. Moreover, the NIDM is required to provide assistance to research institutions, school, colleges and is responsible to assist provincial governments to develop policies, strategies and DRR framework. The institute is functional since February 2010 in Islamabad.

  - **NDMA's Institutional Capacity:** NDMA can support over 0.3 million people across the country immediately on the onset of disaster based on the stockpiles held in warehouses. Likewise, PDMAs can also support the same number. For subsequent support procurement will be undertaken for which all process is finalized prior to disaster. Six (3 x heavy & 3 x medium) Urban Search & Rescue (USAR) Teams raised and located at various locations for immediate response. Teams are in possession of state of the art equipment including canine component. Countrywide elaborate warehouse network established and stocked with necessary items. Finalization of assessment process (MIRA, RNA and DNA) to reduce time and standardized the template to be used by both by Government departments and UN agencies.

- **Functions of NDMA**
  - Act as the implementing, coordinating and monitoring body for disaster management.
  - Prepare the National Plan to be approved by the National Commission.
  - Implement, coordinate and monitor the implementation of the national policy.
  - Lay down guidelines for preparing disaster management plans by different ministries or departments and the provincial authorities.
  - Provide necessary technical assistance to the provincial governments and the provincial 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 disaster.
  - Lay down guidelines for, or give directions to the concerned ministries or provincial governments and the provincial authorities regarding measures to be taken by them in response to any threatening disaster situation or disaster.
  - For any specific purpose or for general assistance, requisition the services of any person and such person shall be a co-opted member and exercise such power as conferred upon him by the Authority in writing.
  - Promote general education and awareness in relation to disaster management.
  - Perform such other functions as the National Commission may require.

Provincial/Regional/State Level

- **Provincial/Region/State DM Commission:** Chaired by the chief executive of the province/region/state, the members include leader of opposition and a member nominated by him. The chief executive has the powers to nominate other members of PDMC. Similarly, he may designate one of the members to be the vice chairperson. Have similar responsibilities that of NDMC i.e. policy formulation polices and develop guidelines on DRM at provincial/region/state level, approve DRM plans prepared by departments and oversee fund utilization by provincial/region/state departments. Functions of these commission are: -
  - Lay down the provincial/regional/state disaster management policy.
  - Lay down the provincial/regional/state plan in accordance with the guidelines laid down by the National Commission.
  - Approve the disaster management plans prepared by the departments of the provincial/regional/state government.
  - Review the implementation of the plan.
  - Oversee the provision of funds for mitigation and preparedness measures.
  - Review the development plans of the different departments of the province/region/state and ensure that prevention and mitigation measures are integrated therein.
  - Review the measures being taken for mitigation, capacity building and preparedness by the departments of the provincial/regional/state government and issue such guidelines or directions as may be necessary.

- **PDMA/SDMA/GBDMA/ICTDMA**
  - **Organization:** The agency to act as the planning, implementing, coordinating and monitoring for disaster management at provincial/region/state level. The organization varies from province to province depending upon the disaster situation in the respective province/region/state.
  - **Functions**
    - Formulate the provincial/regional/state DM policy obtaining the approval of the Commission.
    - Coordinate and monitor the implementation of the National Policy, National Plan and provincial/regional/state plan.
    - Examine the vulnerability of different parts of the province/region/state to different disasters and specify prevention or mitigation measures.
    - Lay down guidelines to be followed for preparation of disaster management plans by the departments and district authorities.
    - Evaluate preparedness at all governmental and non-governmental levels to respond to disaster and to enhance preparedness.
    - Coordinate response in the event of disaster.
    - Give directions to any department or authority regarding 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 district authorities and local authorities to enable them to carry out their functions effectively.
    - Advise the provincial/regional/state government regarding all financial matters in relation to disaster management.
    - Examine the construction in the area and if it is of the opinion that the standards laid down have not been followed, it may direct the owner and/or builder to make such changes or repairs as are necessary to bring the constructs into compliance with such standards.
    - Ensure that communication systems are in order and disaster management drills are being carried out regularly.
    - Perform such other functions as may be assigned to it by the National or Provincial/Regional/State Authority.

- **DDMA/Us**
  - **Organization:** District disaster management authorities/units established at district level and are headed by district executive whereas respective deputy commissioners, district police officers, executive district officer (Health) and any other district-level officer appointed by the District Government are its members. The organization varies from province to province depending upon the disaster situation in the respective province/region/state.
  - **Functions**
    - Prepare a DM plan including district response plan for the district.
    - Coordinate and monitor the implementation of the National Policy, Provincial Policy, National Plan, Provincial Plan and District Plan.
    - Ensure that the areas in the district vulnerable to disasters are identified and measures for the prevention of disasters and the mitigation of their effects are undertaken by the departments of the government at the district level as well as by the local authorities.
    - Ensure that the guidelines for prevention, mitigation, preparedness and response measures as laid down by the National and the Provincial/Regional/State Authorities are followed by all departments of the Government at the district level and the local authorities in the district.

- Give directions to different authorities at the district level and local authorities to take such other measures for the prevention or mitigation of disasters as may be necessary.
  - Lay down guidelines for preparation of disaster management plans by the departments at the district level and local authorities in the district.
  - Monitor the implementation of disaster management plans prepared by the departments at the district level.
  - Lay down guidelines to be followed by the departments at the district level.
  - Organize and coordinate specialized training programs for different levels of officers, employees and voluntary rescue workers in the district.
  - Facilitate community training and awareness programs for prevention of disaster or mitigation with the support of local authorities, governmental and NGOs.
- Set up, maintain, review and upgrade the mechanisms for early warnings and dissemination of proper information to the public.
- Prepare, review and update district level response plans and guidelines.
- Coordinate with, and give guidelines to, local authorities in the district to ensure that pre-disaster, during disaster and post- disaster management activities are carried out promptly and effectively.
- Review development plans prepared by the departments of the government at the district level, statutory authorities or local authorities with a view to make necessary provisions therein for prevention or mitigation of disasters.
- Identify buildings and places that could, in the event of a disaster situation, be used as relief centers or camps and make arrangements for water supply and sanitation in such buildings or places.
- Establish stockpiles of relief and rescue materials and ensure preparedness to make such materials available on short notice.
- Provide information to the Provincial/Regional/State Authority relating to the different aspects of disaster management.
- Encourage the involvement of NGOs and voluntary social-welfare institutions working at the grassroots level in the district for disaster management.
- Ensure communication systems are in order and disaster management drills are carried out periodically.
- Perform such other functions as the provincial government or provincial authority may assign to it or deem necessary for disaster management in the district.
- For the purpose of assisting, protecting or providing relief to the community in response to any disaster, the District Authority may: -
  - Give directions for the release and use of resources available with any department of the government and the local authority in the district.
  - Control and restrict vehicular traffic to, from and within, the vulnerable or affected area.
  - Control and/or restrict the entry of any person into and/or his movement within a disaster area.
  - Remove debris, conduct searches and carry out rescue operations.
  - Provide shelter, food, drinking water and essential provisions, healthcare and services.
  - Establish emergency communication systems in the affected area.
  - Make arrangements for the disposal of the unclaimed dead bodies.
  - Direct any department of the government of the province, and/or any authority or body under that government at the district level to take such measures as are necessary in its opinion.

- Require experts and consultants in the relevant fields to advise and assist, as it may deem necessary.
- Procure exclusive or preferential use of amenities from any authority or person.
- Construct temporary bridges and/or other necessary structures and demolish structures that may be hazardous to the public or aggravate the effects of the disaster.
- Ensure that the NGOs carry out their activities in an equitable and non-discriminatory manner.
- Take such other steps as may be required or warranted to be taken in such a situation.

Humanitarian Coordination Architecture

- **Stakeholders/ Partners:** Humanitarian coordination structure in Pakistan consists of various stakeholders and partners working in the field of disaster management. NDMA being the focal agency is mandated to coordinate with all agencies at the national level. The figure below shows all the stakeholders/ partners who are part of the coordination structure: -
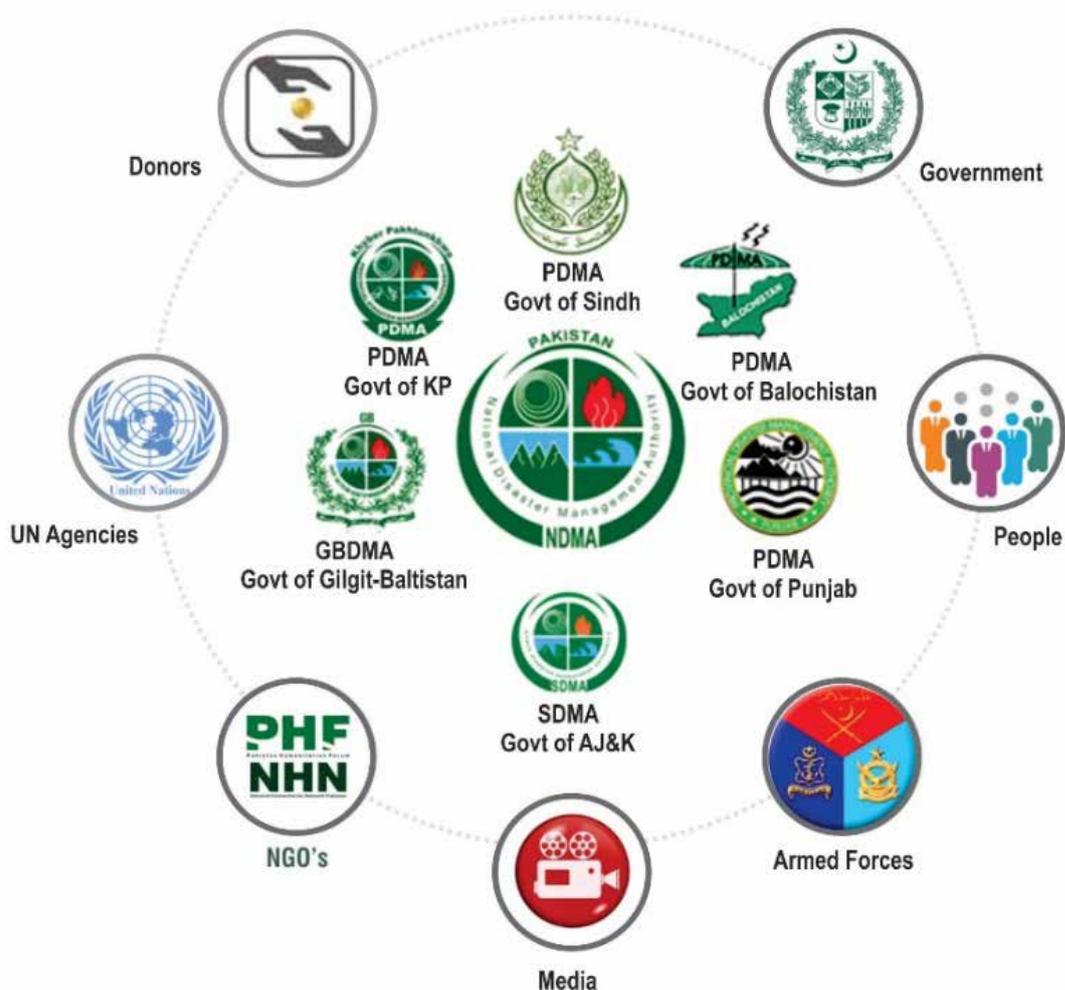
Source: NDRP 2019

- **Role and Functions of Partners**
  - **Government Ministries/Departments/Organizations**
    - **Federal/Provincial Ministries, Departments and Authorities.** In the light of Clause 7 of the National Disaster Management Act 2010, NDMA is mandated to lay down guidelines for or give directions to the all concerned Ministries/ Departments/ Authorities at all levels regarding measures to be taken by them in Response to any threatening disaster situation or disaster. Details responsibilities of these have been given in NDRP. List of, key Federal Ministries/ Departments/ Authorities having important role for disaster response, is given below: -

Federal Ministries	Federal Departments and Authorities
- Defence - Interior - Foreign Affairs - Communications - Climate Change - Finance, Revenue and Economic Affairs - Planning, Development and Reform - National Food Security and Research - Housing and Works - Human Rights - Industries and Production - Information, Broadcasting, National History and Literary Heritage - Information Technology & Telecommunication - Law and Justice - Energy - Maritime Affairs - Railways - National Health Services, Regulations and Coordination - Science and Technology - Water Resources	- Pakistan Armed Forces - Pakistan Meteorological Department - Civil Aviation Authority - Federal Flood Commission - Geological Survey of Pakistan - Survey of Pakistan - Indus River System Authority - National Database and Registration Authority - National Highway Authority - National Logistics Cell - Pakisan Coast Guard - Pakistan Commissioner for Indus Waters - Pakistan Housing Authority - Pakistan Public Works Department - Pakistan Railways - Police Service of Pakistan - Press Information Department - Space and Upper Atmosphere Research Commission - Water and Power Development Authority

  - **Armed Forces:** The Armed Forces have always played a vital & pivotal role in emergency management in the Country. The roles of Armed Forces in disasters spans from relief/ rescue operations to recovery & rehabilitation. However, in complex emergency scenarios and at time where security situation warrants, Armed Forces have been involved in recovery and reconstruction too. The Armed Forces, are considered suitable for such operations due to organization strength, well trained HR and operational equipment/ resources held with them.

    As per National Disaster Management Act 2010, NDMA is empowered to call upon services of Armed Forces, Civil Armed Forces or any other person for the purpose of disaster response {chapter V, section 23 (c) read in conjunction with section 1 (f)}. The employment of Armed Forces including various assets will be determined by NDMA as per the requirement/ situation. The responsibilities which can be assigned to

Armed Forces can be summarized as under: -
- Support disaster management authority in preparing contingency plans.
- Conduct rescue, relief and evacuation operations in conjunction with disaster management authorities.
- Provide available resources/ equipment like helicopters, airplanes, ships & machinery etc for disaster response.
- Assist the disaster management authorities in setting up camps/ tent villages and organize medical camps in close coordination with relevant Health Ministry/ Department.
- Support DM authorities in conduct of assessment (situation/ damages etc).
- Support DM authorities in recovery and reconstruction phase or / and conduct recovery and reconstruction independently where necessary.
- Provide security during the disasters, if required.

Armed Forces can also play a major role with regards to DRR by ensuring implementation of rules/ regulation with the Armed Forces system. Moreover, intuitions like National Defense University, Command & Staff College and other respective Training Institutes can also be utilized in educating Armed Forces personals regarding DRR, DRM and Mitigation processes.

- **Provincial Relief Department:** The Relief Commissioner is responsible for coping with any disaster situation in the province. Funds remain at the disposal of the Relief Commissioner which are released to the District Administration for provision of facilities to affectees as per the rate of compensation for casualties, houses/ crop damages proposed by provincial technical committees headed by the Relief Commissioner. All relief items, goods, cash and grants are distributed by the District Administration through the District Damage Assessment Committee which includes officers from the line agencies, representatives of District and Tehsil Councils and members of local NGOs.
- **Fire Fighting Services:** The main function of the firefighting services is to "extinguish fire". The Municipal Civic Authorities at Tehsil level are responsible for the provision of firefighting services in respective administrative boundary.
- **Civil Defence:** The Civil Defence Department was established through an ordinance in 1951. It is now governed through the Civil Defence Act 1952. Before 1993, it was mandated to "take measure not amounting to actual combat, for affording defence against any form of hostile attack by a foreign power or for depriving any form of hostile attack by a foreign power of its effects, wholly or in part, whether such measures are taken before during or after the time of attack". However, after some time, it was assigned the additional task to take remedial measures against natural or human-induced disasters during peace. The main function of the civil defence is to: -
  - Assist local administration/ army in rescue, relief and evacuation measures.
  - Form search & rescue teams and train them in each Province/ District of the Country.
  - Organize training/ refresher training and simulation exercises for government departments, youth in colleges/ universities and volunteers on search and & rescue missions and first aid.
  - Organize training on bomb disposal/ reconnaissance to the personnel of Armed Forces, Police and all other concerned agencies.

- Develop a database of volunteers at District Headquarters, Tehsil and Union Councils levels and organize trainings (search & rescue and first aid).
- Organize trainings on firefighting for government DRM staff and volunteers at district and tehsil level.
- Create community awareness of public safety organizations.
- **Pakistan Red Crescent Society (PRCS):** PRCS has contributed widely to disaster response in Pakistan with the support of other National Societies. It primarily works in disaster preparedness and response and contributes significantly in providing relief, recovery, reconstruction and capacity building activities. Presently it is working in 80 districts of all four Provinces and AJ&K; it has a core staff of nearly 1,000 personal. Presently, PRCS has a huge network of approximately 50,000 volunteers.
- **Emergency Services:** Emergency Services are operational in all provinces and are responsible for responding to and handling various emergencies, including fire emergencies. These services are equipped with ambulance(s) and technical equipment.
- **Media.** The media plays an important role in saving lives and property before, during and after the disaster through dissemination of important information on/for preparedness, early warnings and disaster response *(situation update covering stranded communities/ missing People, search & rescue/ evacuation, survivor needs, health messages to prevent communicable diseases etc).* Media can also be of great help in coordinating operations of varioius agencies/ organisations.
- **People/Community**
  - **Local Charity Organizations:** The local charity organizations like Edhi Foundation etc provide various services, particularly ambulance services, evacuation, distribution of food and nonfood items during small to largescale disasters in the Country.
  - **Civil Society/ Philanthropist Organisations:** NGOs, Philanthropists and CBO's play an important role in augmenting the Government's efforts for disaster management and provision of relief services to sustain life, reduce physical and emotional distress, and promote/ facilitate recovery of disaster victims. They can also play an important role in dissemination of early warning, evacuation, first aid, search & rescue and firefighting etc.
  - **Scout Associations, Volunteers and Surge Emergency Response Teams (SERT):** Volunteers of Pakistan Boys/ Girls Guides Assosiations, newly established surge team comprising of sectoral experts and volunteers from various fields can be employed to suppliment the disaster response efforts being undertaken by the Government across the Country.
- **Humanitarian Networks**
  - **Pakistan Humanitarian Forum:** Created as an informal network by INGOs and named as Northern Areas Earthquake Relief Operation (NAERO) in 2002. The network aimed to help better coordinate the emergency response and rehabilitation activities of INGOs. In June 2003, it was named as Pakistan Humanitarian Forum (PHF) under the leadership of a chairperson. PHF was mandated to collectively represent INGOs with the Government of Pakistan and UN humanitarian agencies. It was also intended to strengthen coordination, information sharing and advocacy efforts of the humanitarian sector.

As the workload for the annually elected chairperson became untenable due to the extensive demands, therefore in 2010, PHF took the decision to establish a permanent secretariat with dedicated staff to coordinate, support and deliver core PHF services. The secretariat is accountable to the membership through an annually elected Executive Committee (ExComm) and Chair. The PHF Country Coordinator, Chair and Executive Committee represent PHF and take key decisions on action and priorities.

- **National Humanitarian Networks:** Founded in 2010 as a network of National NGOs in Pakistan, led by an elected Chair and Central Executive Committee (CEC) nationally, with provincial/regional chapters in all provinces and state. Its act as an independent and vibrant voice to engage with stakeholders throughout Pakistan for promotion of humanitarian values by influencing policies and building capacities to ensure right based humanitarian response. NHN represents Pakistani Civil Society with the Government of Pakistan, UN humanitarian agencies and all other forums and have significant role in humanitarian architecture in Pakistan. NHN has members across Pakistan, strength of which varies and the forum is open for all national and local organizations engaged in humanitarian assistance or disaster management advocacy. NHN is continually improving its capacity to act as an effective institution for raising voice of national civil society in Pakistan.

  - **NHN Objectives**
    - To act as an institution that engages with all stakeholders that represent National/local NGOs /civil society through efficient and effective coordination mechanism
    - To conduct evidence based policy advocacy for pre, during and post humanitarian crisis (disaster preparedness/ mitigation / management issues)
    - Facilitate all stakeholders in capacity building to promote CBDRM, emergency response and action.
    - To help in organizing and facilitating to make responsive and accountable civil society for humanitarian response and DRM.
    - Advocate for and promote empowered partnership in, based on GHP's agreed principles of partnership and new business model to develop local capacities in humanitarian action.

  - **National & Provincial Secretariats:** National secretariat is established to assist the CEC and NHN Chair. Whereas the provincial/regional secretariat assist the provincial chair and also facilitate national secretariat in its routine functions.

  - **Goverance Structure**
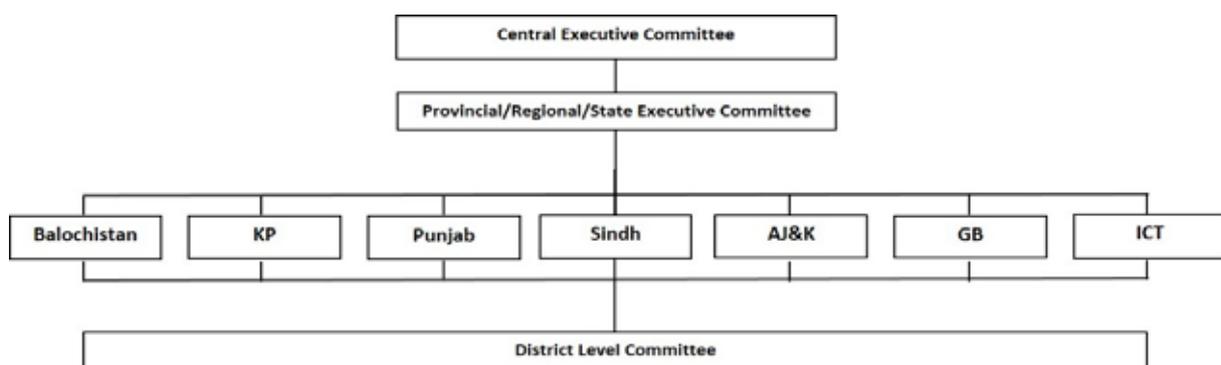
Source: NHN Website

- **United Nations (UN) Agencies/ Clusters.** UN Agencies play a key role in disaster management especially in assessment, planning, coordination, response, recovery and longer term disaster risk eduction programme. UN takes a lead role in establishing the Inter Agency Standing Committee (IASC) to organize and coordinate periodic meetings of UN and INGOs to monitor Response of various agencies. Moreover, the UN Agencies plays an important role in capacity building of public sector in policy formulation, providing technical support to povinces and districts for disaster management plannings.

Clusters are activated by UN Agencies in the backdrop of national level calamity. Clusters are groups of humanitarian organizations, both UN and non-UN, in each of the main sectors of humanitarian action, e.g. water, health and logistics. They are designated by the IASC and have clear responsibilities for coordination. The cluster approach was applied for the first time following the 2005 Earthquake in Pakistan. Nine clusters were established within 24 hours of the earthquake. The aim of the cluster approach is to strengthen system-wide preparedness and technical capacity to respond to humanitarian emergencies, and provide clear leadership and accountability in the main areas of humanitarian response. At country level, it aims to strengthen partnerships, and the predictability and accountability of international humanitarian action, by improving prioritization and clearly defining the roles and responsibilities of humanitarian organizations.
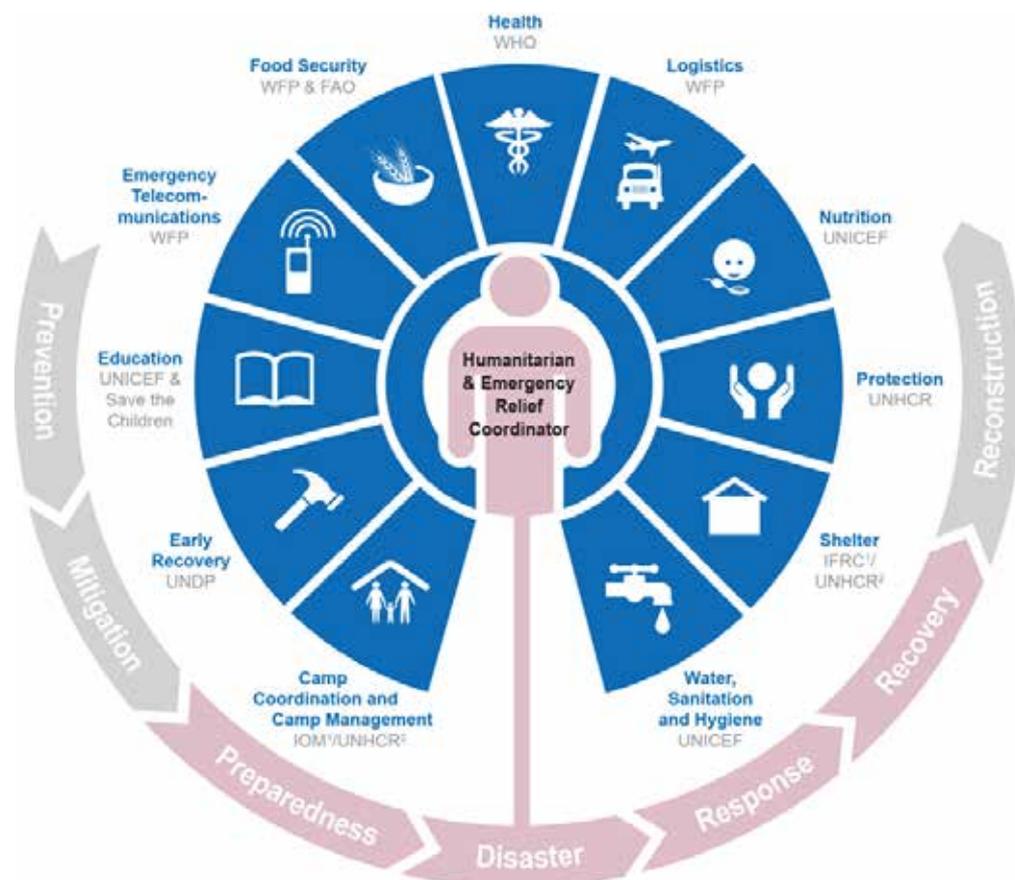
Source: NDRP 2019

- **Coordination Architecture**
  - For the purpose of coordination between the Armed Forces and DM Authorities at National, Provincial and District level a mechanism exists, whereby a DM/ relief cell has been established in Joint Staff Headquarters and all Services Headquarters. NDMA coordinates the employment of Armed Forces through these cells. Likewise, the similar set up exists at Provincial and District level.
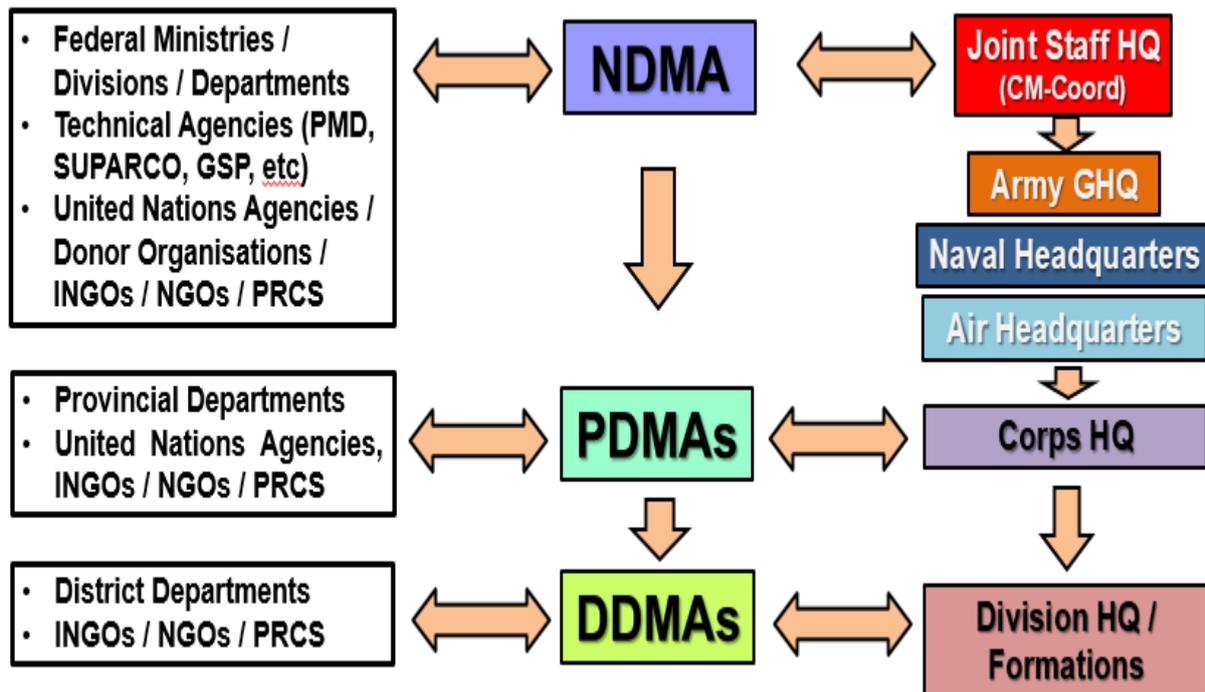
Source: NDRP 2019

- **Government - UN Coordination Mechanism**
  - **Federal Level**
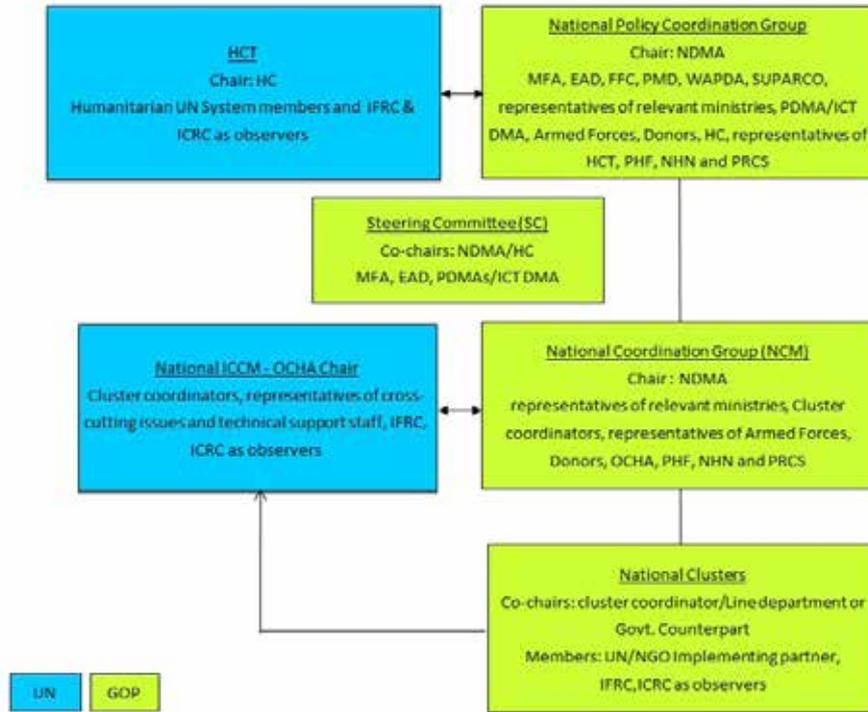
- **Provincial/District Level**
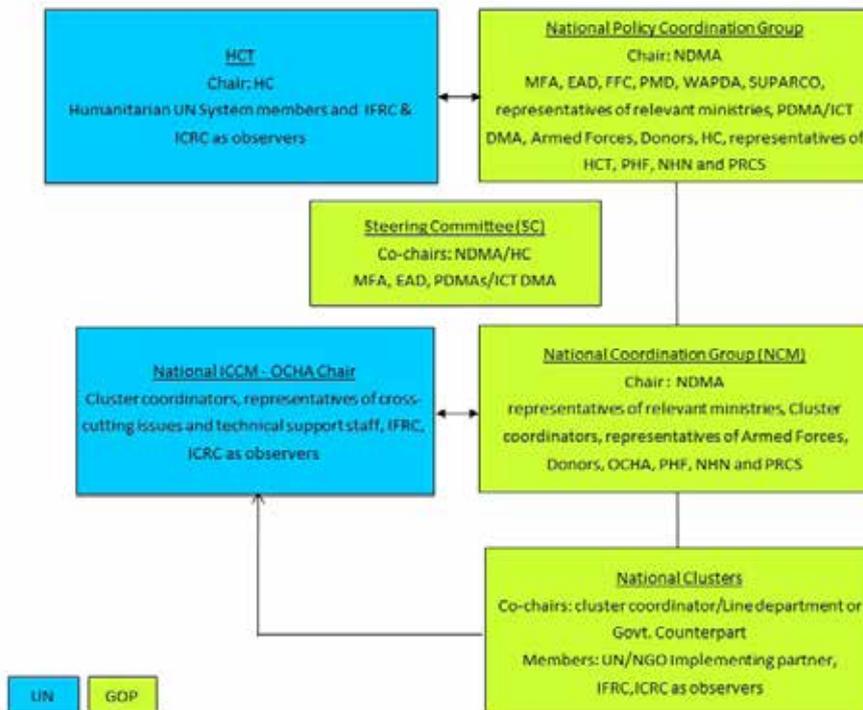
Source: NDRP 2019

SESSION - 4.1

DRM CYCLE AND ITS COMPONENTS

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Learning Objectives

At the end of the session, participants will be able to: -
* Explain the concept DRM, DRM cycle and different phases of DRM.
* Describe the various components of DRM cycles.

Key Messages

* DRM can be defined as a series of actions expressly aimed at reducing disaster risk in endangered.
* DRM cycle can be divided into two categories namely preparedness and response.
* No of activities are under taken during preparedness and response phase of the disaster.
* Main phases of DRM known are pre-disaster, disaster and post- disaster phases.

Session at a Glance

Timing	Topic	Method
15'	Activity 1: Introduction - What is DRM	Brainstorming and discussion
25'	Activity 2: DRM cycle and its components	Exercise: Mix & match Presentation and discussion
5'	Synthesis and session evaluation	Question and answer

🕐	# 45'
🛠️	• Easel board and papers. • Different colour marking pens. • Charts. • Power point presentation/slides.
Preparation	• Prepare power point of session objectives, what is DRM, DRM cycle image. • Prepare four envelopes with strips of DRM cycle. • Print handout 4 for each participant.

Process

Activity 1: Introduction - What is DRM   **15'**
Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the end of the session, participants will be able to: -
* Explain the concept DRM, DRM cycle and different phases of DRM.
* Describe the various components of DRM cycles.

Ask the participants "What is DRM" and write their responses on the board. Conclude the discussion using the definition of DRM on power point.

Activity 2: DRM Cycle and its Components   **25'**

Divide participants into four groups and provide them envelope of DRM cycle strips. Tell them that they have to arrange provided activities of DRM cycle in correct order. After the given time, project the DRM cycle and ask them to make correction if any.

Discuss the DRM cycle each phase and their activities in detail by giving different examples.

Synthesis and Session Evaluation   **5'**

- Ask the participants if they have questions or clarifications about the topics discussed.
- Answer their questions and provide examples as necessary.
- If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
  - What is DRM?
  - Share the phases of DRM cycle
  - Share the activities of DRM cycle of response phase
  - Share the activities of DRM cycle of preparedness phase
- Thank the participants and inform them of the next session.

Handout

- Handout 4: DRM Cycle

DISASTER RISK MANAGEMENT (DRM) CYCLE AND ITS COMPONENTS

What is Disaster Risk Management?

- DRM can be defined as the systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disasters. Disaster risk management aims to avoid, lessen or transfer the adverse effects of hazards through activities and measures for prevention, mitigation and preparedness.

Disaster Risk Management Cycle and its Components

- DRM cycle includes sum total of all activities, programmes and measures which canbe taken up before, during and after a disaster with the purpose to avoid a disaster, reduce its impact or recover from its losses.
- Disaster specialists have consistently made efforts to classify the time periods of a disaster. Among the standard classifications used are: the pre-disaster, during disaster and post disaster phase. DRM Cycle provides a comprehensive description of different elements of measures taken. If followed in a systematic manner, each element of DRM Cycle can effectively reduce disaster risks.
- The time period for any activity/measure will vary greatly depending on the type of disaster and other factors. People involved in disasters must recognize the different phases and the appropriate activities that occur in each phase. It is difficult to set time limits on the post-disaster time phases or to accurately define the limits of each, even for one specific type of disaster.

Disaster Risk Management Phases

- DRM consists of three phases and each phase consist of no of activities, most of these activities are interlinked. Following are the phases of DRM: -
  - **Phase I - Pre-disaster:** Pre-disaster activities are those which are taken to reduce human and property losses caused by a potential hazard. Can also be term as preparedness phase.

- **Phase II - During-disaster:** These include initiatives taken to ensure that the needs and provisions of victims are met and suffering is minimized. Activities taken under this stage are called emergency response activities.
- **Phase III - Post-disaster:** There are initiatives taken in response to a disaster with a purpose to achieve early recovery and rehabilitation of affected communities, immediately after a disaster strikes. These are called as response and recovery activities.

Components - Disaster Risk Management Cycle

- **Preparedness Phase.** Following are the major activities undertaken under the preparedness phase: -
  - **Risk Assessment**
    - A methodology to determine the nature and extent of risk by analyzing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment on which they depend. In Pakistan disaster risk assessment is being conducted for multi-hazard affecting a particular area and is normally referred as MHVRA.
    - At the onset of developing a project/program, it is important to understand hazards, vulnerabilities, and capacities in more detail and to assess their relationship with each other and how that has an impact on community risk levels. Different tools are used in the conduct of hazard, vulnerability and capacity assessment.
  - **Planning**
    - Is a process to lay down an intended future course of action aimed at achieving specific goals/objectives within a specific timeframe. It explains in detail what needs to be done, when, how, and by whom, and often includes best case, expected case, and worst case scenarios.
    - Disaster management planning is done based on the risk assessment (hazards, vulnerabilities and capacities), to reduce the risks. It is considered important, because this will raise awareness of stakeholders about disaster risks and risk management.
    - DRM plans have been developed at district and provincial level to set the course of action with regards to the whole spectrum of disaster management. Contingency planning at all level is an annual process undertaken before the onset of monsoon, which determine a course of for all in case of disaster.
    - Details of the policies and plans formulated by NDMA is as under: -
      - National DRR Policy 2013.
      - NDRP 2010.
      - NDMP 2012.
      - National Policy Guidelines on Vulnerable Groups in Disasters 2014.
      - Host Nation Support Guidelines 2018.
  - **Prevention/Mitigation**
    - Is the process of outright avoidance of adverse impacts of hazards and related disasters or lessening or limitation of the adverse impacts of hazards and related disasters?
    - Mitigation measures to be taken are usually identified in the plan formulated by the district/province. The measures are categorized as structural or non-structural measures.

- **Awareness and Capacity Building**
  - Awareness and capacity building is a process of informing the general population, increasing levels of consciousness about risk and how people can reduce their exposure to hazard. Can be achieved through training and campaigning process.
    - **Objectives of Public Awareness:** Following are the main objectives of public awareness: -
      - To increase the public knowledge about hazards, their nature and the possible consequences of their impact.
      - To increase knowledge about practical preparedness measures.
      - To inform the public about the warning system that will be employed and what they should do when they receive it.
      - To increase knowledge on how to respond to an emergency situation.
      - To mobilize support for DRR plans or response activities.
  - NIDM is playing an important role in building the capacity of government officials and other stakeholders trough training courses, workshops and simulation exercises.
- **Early Warning**
  - Method of giving timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss.
  - **Why do we give Warning?**
    - To inform community about hazards, elements at risk (who and what might be affected) and what is the risks.
    - To advise on means of protection and preparedness; e.g. preventive evacuation, sandbagging to reinforce the flood dike or fire suppression etc.
    - To instruct community who will do what to deal with the impending hazard.
  - **Ways/Form of Warning.** Different ways of giving warning and/or receiving warning include: -
    - Village/community meetings.
    - Notices/posters/billboards.
    - Verbal or pictorial messages.
    - Cartoon series/mascots.
    - Other indigenous forms and channels.
    - Radio/TV/Newspaper.
    - Films.
    - Announcements.
    - Sirens.
  - **Things to Consider when giving Warning/Dissemination**
    - Make warning and communication system inclusive for all.
    - Inform the people of the different phases of warning and their meaning.
    - Inform or update the evacuees/community of the forecast and the warning using symbols or sounds that everybody can understand.
    - "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.
    - 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-induce).

- The flow of information from the "field" until it is processed and packaged for information dissemination to the community should be clear.
- The warning should be: -
  - Based on information collected from reliable sources.
  - Area specific and people specific.
  - Hazard specific.
  - Based on the hazard, vulnerability and capacity assessment.
  - Able to give advice on what to do.
  - Able to inform community of the possible effects/risks that may cause them if they don't follow or do what is advised.
  - 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.
  - Warning is given in simple form and in the local dialect and disseminated through fastest means.
- **Response Phase.** Disaster response can be termed as the provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected. The activities undertaken during the response phase are briefly described in the following paragraphs *however details actions and some planning parameters taken in each activity is covered in detail in module 4.*
  - **Search & Rescue:** Is the search for and provision of aid to people who are in distress or imminent danger. The general field of search and rescue includes many specialty sub-fields, typically determined by the type of terrain the search is conducted over. These include mountain, ground search and rescue, including the use of search and rescue dogs, urban search and rescue in collapse structure, combat search and water rescue.
  - **Relief:** Is the provision of services and public assistance during or immediately after a disaster to save lives, reduce health impact and meet basic subsistence needs of the people affected. During the relief phase, focus is on provision of food, shelter, health assistance and water, sanitation & hygiene.
  - **Recovery:** The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors is termed as recovery. The main purpose is returning individuals and families, critical infrastructure and essential government or commercial services back to a functional, if not pre-disaster state.
  - **Rehabilitation and Reconstruction:** Post-disaster reconstruction is a complex process. It requires multi-sectoral involvement, very significant resources and a wide range of skills. Primarily reconstruction is the responsibility of the Government, however humanitarian agency, donors and countries can be engaged in reconstruction either by providing finical resources or undertaking the projects as per the Government's priorities.

MODULE - 2
# PLANNING

SESSIONS

Session - 1.2: DRM Planning - An Overview
Session - 2.2: Developing a DRM Plan at District Level
Session - 3.2: Contingency Planning, its Importance for Disaster Preparedness and Process
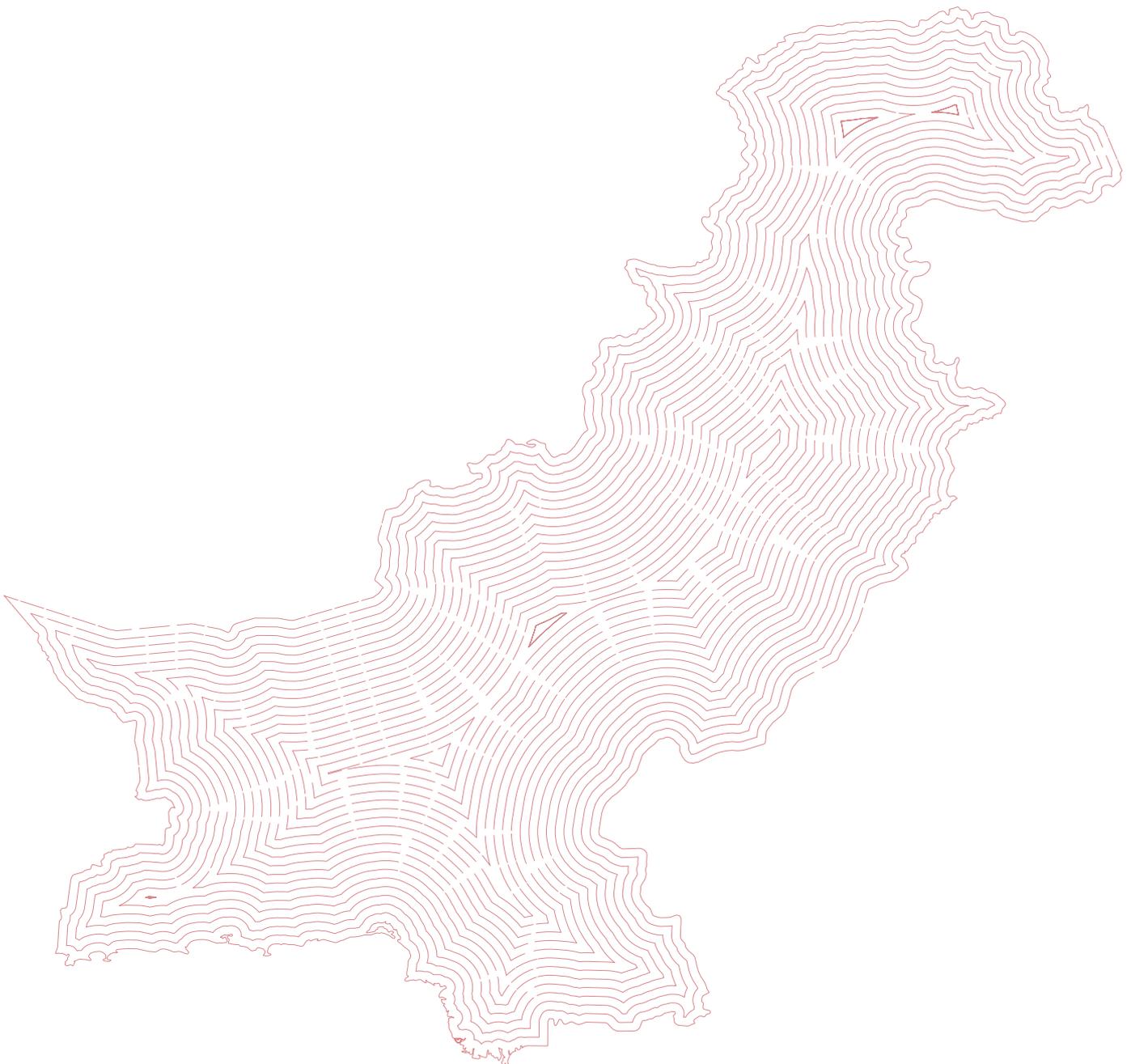
SESSION - 1.2

DRM PLANNING - AN OVERVIEW

Learning Objectives

At the end of the session, participants will be able to: -
- Explain the purpose of plan and process involved in DRM planning.

Key Messages

- The DRM plans define the priorities and provide guidelines for DRM in the district.
- The DRM plan defines the roles of various stakeholders and raises awareness of stakeholders about disaster risks.

Session at a Glance

Timing	Topic	Method
10'	Activity 1: Introduction - DRM plan and its purpose	Brainstorming and discussion
20'	Activity 2: Steps of DRM planning	Whole class discussion Presentation
5'	Synthesis and session evaluation	Question and answer

	35'
	• Easel board and papers. • Different colour marking pens. • Charts. • Power point presentation/slides.
Preparation	• Prepare power point of session objectives, what is DRM plan, its purpose, stakeholders and steps of DRM planning. • Prepare strips of on DRM planning (one step on each meta card).

Process

Activity 1: Introduction - DRM Plan and its Importance   10'

Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the start of the session, ask the participants on their understanding of the word "DRM Plan".
- Ask them to write their answers on meta-cards and post them on the board/wall.
- Ask five participants to explain their answers and note the key points.
- Summarize their answers by collating common answers. Explain what is meant by DRM plan, its purpose and stakeholders to be involved in its process using power point slides.

Activity 2: Steps of DRM Planning   **20'**

- Divide the participants into 10 groups and provide one step to each group. Ask them to stand up from the seats and try to make a queue using the correct order of the strips. Ask the group at the front, what is your step and explain the step with examples. Make correction in the process of this discussion.
- Facilitator will conclude the session by showing steps in correct order by discussing their details.

Synthesis and Session Evaluation   **5'**

- Ask the participants if they have questions or clarifications about the topics discussed.
- Answer their questions and provide examples as necessary.
  - If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
    - What is DRM plan and its purpose?
    - Who should we involve in the development of DRM plan
    - What are the steps of DRM planning?
- Thank the participants and inform them of the next session.

DRM PLANNING - AN OVERVIEW

DRM Plan

- The DRM plans will define priorities and provide guidelines for DRM in the district, provide strategic directions for DRM, define resources available in the district, and describe SOPs for emergency response by the district government.
- The DRM plan can be called by various names such as disaster preparedness and mitigation plan, counter disaster plan, DRR plan or even district development plan.
- Based on the risk assessment (hazards, vulnerabilities and capacities), to reduce the risks.
- Considered important, because this will raise awareness of stakeholders about disaster risks and risk management.

Purpose of planning

- To develop a plan of action for the DDMA and other district stakeholders to set priorities and provide directions for DRM.
- To define the roles of various stakeholders in DRM.
- To raise awareness of stakeholders about disaster risks and the requirements for DRM.

Stakeholders

DDMAs should consult following stakeholders for development of the District DRM Plan: -
- All district line departments.
- Universities and research institutions located in the district.
- NGOs working on DRM in the district.
- Local media (TV, radio, newspapers, magazines).
- Local business companies and groups.
- Political parties and leadership.
- Any other key stakeholders.

Planning Process

Following steps are involved in the DRM planning: -

- Step I : Review of secondary data and literature including risk assessment.
- Step II : Consultation with district stakeholders.
- Step III : Prepare a draft of the District DRM Plan.
- Step IV : Submit the draft to PDMA/NDMA for technical review and advice.
- Step V : Circulate the draft plan to all stakeholders for comments and feedback.
- Step VI : Organize district level workshop to seek comments on the draft plan.
- Step VII : Finalize the district plan based upon stakeholder comments.
- Step VIII : Approval of the Plan.
- Step IX : Publish and disseminate the district plan to all relevant stakeholders.
- Step X : Revision and updating of the plan.

SESSION - 2.2

DEVELOPING A DRM PLAN AT DISTRICT LEVEL

Learning Objectives

At the end of the session, participants will be able to: -
- Write the components of the DRM plan.
- Evaluate the existing district DRM Plans.

Key Messages

- The DRM planning process is based on the hazard, vulnerability and capacity assessment.
- The plan aims at sensitization of district authorities about collective efforts to be taken.
- The aim of the plan is to identify risk reduction measure to be taken and to define the roles and responsibilities of different stakeholders.

Session at a Glance

Timing	Topic	Method
20'	Activity 1: Introduction - Components of DRM plan	Presentation and whole class-discussion
80'	Activity 2: Evaluate existing district DRM plan	Group work
5'	Synthesis and session evaluation	Question and answer

🕐	**105'**	
	• Easel board and papers. • Different colour marking pens. • Charts. • Power point presentation/slides.	
Preparation	• Prepare power point of session objectives and components of DRM plan. • Provide soft copy of DRM Plans to respective group. Link is as follow: - • Mansehra - http://www.ndma.gov.pk/plans/District%20DRM%20Plan%20Mansehra.pdf • Dadu - http://www.ndma.gov.pk/plans/District%20DRM%20Plan%20Dadu.pdf • Muzaffargarh - http://www.ndma.gov.pk/plans/District%20DRM%20Plan%20Muzaffargarh.pdf • Ziarat - http://www.ndma.gov.pk/plans/District%20DRM%20Plan%20Ziarat.pdf • Print handout 5 for each participant.	

Process

Activity 1: Introduction   **20'**
Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the end of the session, participants will be able to: -
- Write the components of the DRM plan.
- Evaluate the existing district DRM Plans.

Ask the participants to raise their hands if she/he is familiar with the DRM plan or she/he has contributed in the development of DRM?
Using the power point slides basic components of DRM plan with examples. Encourage participants to share their learnings about each component. Provide them handout 5.

Activity 2: Evaluate the Existing District DRM Plans   **80'**
Divide the participants into 4 groups. Ask them to evaluate assigned district DRM plan as per components of DRM plan. Each group will provide the answer of the following questions on chart papers
Q1: What do you like about the plan?
Q2. What can be done to improve it further?
Q3. Which process can be adopted to develop effective and inclusive DRM plan at district level?

Groups
Group 1: *Mansehra - http://www.ndma.gov.pk/plans/District%20DRM%20 Plan%2Mansehra.pdf*
Group 2: *Dadu - http://www.ndma.gov.pk/plans/District%20DRM%20Plan%20Dadu.pdf*
Group 3: *Muzaffargarh - http://www.ndma.gov.pk/plans/District%20DRM%20Plan%20 Muzaffargarh.pdf*
Group 4: *Ziarat - http://www.ndma.gov.pk/plans/District%20DRM%20Plan%20Ziarat.pdf*
Synthesis and Session Evaluation   **5'**
- Ask the participants if they have questions or clarifications about the topics discussed.
- Answer their questions and provide examples as necessary.
- If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
  - What are the components of DRM plan at district Level?
- Thank the participants and inform them of the next session.

Handout

- Handout 5: Components of DRM Plan

DEVELOPING A DRM PLAN AT DISTRICT LEVEL

Things to Remember

- Emphasize that the plan should be SMART i.e. specific, measureable, achievable, realistic and time bound. In participatory planning, the "A" in SMART can also mean acceptable to all concerned.
- These plans are livable documents.
- Encourage participants to think various do able risk assessment 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 days.
- This is the moment of truth for all participants to put into action all the knowledge that they acquired in this training.

Outline - District DRM Plan

- **Introduction**
  - Table of content.
  - Forward.
  - Message.
  - Purpose and scope of plan.
  - Vision, mission and objective.
  - List of acronyms.
  - Terms and concept.
  - Acknowledgement.
  - Distribution list.
- **Overview/Profile of the District (maximum two pages)**
  - Geography.
  - History.
  - Demography.
  - Economy.
  - Culture.
  - Administrative system/units.
- **Hazard Profile of District**
  - Past disaster and their impacts (causes, seasonality, severity).
  - Review of existing natural and human induced hazards.
  - Information about high hazard risk areas.
  - Vulnerability analysis.
  - Analysis of capacities and available resources.
  - Analyses of future disaster risks.
- **Capacity and Gap to Meet the Challenges**
  - Existing institutional and agency's capacity.
  - DRR projects/interventions (structural and non-structural).
  - Existing resources.
  - Gaps.
    - Organizational.
    - Resource gap (human, technical).
    - DRR implementation capacity.
- **Plans to Meet the Gap**
  - Within existing resources.
  - From resources of neighboring districts.
  - From resources of the province.

- The plan must cater for: -
  - DRR.
  - Preparedness.
  - Response.
- **Roles and Responsibilities**
  - Should include all integral and in situ resources of: -
    - Line departments.
    - Provincial departments present.
    - Federal resources available.
  - Pre, during and post disaster.
- **SOPs**
  - Activation of DEOC.
  - Early Warning.
  - Reporting.
  - Dissemination of information.
  - Request for assistance.
- **Conclusion**
- **Annexes**
- **Sources and Reference**

SESSION - 3.2

CONTINGENCY PLANNING AND ITS IMPORTANCE FOR DISASTER PREPAREDNESS AND PROCESS

Learning Objectives

At the end of the session, participants will be able to: -
- Explain the process developing contingency plan.
- Categorize actions to be taken at district, provincial and national level for the development of contingency plan
- Develop a simple template for monsoon contingency plan using the given guide lines.

Key Messages

- Contingency planning helps determining the state of preparedness, required resources, information process, methodologies as well as coordination mechanism to respond to disaster before it occurs.
- Contingency planning consists of clearly defined institutional roles, and resources, information processes, communication mechanism, availability of emergency supplies, and operational arrangements for all the stakeholders responsible to take action against disasters.
- Contingency plan always takes into account early warning, evacuation planning, and alternative communication system in order to keep all the required support in a standby mode.
- Contingency plan is regularly updated and revised in anticipation of problems that may arise during the implementation of the plan.
- It is almost impossible to develop the plan for every hazard that exists in a society, as it requires sufficient financial and human resources. Multi-hazards approach is appropriate for developing contingency plan.
- District contingency plans take into account minor details as compared to the provincial and national contingency plans, which provide broad guidelines, SOPs, institutional arrangements and resource mobilization.

Session at a Glance

Timing	Topic	Method
20'	Activity 1: Introduction - What is contingency planning and continuum of contingency planning	Snowball Presentation
30'	Activity 2: Formulation process of contingency planning	Individual worksheet and whole class discussion
30'	Activity 3: Actions at various levels for development of contingency plan	Group work
30'	Activity 4: Suggested contents of monsoon contingency plan	Group work: Analysis and creating
10'	Synthesis and session evaluation	Question and answer

	120'
	• Easel board and papers. • Different colour marking pens. • Charts. • Power point presentation/slides. • Copies of contingency plan already prepared for various disasters.
Preparation	• Prepare power point of session objectives, what is contingency planning, continuum of contingency planning image and formulation process of contingency plan. • Print the worksheet of formulation process of contingency plan for each participant. • Copies of contingency plan prepared for various disasters.

Process

Activity 1: Introduction - What is Contingency planning and Continuum of Contingency planning? 20'

Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the end of the session, participants will be able to: -

• Explain the process developing contingency plan.
• Categorize actions to be taken at district, provincial and national level for the development of contingency plan
• Develop a simple template for monsoon contingency plan using the given guide lines.

Ask the participants on their understanding about the contingency planning on their note pads and share it with person sitting next you and agree on one definition. Once they complete this task, ask them to discuss within group sitting on the same table and agree on one definition as a group

Ask them to share their group definitions once they complete this task.

Conclude the discussion using the power point slides on what is contingency planning and continuum of contingency planning.

Activity 2: Formulation Process of Contingency Plan 30'

Provide the following worksheet to each participant and ask them to assign the number to each step in logical order.

Steps for Contingency Plan	Write the number 1-10 in logical order
Defining strategies and objectives	
Context analysis, scenario building and defining planning assumptions	
Consolidating the process and follow-up actions.	
Lessons learnt, best practices, policies	
Review the process and preparations	
Implementation of plan	
Threat analyses	

Steps for Contingency Plan	Write the number 1-10 in logical order
Co-ordination and preparing for the contingency planning process	
Defining management and coordination arrangements	
Implementation of plan	

Once the participants complete the task, project the formulation process on screen and discuss each step with examples

Activity 3: Actions at Various Levels for Development of Contingency Plan   30'
Participants will be divided into three groups and provided with the strips of action to be taken for contingency planning. Ask them to arrange the action strips under following three levels: -
• District level
• Provincial level
• Federal level
After the participants have the action strips, facilitator will show them the action at various levels on slide and ask them to make correction if require.

Activity 4: Suggested Contents of Monsoon Contingency Plan   30'
• Provide the copy of the following monsoon contingency plan to participants in groups and ask them to prepare once pager template for contingency plan on chart papers
  http://www.ndma.gov.pk/Advisory/National%20Monsoon%20Contingency%20Response%20Directive%202018.pdf
Ask groups to present their work. Ask them share examples for each content.

Synthesis and Session Evaluation   10'
• Ask the participants if they have questions or clarifications about the topics discussed.
• Answer their questions and provide examples as necessary.
  • If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
    - What is contingency plan?
    - What are the steps of formulation process of contingency plan?
    - What are the actions for contingency plan development at: -
      • District level
      • Provincial Level
      • National Level
    - What are the content of monsoon contingency plan prepared at provincial/ district level?
• Thank the participants and inform them of the next session.

CONTINGENCY PLANNING AND ITS IMPORTANCE FOR DISASTER PREPAREDNESS AND PROCESS

General

- Contingency planning is an important tool for disaster mitigation and preparedness. The impact of a disaster cannot be reduced only by taking mitigation measures. Better planning to mount effective and timely response along with mitigation measures, will however, likely to generate more positive results. Elements of contingency planning should complement to mitigating activities and indeed they do if practically and technically viable and doable for the government officials, humanitarian agencies as well as the community itself. At the same time, mitigation of disasters should be integrated into contingency plans.
- Contingency helps determining the state of preparedness, required resources, methodologies as well as coordination mechanism in order to respond to emergencies before they arise. Historically, contingency planning was the only way to respond to a disaster in Pakistan without taking into consideration risk reduction and mitigation elements, therefore this approach continued to be a failure till Earthquake 8th October 2005.
- Presently a disaster management system exists at national, provincial and district level and strenuous efforts are being made to integrate DRM into development planning process and different projects are going-on to introduce mitigation measures at various levels. Contrary to the past, hazard prone communities, NGOs and government officials are well aware of the risk assessment. In this backdrop, anticipating and planning for emergency situations before they happen would be based on solid premise. As opposed to the past it would not be an exercise in futility anymore.

What Contingency Planning Is?

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

  Contingency planning results in organized and coordinated courses of action with clearly- identified institutional roles and resources, information processes, and operational arrangements for specific actors at times of need. Based on scenarios of possible emergency conditions or disaster events, it allows key actors to envision, anticipate and solve problems that can arise during crises. Contingency planning is an important part of overall preparedness. Contingency plans need to be regularly updated and exercised.

Continuum of Contingency Planning

- Contingency planning is very crucial step in overall disaster mitigation process, as its implementation comes to fore when there is a chaotic situation. For this very reason, Planning should take into account all the necessary ingredients of an effective emergency response.
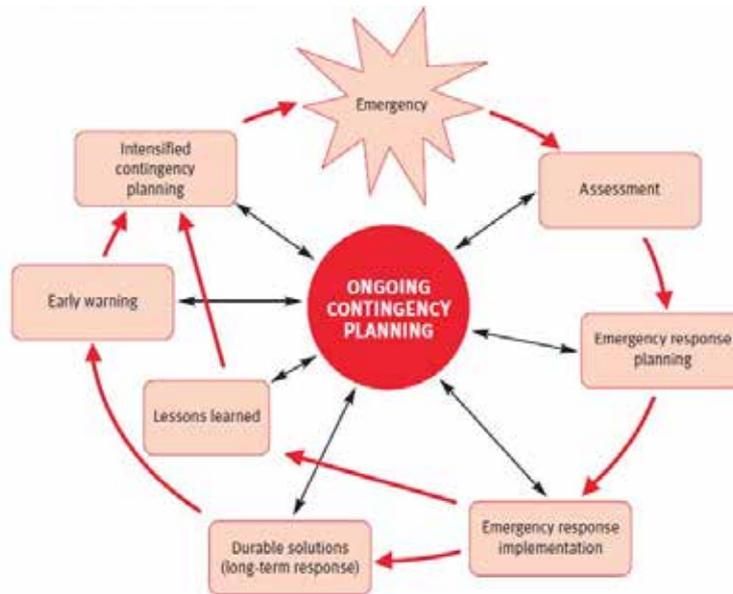
Source: NDMA Guidelines

- Following are some key elements: -
  - Risk Assessment: Determining the most possible crisis scenarios and selecting one or more as a basis for planning built on the risk assessment information that may have already been done either at the national level for some key sectors. NDMA, PDMAs, DDMUs, I/NGOs and UN agencies are the useful sources for this information.
  - Defining and Prioritizing Contingencies: It is almost impossible to develop contingency plan for every hazard that exists in a community, as it requires sufficient financial and human resources. To save time and resources, it may be appropriate to adopt multi-hazard approach to developing a contingency plan.
  - Emergency Scenarios: It is important to envisage a worst-case scenario for designing an appropriate contingency plan. However, these scenarios are not developed in isolation rather based on the risk assessment and likely threat.

Formulation Process
- Following are the steps involved in formulation of contingency plan: -
  - Step 1:   Threat analyses.
  - Step 2:   Co-ordination and preparing for the contingency planning process.
  - Step 3:   Context analysis, scenario building and defining planning assumptions.
  - Step 4:   Defining strategies and objectives.
  - Step 5:   Defining management and coordination arrangements.
  - Step 6:   Developing response plans.
  - Step 7:   Consolidating the process and follow-up actions.
  - Step 8:   Implementation of plan.
  - Step 9:   Review the process and preparations.
  - Step 10:   Lessons learnt, best practices, policies.
- **Actions at Various Level**
- **District Level**
  - Identify hazards, related risks and vulnerabilities.
  - Identification and prioritization of their needs.
  - Map their capacities/resources and identify gaps.

- Make their own plans.
- Enhance their own capacities.
- **Provincial Level**
  - Identifying vulnerable districts based on hazard profile.
  - Facilitation and coordination efforts.
  - Analysis and assimilation of district plans into provincial plans.
  - Mapping of provincial resources and identification of overall needs/gaps.
  - Approach provincial/federal governments & agencies to make up short fall.
  - Establish mechanism/ linkages with all stake holders including federal/ provincial departments, NGOs and civil society to ensure smooth implementation of plan.
- **Federal Level**
  - Facilitate the whole planning process.
  - Provide technical assistance in analysis and refinement of plans.
  - Provide scientific data/information for forecasting/early warning.
  - Map resources (including those of humanitarian community).
  - Prepare national plan by assimilating provincial plans.
  - Define roles and responsibilities of stakeholders.
  - Establish mechanism/linkages for implementation of plan.
  - Mobilize resources to fill the gaps.
  - Share national plan with donors/UN/INGOs, media and other stakeholders.

Suggested Contents of the Plan - Monsoon Contingency Plan

- General overview/hazard profile (may include past disasters faced so far with details e.g. caseload).
- Special DRR/preparedness measures and activities undertaken since last monsoon.
- DRR preparedness measures/projects which could not be undertaken with details.
- Seasonal forecast.
- Scenario development - Likely/worst case.
- Planning assumptions.
- Identify triggers.
- Resource availability at all levels with geographic spread.
- Deployment plan of available resources.
- Meeting resource gap - Finances, production capacities, timelines.
- Logistics - Warehouses, inventories (may not be reflected in plan), transport etc.
- Triggers for response.
- Monitoring of situation/early warning systems - Dissemination of information/ advisories.
- Media/community mobilization and awareness campaign.
- Command, control and communication systems - Management of emergency operation centers.
- Roles and responsibilities - Duty rosters.
- List of contact persons/numbers.
- Search and rescue.
- Evacuation and camp management.
- SOPs for civil military cooperation at district level.
- Distribution mechanism of relief items.
- Strategize multi-sectoral relief response (shelter, food, health, wash).
- Restoration of public services.

MODULE - 3

# DISASTER RISK REDUCTION

SESSIONS

Session - 1.3: DRR - An Overview and Pakistan's Global and National Commitments for DRR

Session - 2.3: Prevention and Mitigation Framework and Measures for Various Hazards

Session - 3.3: Mainstreaming DRR

Session - 4.3: Public Awareness in DRM

Session - 5.3: Multi-hazard Early Warning and Dissemination Mechanisms
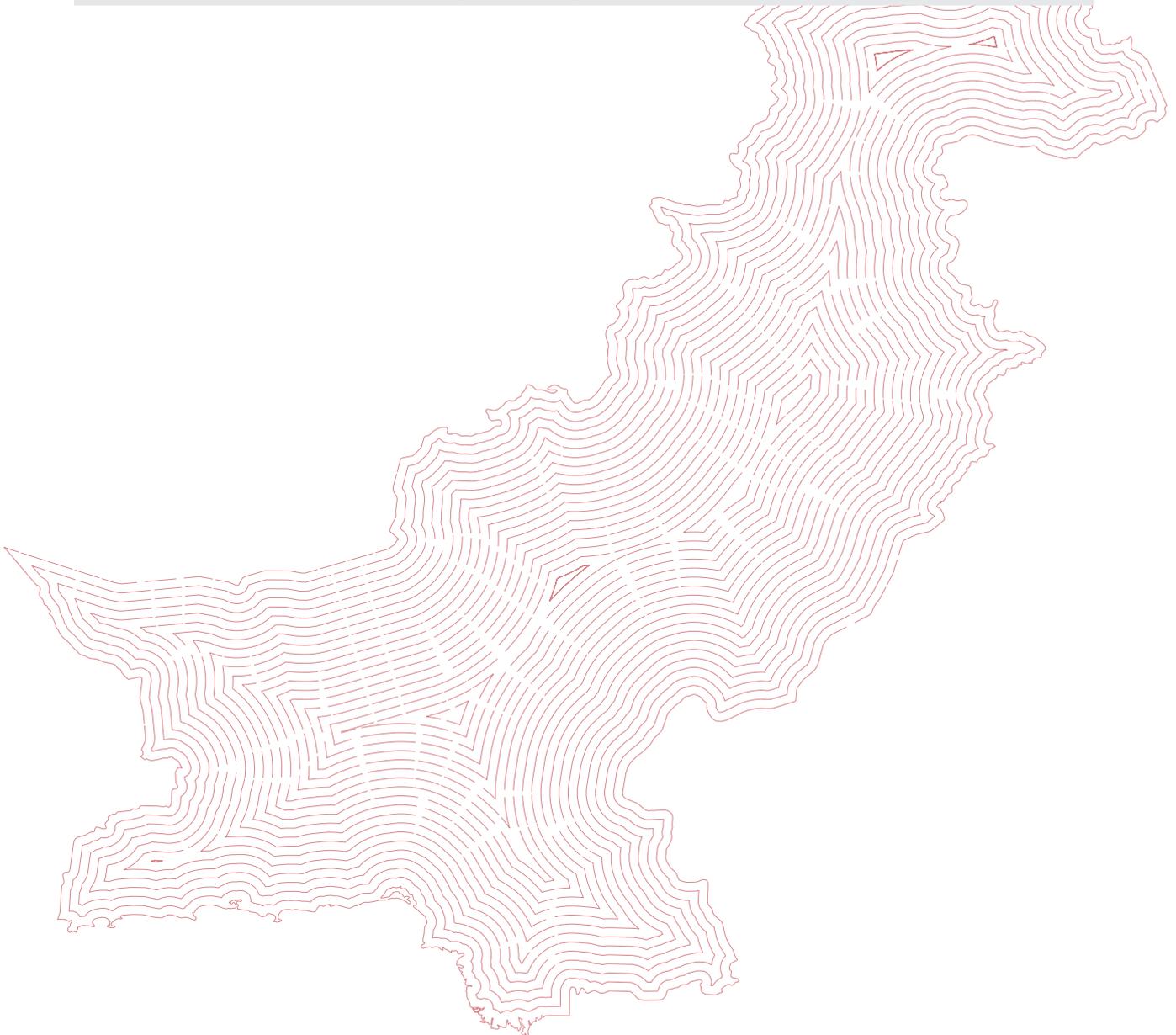
SESSION - 1.3

DRR - AN OVERVIEW AND PAKISTAN'S GLOBAL AND NATIONAL COMMITMENTS FOR DRR

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Learning objectives

At the end of the session, participants will be able to: -
* Explain the DRR and DRR development of concepts and approaches.
* List issues and challenges of DRR in Pakistan.
* Name the commitments of Pakistan related to DRR.

Key Messages

* Need to mainstream DRR was emphasize in HFA adopted by the signatory's states.
* The purpose of mainstreaming DRR into development programmes and projects aims at reducing potential disaster risks and increase community resilience to hazard impact.
* Primary responsibility of mainstreaming DRR for all aspects of disaster management rests with the government.
* The National DRR Policy provides an overall guiding framework for addressing the high levels of disaster risk permeating Pakistani society. The policy serves as a guiding framework both for DRR and relevant development plans and programs to focus attention upon priority issues.
* The NDMP aimed at enhancing the capacity of the country to prepare for and respond to disasters by defining the measures to be considered necessary for disaster management and DRR reduction in line with the provision of the National Disaster Management Act 2010.

Session at a Glance

Timing	Topic	Method
15 '	Activity 1: Introduction - What is DRR?	Brainstorming and presentation
20'	Activity 2: Issues and challenges in DRR	Group work
25'	Activity 3: Global and national commitments of Pakistan for DRR	Simulation
5'	Activity 4: Key obligations of Pakistan related to its commitments for DRR	Presentation
5'	Synthesis and session evaluation	Question and answer

	# 60'

	• Easel board and papers. • Different colour marking pens. • Charts. • Meta cards. • Power point presentation/slides.

Preparation	• Prepare power point of session objectives, what is DRR, development of its concept and approach.
	• Prepare following cards with description of: -
	  • Group 1: Yokohama Strategy and Plan of Action for a Safer World.
	  • Group 2: HFA 2005-2015.
	  • Group 3: Sendai Framework 2015-2030.
	  • Group 4: UNFCCC.
	• Print handout 6 for each participant.

Process

Activity 1: Introduction - What is DRR?   **15'**
Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the end of the session, participants will be able to: -
• Explain the DRR and DRR development of concepts and approaches
• List issues and challenges of DRR in Pakistan
• Name the commitments of Pakistan related to DRR
Ask the participants about the understanding of the DRR. Write DRR at the middle of the board. Write responses of the participants around it.
Conclude the discussion using power point slides related to DRR and DRR development of the concept and approach.

Activity 2: Issues and Challenges in DRR   **20'**
Divide the participants into four groups and ask them to write issues and challenges of DRR in Pakistan on meta-card (one issues or challenge on each card).
Ask them to place/paste these cards on the floor/wall once they done writing them. Categorize these issues and challenges major as per categories given in the explanation below. Ask the examples/explanation about each of the important issues or challenge.

Activity 3: Global and National Commitments of Pakistan for DRR   **30'**
Divide the participants into 4 groups and ask them to go through the assigned commitment and present it in front of the group in an innovative way. It can be freezing frame, role play, presentation, drawing, diagram.
• Group 1: Yokohama Strategy and Plan of Action for a Safer World
• Group 2: HFA 2005-2015
• Group 3: Sendai Framework 2015-2030
• Group 4: UNFCCC
Give explanation or examples whenever it is required during the presentations/ demonstrations of the groups

Synthesis and Session Evaluation 5'
- Ask the participants if they have questions or clarifications about the topics discussed.
- Answer their questions and provide examples as necessary.
- If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
  - What is DRR?
  - What are the issues and challenges of DRR in Pakistan?
  - Name global commitments of Pakistan related to DRR?
- Thank the participants and inform them of the next session.

Handouts

- Handout 6: Pakistan's Global and National Commitments for DRR

DRR - AN OVERVIEW AND PAKISTAN'S GLOBAL AND NATIONAL COMMITMENTS FOR DRR

DRR

- DRR is a systematic approach to identifying, assessing and reducing the risks of disaster. It aims to reduce socio-economic vulnerabilities to disaster as well as dealing with the environmental and other hazards that trigger them. DRR is very wide-ranging: Its scope is much broader and deeper than conventional emergency management. There is potential for DRR initiatives in just about every sector of development and humanitarian work.
- **Development of the Concept and Approach**
  - The evolution of disaster management has seen a progressively wider and deeper understanding of why disasters happen and how to reduce their impact on society. The modern paradigm of disaster management - DRR - represents the latest step along this path. DRR is a relatively new concept in formal terms, but it embraces much earlier thinking and practice. It is being widely embraced by international agencies, governments, disaster planners and civil society organizations. Many experts see climate change as having a direct impact on the prevalence and seriousness of disasters, as well as causing them to be more frequent in the future. There are growing efforts to closely link DRR and climate change adaptation, both in policy and practice.
  - DRR is such an all-embracing concept that it has proved difficult to define or explain in detail, although the broad idea is clear enough. Inevitably, there are different definitions in the technical literature, but it is generally understood to mean the broad development and application of policies, strategies and practices to minimize vulnerabilities and disaster risks throughout society. The term "DRM" is often used in the same context and to mean much the same thing. It is more properly applied to the operational aspects of DRR: the practical implementation of DRR initiatives.
  - There have been growing calls for greater clarity about the components of DRR and about indicators of progress toward resilience. The first step in this process was the adaptation HFA (2005–2015), the first internationally accepted framework for DRR.
  - UN initiatives have helped to refine and promote the concept at international level, stimulated initially by the UN's designation of the 1990s as the IDNDR. In 1999, UN member states approved the International Strategy for DRR, which reflected a shift from the traditional emphasis on disaster response to disaster reduction, by seeking to promote a "culture of prevention".

Issues and challenges in DRR

- **Priorities.** Governments and other organizations have to accord high priority to this important aspect to reduce the risk of disaster. However, it is unrealistic to expect progress in every aspect of DRR because of capacity constrain and insufficient resources.
- **Partnerships and Inter-Organizational Co-ordination.** Government alone, single group or organization can address every aspect of DRR. DRR thinking sees disasters as complex problems demanding a collective response. DRR requires strong vertical and horizontal linkages.
- **Community and Local Organization's Involvement.** Active involvement of community and local organizations is very important in disaster risk reduction and need no emphasis. Community-based DRR vital as it responds to local

problems and needs, capitalizes on local knowledge and expertise, is cost-effective, improves the likelihood of sustainability through genuine 'ownership' of projects, strengthens community technical and organizational capacities, and empowers people by enabling them to tackle these and other challenges.

- **Governance.** The DRR approach requires redefining the role of government in disaster reduction. It is generally agreed that national governments should be main actors in DRR and is responsible to ensure the safety of citizens, co-ordinate the work of others and they create the necessary policy and legislative frameworks.
- **Accountability and Rights.** The principle of accountability lies at the heart of genuine partnership and participation in DRR. It applies to state institutions that are expected to be accountable through the democratic process and to private sector and non-profit organizations that are not subject to democratic control. Accountability is an emerging issue in disaster reduction work. Accountability should be primarily toward those who are vulnerable to hazards and affected by them.
- **Policy and Investment.** Economic costs of disasters are on the rise, but most humanitarian investment is currently spent on responding to disasters, rather than managing their future risks. If this pattern continues, spending on reconstruction and relief will become unsustainable. A more developed evidence base, enhanced political commitment, and dialogue across policy areas will be needed for implementing DRR. Moreover, there is a need for strong gender perspective in DRR policy. A gender-sensitive approach would identify how disasters affect men, women, boys and girls differently and shape policy to people's specific vulnerabilities, concerns and needs.

Global and National Commitments of Pakistan for DRR

- Prior to 1990s DM was mainly response oriented and emphasis used to be on responding to any disaster through event triggered approach with no or least attention to prevention, mitigation and preparedness. However, later due to post disaster impacts, the world understood that a disaster management paradigm has to take into consideration the social and economic aspects of a disaster. It is important to recognize the role of UN and its agencies with regard to DRR. The international community under UN and UNISDR encourages the policy makers to mainstream DRR into development process and seek technical assistance from other member states through different UN organization
- UN initiatives have helped to refine and promote the concept at international level, stimulated initially by the UN's designation of the 1990s as the IDNDR. In 1999, UN member states approved the International Strategy for DRR, which reflected a shift from the traditional emphasis on disaster response to disaster reduction, by seeking to promote a "culture of prevention".
- **Yokohama Strategy and Plan of Action for a Safer World:** In 1994, the first world conference on natural disaster reduction was held in Yokohama, Japan. The conference adopted the Yokohama Strategy for a Safer World: guidelines for natural disaster prevention, preparedness and mitigation. It was a turning point in the history of DRR efforts, as the socio-economic aspects of vulnerable communities were taken into account. The word conference outlined Yokohama principles to prevent, mitigate and reduce disaster risks in developed and less developed countries.
- **HFA 2005-2015:** In 2005, 168 states attending the UN World Conference on Disaster Reduction held in Kobe, Hyogo, Japan adopted HFA 2005-2015. Endorsed by the UN General Assembly, HFA is a non-binding but politically authoritative

obligation to building the resilience of the nations and communities to disasters by 2015. This was the first internationally accepted framework for DRR, which outlines three strategic goals and five broad priority areas for action plus general considerations, key activities under each priority area and role of states and other stakeholders involved in the implementation. Although the primary responsibility to implementing the activities underlined in the HFA lies with governments, collaboration among different UN and NGOs is necessary. For this, UNISDR is playing a crucial role as designated by the HFA.

- **HFA Strategic Goals**
  - Integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.
  - Development and strengthening of institutions, mechanisms, and capacities at all levels, in particular at the community level to build resilience.
  - Incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response, and recovery programs in the reconstruction of affected communities.

- **HFA Priorities for Actions**
  - **Priority 1:** Ensure that DRR is a national and a local priority with a strong institutional basis for implementation.
  - **Priority 2:** Identify, assess and monitor disaster risks and enhance early warning.
  - **Priority 3:** Use knowledge, innovation and education to build a culture of safety and resilience at all levels.
  - **Priority 4:** Reduce the underlying risk factors.
  - **Priority 5:** Strengthen disaster preparedness for effective response at all levels.

- **Sendai Framework 2015-2030**
  - The Sendai Framework for DRR 2015-2030 was adopted at the third UN World Conference in Sendai, Japan, in March, 2015. The Sendai Framework is the successor instrument to the HFA 2005-2015: Building the Resilience of Nations and Communities to Disasters. The HFA was conceived to give further impetus to the global work under international framework for action for the IDNDR of 1989, and the Yokohama Strategy for a Safer World: Guidelines for natural disaster prevention, preparedness and mitigation and its plan of action, adopted in 1994 and the ISDR of 1999. The Sendai Framework is built on elements which ensure continuity with the work done by states and other stakeholders under the HFA and introduces a number of innovations as called for during the consultations and negotiations.
  - The Sendai Framework also articulates the need for improved understanding of disaster, vulnerability and hazard characteristics; the strengthening of disaster risk governance, accountability for DRM; preparedness to "Build Back Better"; recognition of stakeholders and their roles; mobilization of risk-sensitive investment to avoid the creation of new risk; resilience of health infrastructure, cultural heritage and work-places; strengthening of international cooperation and global partnership, and risk-informed donor policies and programs, including financial support and loans from international financial institutions. There is also clear recognition of the global platform for DRR and the regional platforms for DRR as mechanisms for coherence across agendas, monitoring and periodic reviews in support of UN governance bodies.

- UNISDR has been tasked to support the implementation, follow-up and review of the Sendai Framework.
- **Expected Goals.** To support the assessment of global progress in achieving the goal of the present framework, seven global targets have been agreed. These targets will be measured at the global level and will be complemented by work to develop appropriate indicators. National targets and indicators will contribute to the achievement of outcome and goal of present framework. The seven global targets are: -
  - Substantially reduce global disaster mortality by 2030, aiming to lower the average per 100,000 global mortality rate in the decade 2020-2030 compared to the period 2005-2015.
  - Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 in the decade 2020-2030 compared to the period 2005-2015.
  - Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030.
  - Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030.
  - Substantially increase the number of countries with national and local DRR strategies by 2020.
  - Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of the present Framework by 2030.
  - Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030.
- **Priorities for Action.** Taking into account the experience gained through the implementation of the HFA, and in pursuance of the expected goal, there is a need for focused action within and across sectors by states at local, national, regional and global levels in the following four priority areas: -
  - **Priority 1.** Understanding disaster risk.
  - **Priority 2.** Strengthening disaster risk governance to manage disaster risk.
  - **Priority 3.** Investing in DRR for resilience.
  - **Priority 4.** Enhancing disaster preparedness for effective response and to *"Build Back Better"* in recovery, rehabilitation and reconstruction.
- **UNFCCC**
  - Is the first intergovernmental treaty on climate change developed to address the problem of climate change. The convention, which sets out an agreed framework for dealing with the issue, was opened for signature at the June 1992 UN conference on environment and development also known as the Rio Earth Summit. The UNFCCC entered into force on 21 March 1994, and by December 2007, it had been ratified by 192 countries.
  - Parties to the convention continue to meet regularly to take stock of progress in implementing their obligations under the treaty, and to consider further actions to address the climate change threat. They have also negotiated a protocol to the convention.
  - Yearly conference is held in the framework of the UNFCCC. They serve as the formal meeting of the UNFCCC Parties (conferences of the parties - COP) to assess progress in dealing with climate change. The purpose is to review the activities with regards to climate change.

SESSION - 2.3

PREVENTION AND MITIGATION FRAMEWORK AND MEASURES FOR VARIOUS HAZARD

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Learning objectives

At the end of the session, participants will be able to: -
- Compile mitigation measures to forestall the re-occurrence of various types of disasters.
- Outline implications in the implementation of guiding principles of mitigation.

Key Messages

- Emergency management is comprised of four interdependent risk-based functions: prevention/mitigation, preparedness, response and recovery. Mitigation provides a critical foundation for risk reduction.
- Disaster mitigation measures are those that eliminate or reduce the impacts and risks of hazards through proactive measures taken before an emergency or disaster occurs.
- Mitigation, an integral component of preparedness, is one of the most important ways of preparing for disasters.

Session at a Glance

Timing	Topic	Method
10'	Introduction	Presentation
30'	Activity 1: Mitigation and its types	Group work
10'	Formulation and implementation of mitigation program	Interactive lecture/ presentation
20'	Activity 2: Guiding principles of mitigation	Discussion
40'	Activity 3: Mitigation measures for various hazards	Group work and discussion
10'	Synthesis and session evaluation	Question and answer

🕐	# 120'
🛏️	• Easel board and papers. • Different colour marking pens. • Charts. • Meta cards. • Power point presentation/slides.

Preparation	• Prepare power point of session objectives, what is mitigation, types of mitigation, formulation and implementation of mitigation program.
	• Prepare cards of principle with its definition on them for each group.
	   • Group 1: Initiation
	   • Group 2: Management
	   • Group 3: Prioritization
	   • Group 4: Monitoring and evaluation
	   • Group 5: Institutionalization
	• Prepare cards with following content only: -
	
	   • Group1: Floods (all types) • Group 2: Earthquake • Group 3: Drought
	   • Group 4: Cyclone & tsunami • Group 5: Fire • Group 6: Landslides
	   • Group 7: Cold wave • Group 8: Heat wave
	
	Print handouts 7 and 8 for each participant.

Process

Introduction   **10'**
Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the end of the session, participants will be able to: -
• Compile mitigation measures to forestall the re-occurrence of various types of disasters.
• Outline implications in the implementation of guiding principles of mitigation.

Activity 1: Mitigation and its Types   **30'**
Divide participants into 5 groups. After 2010 Flood, what mitigation measures could have been implemented to forestall the re-occurrence of such disaster? Ask them to classify these mitigation measures into structural and nonstructural interventions.

Formulation and Implementation of Mitigation Measures   **10'**
Present the requirements and circumstances for formulating and implementing mitigation program (content is available in the content section with the same heading) using power point slides in an interactive way by giving relevant examples. For material please refer to hand out.

Activity 2: Guiding Principles of Mitigation 20'

Divide participants into 5 groups and assign principle to each group. Ask them to discuss and present one example (negative or positive) related to principle. Make cards by printing principle with its definition on them for each group

- Group 1: Initiation
- Group 2: Management
- Group 3: Prioritization
- Group 4: Monitoring and evaluation
- Group 5: Institutionalization

Activity 3: Mitigation Measures for Various Hazards 40'

Divide participants into following groups: -

• Group1: Floods (all types)	• Group 2: Earthquake	• Group 3: Drought
• Group 4: Cyclone & tsunami	• Group 5: Fire	• Group 6: Landslides
• Group 7: Cold wave	• Group 8: Heat wave	

Ask them to write and present mitigation measures of assigned hazard.

Synthesis and Session Evaluation 10'

- Ask the participants if they have questions or clarifications about the topics discussed.
- Answer their questions and provide examples as necessary.
- If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
  - What is mitigation?
  - What are the types of mitigation?
  - Name guiding principles of mitigation?
- Thank the participants and inform them of the next session.

Handouts

- Handout 7: Mitigation and its Types
- Handout 8: Mitigation Measures for various Hazards

PREVENTION AND MITIGATION FRAMEWORK AND MEASURES FOR VARIOUS HAZARD

What is Mitigation?

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

Types of Mitigations

- **Structural Mitigation**
  - Structural mitigation is deified as a risk reduction measures undertaken through the construction or altering of the physical environment through the application of engineered solutions. Structural mitigation measures may apply to both engineered and non-engineered structures.
    - **Engineered Structures.** Engineered structures involve architects and engineers during the planning, designing and construction phases. They may include buildings ranging in scale from simple dwellings to multi-story office blocks, as well as infrastructure such as electricity pylons to dams, embankments, ports, roads, railways and bridges. While professionals are trained to plan, design and supervise the construction of buildings and infrastructure to achieve necessary structural safety standards, they may need additional training to incorporate mitigation practices into their design of structures resistant to seismic shock, storm winds or floods. Application of sound technical principles is achieved through: -
      - Site planning.
      - Assessment of forces created by the natural phenomena (earthquake, cyclone or flood).
      - The planning and analysis of structural measures to resist such forces.
      - The design and proper detailing of structural components.
      - Construction with suitable material.
      - Good workmanship under adequate supervision.

      Most countries have building codes for engineered construction. These codes provide general guidelines for the assessment of forces and further analysis, appropriate design methodologies and construction techniques. If a country does not have a building code which specifies design and construction requirements for earthquake and wind forces, such a code should be formulated as soon as possible, technical personnel trained in its use and enforcement ensured. The quality of construction is as important as good analysis and design. Good workmanship must be encouraged by appropriate training and supervision to achieve better performance.
    - **Non-engineered Structures.** Non-engineered structures are those constructed by their owners themselves or by local carpenters and masons who generally lack formal training. Such structures mainly comprise simple dwellings and public buildings, built with local materials in the traditional manner. In some disasters, high casualties and economic losses can be attributed to the failure of non-engineered structures. The improved designs vary according to the many different traditional ways of building that suit various cultures, climates, available skills and building materials.

Another important aspect of increasing the safety of non-engineered structures is to try to ensure that they are not built on hazardous sites such as steep slopes subject to landslides, floodplains subject to flash floods or river bank erosion, or coastal areas exposed to storm surges. However, people often do not want to leave their traditional homes and the area in which they have been living for generations, even though the location may be hazard prone. Economic pressures may also induce people to settle in hazardous areas. Wherever practical, incentives should be offered to attract people out of hazardous locations; alternatively, consideration may be given to substituting appropriately engineered structures where this might be practical and economic, or mitigation measures introduced in non-engineered constructions so as to enhance their safety.

- **Non-Structural Mitigation**
  - Non-structural mitigation is deified as a measure that reduces risk through modification in human behavior or natural processes without requiring the use of engineering structure. Following activities can be performed under non-structure mitigation: -
    - **Legal Framework.** Generally speaking, existing disaster-related legislation tends not to place enough emphasis on mitigation. In establishing or reviewing such legislation, therefore, it may be advantageous to ensure that mitigation requirements are adequately covered. Land-use planning and the application of building codes provide some legal basis for successful mitigation. However, both these aspects tend to fall short of full effectiveness unless they are rigidly enforced.
    - **Incentives.** Incentives can often provide better inducements for mitigation than legal impositions. Government grants or subsidies may help to persuade commercial and other institutions to include mitigation measures in their building or reconstruction activities. The provision of government technical assistance can help towards the same end. Insurance can also provide useful incentives: for instance, insurance companies may be persuaded to offer reduced premiums for buildings, once hazard-resistant measures have been incorporated.
    - **Training and Education.** If mitigation is to be successful, its requirements must be widely known and understood. Therefore, there is a need to train and educate all those involved, including DRM officials, construction specialists and the general public. In this regard, public awareness programs can provide an important foundation by informing people generally of the need for and benefits of mitigation programs. In a more specific sense, programs of training and education are necessary to ensure that mitigation programs would be supported and properly implemented. Four target groups are especially important: -
      - Public officials who play a vital role in DRM. Appropriate training modules should be incorporated in their career-path training programs and opportunities provided to them to attend specialist courses.
      - Technical students whose professional education should include disaster mitigation courses.
      - Small builders and craftsmen who may be given on-the-job training in simple mitigation practices.
      - School children who should be introduced to simple mitigation measures in the context of environmental studies, natural science or geography classes.

- **Public Awareness.** In addition to general awareness, certain particular areas of public involvement are necessary for effective implementation of mitigation programs. These include: -
  - A good public knowledge and understanding of local hazards and vulnerabilities.
  - Public awareness of the kind of mitigation measures which can be applied.
  - Public participation in community preparedness programs.
  Governments can substantially assist public awareness of safe mitigation practice by ensuring that their own public buildings (such as post offices, tools, hospitals, government offices) and services are built to high safety standards. This will also help to ensure that designers, builders and engineers gain experience in safe construction and, at the same time, contribute to a safer environment.
- **Institution Building.** The strengthening of a country's or community's social structure can enhance disaster mitigation capacity. Such strengthening is, however, difficult to achieve. Three possible ways are to extend normal development as follows: -
  - First, through institution building; organizations that serve as coping mechanisms can be identified and strengthened. A deliberate effort can be made to increase their institutional capacities and skills thus enhancing their ability to deal with a crisis.
  - Second, through increasing the number of coping mechanisms within a country or community.
  - Third, through encouraging actions that promote co-operation among different groups within society. Such cooperation can considerably reduce the social impact of disasters.

  In their development activities, both government and non-government agencies should be careful to avoid actions that will further increase or institutionalize a society's vulnerability. It is especially important to identify institutional dependency relationships, particularly those that may be increased in a disaster situation, and work to eliminate them. By increasing self-sufficiency, agencies may improve the ability of families and communities to cope with disasters. This can be a mitigating factor and could help speed recovery. Strong institutions can play a vital role in various aspects of mitigation, such as promoting public awareness programs, training at community levels and monitoring hazards and vulnerabilities.

- **Early Warning Systems.** Various modern developments have significantly improved the ability of disaster management authorities to provide effective warning of impending disasters. Better early warning systems have, for instance, been instrumental in evacuating vulnerable groups, moving livestock to safety and mobilizing emergency services and resources. In the particular context of mitigation, three matters are underlined here.
  - The steps between the issuing of warning and the taking of action by relevant authorities or vulnerable people are critical.
  - Evacuation should only be ordered when there is virtual certainty of hazard impact; a false evacuation order for a hazard that does not materialize can destroy public confidence in the warning system and neutralize several years of preparedness planning.

- To the extent possible, the dissemination of warnings should use duplicate systems to ensure effectiveness. For example, radio messages backed up by siren warnings; warning flags backed up by house-to-house visits by local wardens.

Formulation and Implementation of Mitigation Programs

- The requirements and circumstances for formulating and implementing mitigation programs are likely to differ in various countries. However, the information given should be of general assistance.
  - If possible, a simple broad strategy should be devised to cover foreseeable mitigation requirements. This strategy should contain component programs, with desirable priorities.
  - The strategy should be interlocked, as far as possible, with national development planning, environmental considerations and other DRM activities.
  - A system for monitoring and reviewing the strategy should be introduced and applied.
  - Responsibility for overseeing and coordinating mitigation activities should be clearly defined. Normally, this responsibility would be vested in the minister/ official responsible for disaster-related affairs or the NDMC, with clear down ward delegation. Responsibility for individual mitigation programs should also be clearly defined.
  - There should be a requirement for an annual progress report covering mitigation activities; this should normally be embodied in an annual DRM report to the Government.
  - Mitigation activity should be regarded as a suitable and productive area for international assistance.
  - Since many different agencies are likely to be involved in mitigation programs, the national authority should be authorized to fulfill day-to-day liaison requirements, in order to ensure coordination of effort.
  - For individual mitigation programs it is likely that a particular government ministry/department can be given the lead role. For instance, a mitigation program to protect and conserve a vital road system should be led by the ministry responsible for roads.
  - Mitigation programs should not be regarded as, or be allowed to become, a separate activity. They should be part of an integrated national program.

Guiding Principles of Mitigation

- The following principles are widely recognized as providing a valuable guide to disaster mitigation: -
  - **Initiation.** Disasters offer unique opportunities to introduce mitigation measures. Mitigation can be introduced within the three diverse contexts of reconstruction, new investment and the existing environment. Each presents different opportunities to introduce safety measures.
  - **Management.** Mitigation measures are complex and interdependent, and they involve widespread responsibility. Therefore, effective leadership and co-ordination are essential to provide a focal point. Mitigation will be most effective if safety measures are spread through a wide diversity of integrated activities. "Active" mitigation measures that rely on incentives are more effective than "passive" measures based on restrictive laws and controls. Mitigation must not be isolated from related elements of disaster planning such as preparedness, relief and reconstruction.

- **Prioritization.** Where resources are limited, priority should be given to the protection of key social groups, critical services and vital economic sectors.
- **Monitoring and Evaluation.** Mitigation measures need to be continually monitored and evaluated so as to respond to changing patterns of hazards, vulnerability and resources.
- **Institutionalization.** Mitigation measures should be sustainable so as to resist public apathy during the long periods between major disasters. Political commitment is vital to the initiation and maintenance of mitigation.

Mitigation Measures for Various Hazards

- Mitigation measures for risks associated with geo-hazards can broadly be classified in six categories; land use plans, enforcement of building codes and good construction practice, early warning systems, construction of physical protection barriers, network of escape routes and "safe" places and community preparedness and awareness building. Mitigation measures at various level for different hazards could be as under: -
- **Floods (all categories)**
  - Identification of flood prone areas (flood risk and vulnerability assessment).
  - Land use zoning, mapping, regulations and implementation for flood safety.
  - Construction of water storage facilities.
  - Construction of flood protection and diversion/dispersion infrastructure.
  - Channelization of flood waters.
  - Construction of delay action/check dams.
  - Construction of flood prone buildings and infrastructure.
  - Effective flood forecasting and early warning dissemination system.
  - Solid waste management to reduce choking of the drains and river.
  - Bio sea wall to reduce the impact of coastal flooding.
  - Afforestation to reduce/eliminate chances of erosion.
  - Identification & development of safe evacuation sites and routes.
  - Capacity building, awareness.
- **Earthquake**
  - Micro-zoning and vulnerability mapping.
  - Construction of earthquake resistant buildings and infrastructures.
  - Enforcement of building codes including ruler area and decisions about construction of structures with due approval from specified authorities.
  - Seismic retrofitting of weak structures in highly seismic zones to make them more resistant to seismic activity, ground motion, or soil failure due to earthquakes.
  - Monitoring faults activity and forecasting
  - Formulation of guidelines both for earthquake-resistant constructions as well as for retrofitting with specifications about site selection, foundation, construction, materials and workmanship making involvement of specialist architects, trained engineer and masons mandatory.
  - Promoting awareness and preparedness programs for general public and involving them in the process of disaster mitigation through education and awareness.
  - Capacity building in mitigation measures at all level.
- **Drought**
  - Vulnerability and risk assessment.
  - Set up a mission/task force on drought mitigation.
  - Forecasting and early warning.
  - Identify program and measures for drought mitigation.

- Long term irrigation management.
- Water harvesting and conservation by: -
  - Artificial recharge of ground water.
  - Traditional water harvesting and conservation.
- Construction of shelters for cattle and development of infrastructure for storage and transportation of dry and green fodder etc.
- Encourage community-level plans for drought mitigation.
- Water saving technologies (drip and sprinkler irrigation system).
- Promote education and awareness of mitigation policies & measures and encourage community participation in drought mitigation.
- **Cyclone and Tsunami**
  - Conduct risk mapping and vulnerability assessment.
  - Erect tsunami breakwaters to provide cushion.
  - Construction of tsunami and cyclone shelters (safe places to flee).
  - Building of sea wall and embankments.
  - Carryout natural bio-shields and shelterbelt plantations.
  - Maintaining of natural sand dunes.
  - Building disaster resistant housing & infrastructure.
  - Effective early warning system and dissemination system.
  - Elaborate evacuation plans (with emphasis on self-reliance for sustenance with the coastal community).
  - Capacity development and training.
- **Landslides**
  - Construct breakwaters to provide cushion against landslides.
  - Conduct hazard mapping and vulnerability assessment.
  - Carryout land use zonation.
  - Ensure slope drainage.
  - Built retaining structures.
  - Ensure plantation/vegetation.
  - Effective monitoring and forecasting mechanism.
  - Elaborate warning and evacuation measures.
  - Public awareness and capacity building.
- **Cold Wave**
  - Keep ready the emergency kit along with snow shovels, wood for your fireplace and adequate clothing.
  - Listen to local radio station or television for weather updates.
  - Stay indoors; minimize travel.
  - Keep dry. Change wet clothing frequently to prevent loss of body heat.
  - Watch for signs of frostbite, like numbness and white or pale appearance in fingers, toes, ear lobes and the tip of the nose.
  - Maintain proper ventilation when using kerosene heaters or coal oven to avoid toxic fumes.
  - Go to a designated public shelter, if your home loses power or heat during extreme cold.
  - Protect yourself from frostbite and hypothermia by wearing warm, loose-fitting, lightweight clothing in layers.
- **Heat Wave**
  - **Before**
    - Install temporary window reflectors such as aluminum foil-covered cardboard, to reflect heat back outside.
    - Cover windows that receive morning or afternoon sun with drapes, shades.
    - Listen to local weather forecasts and stay aware of upcoming temperature changes.

- Know those in your neighborhood who are elderly, young, sick or overweight. They are more likely to become victims of excessive heat and may need help.
- Get trained in first aid to learn how to treat heat-related emergences.
  - **During**
    - Never leave children or pets alone in closed vehicles. Stay indoors as much as possible and limit exposure to the sun.
    - Stay on the lowest floor out of the sunshine.
    - Eat well-balanced, light and regular meals.
    - Drink plenty of water; even if you do not feel thirsty.
    - Persons with epilepsy or heart, kidney, or liver disease; are on fluid-restricted diets; or have a problem with fluid retention should consult a doctor before increasing liquid intake.
    - Protect face and head by wearing a hat or cloth.
- **Forest Fire**
  - **Do's**
    - Try to maintain forest blocks to prevent dry litter from forest during summer season.
    - Try to put the fire out with available resources and if not possible call the fire brigade.
    - Move farm animals & movable goods to safer places identified by district administration.
    - During fire listen regularly to radio for advance information & obey the instructions cum advice.
    - Teach the causes and harm of fire to your family and others. Make people aware about forest fire safety.
    - Do not be scared when a sudden fire occurred in the forest, be calm & encourage others & community to overcome the problem patiently.
    - Do apply seasonal mitigation measures i.e. fuel reduction etc.
  - **Don'ts**
    - Don't throw cigarettes butts in the forest.
    - Don't leave the burning wood sticks in or near the forest.
    - Don't enter the forest during the fire.
    - Discourage community not to use slash & burn method.
- **Urban Fire**
  - **Do's**
    - In case of fire, call fire services in your area/town.
    - Learn at least two escape routes and ensure they are free from obstacles.
    - Remain calm, unplug all electrical appliances.
    - Keep buckets of water and blanket ready.
    - If clothes catch fire, Stop, Drop and Roll.
    - In case of uncontrolled fire, wrap the victims in a blanket, till the fire ceases/ stops.
  - **Don'ts**
    - Avoid fireworks etc. in crowded, congested places, narrow lanes or inside the house.
    - Use of inappropriate clothes.
    - Do not apply adhesive dressing on the burnt area.
    - Do not throw lighted cigarette butts.

- **Epidemics**
  - **Before**
    - Store at least two week supply of water and food.
    - Periodically check your regular prescription drugs to ensure a continuous supply in your home.
    - Have any non-prescription drugs and other health supplies in hand, including pain relievers, stomach remedies, cough and cold medicines, fluids with electrolytes and vitamins.
    - Volunteer with local groups to prepare and assist with emergency response.
    - Keep your surroundings cleans and do not let the water be stagnant.
  - **After**
    - Avoid close contact with people who are sick. When sick, keep distance from others to protect them from getting sick.
    - If possible, stay at home; stay away from work, school etc. when you are sick. This will help prevent others from catching your illness.
    - Cover will help protect you from harmful germs.
    - Avoid touching your eyes, nose or mouth. Germs are often spread when a person touches something that is contaminated with germs and then touches his or her eyes, nose or mouth.
- **Thunder & Lightning**
  - **Before & During**
    - Keep ready an emergency kit with important medication. Postpone outdoor activities.
    - Remember, rubber-soled shoes and rubber tires provide no protection from lighting.
    - Unplug any electronic equipment well before the storm arrives. Use your battery-operated radio for updates.
    - Avoid contact with electrical equipment or cords. Unplug appliances and other electrical items such as computers and turn off air conditioners.
    - Do not lie on concrete/marble floors and do not lean against concrete walls.
  - **After**
    - Continue to listen to local radio and television stations for updated information or instructions, as access to roads or some parts of the locality may be blocked.
    - Help people who may require special assistance, such as infants, children and the elderly.
    - Stay away from broken power lines and report them immediately.

SESSION - 3.3

MAINSTREAMING DISASTER RISK REDUCTION

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Learning objectives

At the end of the session, participants will be able to: -
- Explain the purpose of DRR mainstreaming and responsibilities to undertake mainstreaming.
- List barriers to mainstreaming and steps involved.
- Compile the actions can be taken to mainstream DRR in various sectors.

Key Messages
- Need to mainstream DRR was emphasize in HFA adopted by the signatory's states.
- The purpose of mainstreaming DRR into development programmes and projects aims at reducing potential disaster risks and increase community resilience to hazard impact.
- The primary responsibility of mainstreaming DRR for all aspects of DM rests with the government.
- Disasters can setback development; however, disaster does provide opportunities to build back better.

Session at a Glance

Timing	Topic	Method
5'	Introduction	Presentation
10'	Activity 1: DRR mainstreaming and its purpose	Brainstorming and discussion
25'	Activity 2: Responsibility of DRR mainstreaming and its barriers	Group work
15'	Steps to successful mainstreaming	Interactive lecture
45'	Activity 3: Mainstreaming DRR in various sectors	Group work and discussion
15'	Mainstreaming DRR in development process	Interactive lecture
5'	Synthesis and session evaluation	Question and answer

🕐	# 120'

🧹	• Easel board and papers. • Different colour marking pens. • Charts. • Meta cards. • Power point presentation/slides.
Preparation	• Prepare power point of session objectives, mainstreaming DRR and Its purpose, steps to successful mainstreaming and main-streaming of DRR in development process. • Print handouts 9 and 10 for each participant.

Process

Introduction   **5'**
Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the end of the session, participants will be able to: -
• Explain the purpose of DRR mainstreaming and responsibilities to undertake mainstreaming.
• Enlist barriers to mainstreaming and steps involved.
• Compile the actions can be taken to mainstream DRR in various sectors.

Activity 1: Mainstreaming DRR and its Responsibility   **10'**
Ask the participants to share their understanding about the DRR mainstreaming. Write their responses on the board. Conclude the discussion using the power point slides.

Activity 2: Responsibility of DRR Mainstreaming and its Barriers   **25'**
Divide the participants into three groups. Ask them to write the responses of following questions on the charts: -
Q1. Identify the main stakeholders that would be involved in mainstreaming DRR at all levels.
Q2. What will be the role of each major stakeholder?
Q3. What are the barriers to DRR mainstreaming?
Ask groups to select one presenter to share the working of the group with others. Provide your input wherever it is needed.

Steps to Successful Mainstreaming   **15'**
Present the steps of successful mainstreaming using power point slides by giving examples (image of steps of mainstreaming available in content/ handout section)

Activity 3: Mainstreaming DRR in Various Sectors   **45'**

Divide participants into 6 groups as per their sector of expertise/interest.
• Group 1: Education   • Group 2: Health   • Group 3: Housing
• Group 4: Agriculture • Group 5: Irrigation • Group 6: Infrastructure

Groups will be asked to discuss and share their thoughts on "actions to be taken to mainstream DRR in the assigned sector". Ask them to write their response on charts and present them. Use the content of handout 9 to cover the missing/leftover points).

Mainstreaming DRR in Development Process   **15'**

Present mainstreaming DRR in development process through power point slides (use the content of handout 10 to prepare presentation).

Synthesis and Session Evaluation   **5'**

- Ask the participants if they have questions or clarifications about the topics discussed.
- Answer their questions and provide examples as necessary.
- If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
    - What is DRR mainstreaming?
    - What are the barriers to mainstreaming?
    - Name steps of mainstreaming?
- Thank the participants and inform them of the next session.

Handouts

- Handout 9: Mainstreaming DRR in various Sectors
- Handout 10: Mainstreaming DRR in Development Process

MAINSTREAMING DISASTER RISK REDUCTION

Mainstreaming DRR
- Since late 1990s, there has been increasing recognition of the need to 'mainstream' DRR. The rising interest in mainstreaming disaster risks has also been fueled by a gradual up ward rise in reported disaster losses. Between the 1950s and 1990s, the reported global cost of disasters increased 15-fold in real terms while numbers affected rose from 1.6 billion over the period 1984-1993 to almost 2.6 billion during the subsequent decade.
- The need to mainstream DRR was formalized in January 2005 when the HFA was adopted by the signatory's states. Mainstreaming is an ongoing process not a one-off technical activity. Successful mainstreaming requires more than just developing appropriate approaches and tools. A change in organizational culture is required to ensure integration at all levels of the organization and across all programmes. Political commitment and motivation, including financial support, can contribute to strengthening the organizational culture.

Mainstreaming Purposes
- To make certain that all the development programmes and projects are designed with evident consideration for potential disaster risks and to resist hazard impact.
- To make certain that all the development programmes and projects do not inadvertently increase vulnerability to disaster in all sectors: social, physical, economic and environment.
- To make certain that all the disaster relief and rehabilitation programmes and projects are designed to contribute to developmental aims and to reduce future disaster risk

Responsibility - Mainstreaming DRR
- The primary responsibility for all aspects of disaster management rests with the government. This includes planning and implementing long-term risk reduction and preparedness measures.
- Risk reduction initiatives must be multi-disciplinary partnerships involving a range of stakeholders. Such partnerships should be vertical (between national and local actors) and horizontal (between government, the private sector and civil society).

Barriers to Mainstreaming DRR
- Following are some of the main barriers to mainstreaming: -
  - Lack of awareness.
  - Crosscutting issues.
  - Lack of coordination.
  - Lack of resources.
  - Political commitment.

Steps to Successful mainstreaming
- The development of practical guidelines on the integration of disaster risk concerns within development sector programming, project design and evaluation represents only one strand in a series of steps required to ensure successful mainstreaming in hazard-prone areas. These are summarized as under: -

Source: UNISDR's guidance note on "Tools for Mainstreaming DRR"

- **Step 1 - Awareness Rising.** For appreciation and understanding of the relevance of DRR to sustainable development, awareness is critical, on the part of both governments and development organizations. Most fundamentally of all, governments need to accept greater accountability for hazard-related human, physical and economic losses. Governments need to assume greater responsibility for their countries' and peoples' vulnerability and to actively seek to reduce risk.
- **Step 2 - Enabling Environment.** Appropriate organization policies, strategies and institutional capacities need to be built rather than relying on humanitarian partners. It is essential that governments themselves prioritize risk reduction as a critical development challenge in high-risk areas.
- **Step 3 - Development of Tools.** Programming, appraisal and evaluation tools are required to investigate sectors and individual projects at risk from natural hazards, provide detailed information on the nature and level of risk and ensure that appropriate risk reduction measures are taken.
- **Step 4 - Training and Technical Support.** Government needs to provide appropriate internal training and technical support to support the integration of disaster risk concerns into development.
- **Step 5 - Change in Operational Practice**
  - Early Assessment. It is essential that hazard-related issues are considered during the very early stages of programming and project design so that they can be fully and systematically taken into account and appropriately addressed where relevant.
  - Adequate Supporting Information. Sufficient information is necessary to permit a full and accurate assessment of disaster risk and its appropriate treatment. There is need to establish an appropriate system of hazard data collection and analysis.
  - Cost Minimization. Disaster risk analysis should be integrated into country programming and project design at minimum cost. Pooling of relevant information and related analysis within the development community and with governments would help achieve this.

- Treatment of Low-probability, High-impact Risks. Climatological hazards are most likely to be identified as potential risks, reflecting their shorter return periods and thus higher probability that they will occur over the life of a project or country strategy. In contrast, risks emanating from earthquakes hazards, with much longer return periods, may be discounted. However, even if ignored from an economic perspective, it is important to ensure that earthquake risks are adequately considered from a safety perspective, taking rights to safety and protection into account.
    - Transparent, Inclusive and Accountable Consultation. The consultative process must give a voice to poor and marginalized groups, who are often among the most vulnerable to natural hazards, and ensure that their interests are adequately addressed and their rights protected.
    - Adequate upkeep and Maintenance of Development Investments. Mechanisms for ensuring that development investments are adequately maintained and remain in good condition are essential in ensuring that their designed level of hazard resilience is maintained.
  - **Step 6 - Measuring Progress.** Internationally agreed targets for disaster reduction should be established, providing a focus for the government against which progress in mainstreaming can be measured.
  - **Step 7 - Learning and Experience Sharing.** The government, together with other stakeholders, should make a concerted effort to monitor, share and learn from its experience in mainstreaming DRR into development.

Mainstreaming DRR in various Sectors
- **Education Sector**
  - Increasing structural safety of school buildings to make them disaster resilient.
  - Hazard and risk assessment of school building.
  - Formulation of school safety plans for disaster preparedness.
  - Advocacy for legal and policy frameworks enabling school based DRR.
  - Training of teachers and school management committee members and disaster management officials, engineers on improved methodologies to assess vulnerabilities of schools.
  - Including DRR into school curriculum.
  - Implementing DRR and preparedness activities in schools.
  - National policy on and capacity for DRR in the education sector.
- **Health Sector**
  - Vulnerability assessment of health facilities.
  - Increase hazard resilience of hospitals and facilities.
  - Health resources & services availability mapping system (HeRams).
  - Formulation of hospital preparedness plan.
  - Establishing mass casualty management system.
  - Developing integrated monitoring systems that include early detection of epidemics based on epidemiological data, early warning system (disease early warning system - DEWS).
  - Integrating health concerns in hazard control measures.
  - Train hospital staff to deal with emergencies of rare cases.
  - Developing strategies for epidemic preparedness and emergency action.
- **Housing Sector**
  - Promote the increased use of hazard-resilient designs (e.g. flood proofing, or seismic safety) in housing programmes in hazard-prone areas.
  - Institutionalize risk assessment and environmental impact assessment within housing development authority.
  - Enforcement of building and fire safety codes.

- Creation of village reconstruction committees to ensure safer construction.
- Formulation of basic technical training guidelines, training and information materials.
- Adopting local traditional construction which is culturally and economically viable.
- Promote utilization of national building codes that have special provisions for enhanced design standards for buildings in areas affected by natural disasters.
- Strengthen existing buildings (retrofitting).
- **Agriculture Sector**
  - Disaster resilient infrastructure.
  - National policy to use waste land to enhanced crop yields.
  - Awareness and specialized training and capacity building at the community level.
  - Forecasting system for DRR and climate change adaptation.
  - Use of alternative crops.
  - The planting of shelter breaks, comprised of trees and shrubs, to reduce wind effects.
  - Crop diversification.
  - Adjustments to crop planting harvesting cycles.
  - Food storage programs to insure against shortage arising from disaster.
- **Infrastructure Sector**
  - Assessment to ascertain susceptible of infrastructure systems to hazard.
  - Ensure measures for disaster survivability of key and critical infrastructure.
  - Incorporate disaster risk impact assessments as part of the planning process before the construction of new roads, bridges, power plants, transmitters etc.
  - Promote use of hazard risk information in land-use planning.
- **Irrigation Sector**
  - Creation of pool of irrigation system management experts and managers to address irrigation management, development and flood related issues in an integrated manner.
  - Emphasis on increased water storage capacity.
  - Capacity building of concerned official on hydro-meteorological disasters, integrated water and flood management, structural (irrigation) and non-structural risk management measures, flood forecasting systems, irrigation system information dissemination, community awareness on irrigation management.
  - Effective plans to reduce water losses through seepages from canals and water channels.
  - Minimizing land erosion by making small check dams, gully blocking and intensive terracing and forestation.
  - Standardization of designs and specifications for flood protection works duly incorporating DRR aspects.
  - Monitoring and quality control of river training, flood control, drought mitigation, irrigation & water supply and dams' safety projects.
  - Management of hill torrent flood flows for meeting irrigation needs during droughts through provision of flood dispersion structures, drains, off-takes.
  - Construction of small and medium dams to augment rain water for local water supply and irrigation.
  - Improvement of water conveyance infrastructure including modernization of barrages, system.
  - Improvement in drainage and reclamation system.
  - Rainwater harvesting of watersheds of hill torrents and small streams through construction of check dams to retard the speed of flows.
  - Motivate farmers in non-irrigated areas to construct small ponds in their fields for preserving the rain as well as the flood water for irrigation.

Creating an Enabling Environment for Mainstreaming DRR into Sectoral Development

- Legislative arrangements for DRR which should emphasize the importance of risk reduction in sectoral development.
- DRM strategy to implement the legislative framework. The strategy should involve stakeholders at all levels of government and from various sectors.
- Strengthening partnerships between various sectoral agencies for DRR.
- Finances available for implementing DRR measures/budgetary considerations.
- Political commitment (will) for DRR at the highest government levels in the sector and for support from the donor and development community.

Mainstreaming DRR in Development Process

- The rapid escalation in the impact of disasters in recent decades is a recognized threat to sustainable development and poverty reduction. Governments spend large amount every year on rehabilitation, but at the same time, theses development projects are damaged by natural disasters. Despite this, many development organizations have been slow to adopt DRR as a core objective or take measures to protect their projects against hazards. Yet it may not cost a great deal to incorporate risk management into development projects. Many standard project planning tools can be used to do this with little or no modification. Development organizations should adopt a systematic DRM approach to identifying, assessing and reduction risks of all kinds associated with hazards that affect both project performance and beneficiary groups.
- **The Project Management Cycle**
  A project is "a series of activities aimed at bringing about clearly specified objectives within a defined time-period and with a defined budget". In reality, this simple definition covers an enormous verity of projects types, in terms of size, aims, focus and methods. Nevertheless, there are many basic similarities. The 'project cycle' is a way of viewing the main elements that projects have in common, and how they relate to each other in sequence. The precise formulation of the cycle and its phases varies from one organization to another, but the basic components are shown in the figure below.
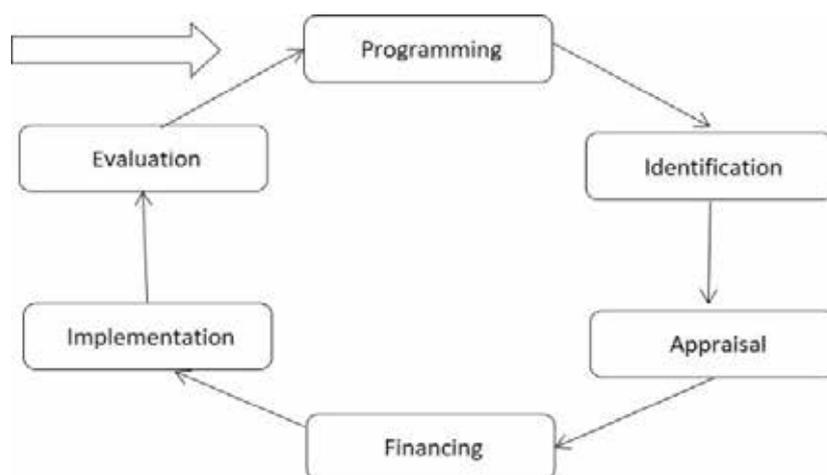
Source: EC Manual, Project Cycle Management, Brussels, European Commission, Europe Aid, 2001

- **Programming.** The establishment of general guidelines and principles for cooperation, agreement of sectoral and thematic focus and outlining of board ideas for projects and programs.
- **Identification.** Within the program framework, problems, needs and interests of possible stakeholders are analyzed; ideas for projects and other actions are identified and screened. The outcome is a decision on whether or not the options developed should be studied in more detail.
- **Appraisal.** All significant aspects of the ideas are studied, taking into account stakeholders' views, relevance to problems, feasibility and other issue. Logical or result-based management framework, and activities and implementation schedules, are developed and the required inputs are calculated. The outcome is a decision to take the project forward, or not. The term 'appraisal' being applied more narrowly to a review of all the planning work to date and the resulting decision on whether or not to proceed.
- **Financing.** A decision is taken by the relevant parties about whether or not to fund the project, based on the appraisal. Some project cycles refer to this stage as 'negotiation' or 'approval', and it may involve both the implementing agency and other stakeholders.
- **Implementation.** The agreed resources are used to carry out the planned activities and achieve objectives. Progress is assessed through monitoring to enable adjustment to changing circumstances. At the end of implementation, a decision should be made about whether to close or extend the project.
- **Evaluation.** This assessment of the project's achievements and impact examines the relevance and fulfillment of objectives, efficiency, effectiveness, impact and sustainability. It leads to a decision to continue, change or stop a project, and its conclusion are taken into account when planning and implementing similar projects.
- Projects are not prepared in isolation. Some sort of country or sectoral approach sets the framework within which they can be designed. Projects may also have to conform to a range of other cross-cutting policies or strategies (e. g. on gender, environmental protection, participation) that have been adopted by the organization concerned.
- **Incorporating DRM into the Project Cycle**
  - DRM should be factored into all stages of the project cycle. The initial planning stages of the cycle (programming - identification - appraisal) are the key entry points at which disaster risk issue can be factored into projects. But at the other stages of financing, implementation & evaluation, and the various activities that take place within them, implementation of recommended mitigation measure needs to be ensured. It is always important to make certain that recommended mitigation measures are incorporated in the construction process so that the hazards prevalent in the project area. The different phases in the project cycle are not separate but part of a process of planning, action and reflection that, in an ideal world, feeds lessons from one project into others.
  - Many tools that are potentially useful in introducing disaster risk management (e. g. economic appraisal, environmental appraisal, vulnerability analysis, social livelihoods analysis and social impact assessment) are likely to be deployed extensively during the appraisal phase. Logical and result based management frameworks, which are commonly used in project design, address some kinds of risk explicitly though often inadequately.

- **New Tools for Integrating DRR**
  - There is a recognized need for integrated approaches to mainstreaming DRR issue into the planning phases of project management cycle as a whole. Two basic approaches are being used: -
    - **Checklists.** Setting a series of questions relating to DRR, which must be answered when developing project planning documents.
    - **Entry Points.** A focus on the process of planning, ensuring that relevant issues are considered during different stages in the project management cycle.
  - The difference between the two approaches should not be exaggerated, being to some extent a matter of emphasis. They are not mutually exclusive. A process-focused approach will probably involve checklists of some kind. A checklist for DRR has been developed by NDMA in consultation with other stakeholders for inclusion in project proposal. Copy of the check list is given below: -

Planning Commission of Pakistan

CHECKLIST FOR DISASTER RISK REDUCTION

Infrastructure Sectors

(Circulated vide No. 5(7) Misc./PP&H/PD/10, on 23 November 2010 as part of PC1 & PC2)

1. Which types of hazards have been considered as unavoidable for the project and thus a condition for its planning and design?

   Indicate the relative order of importance of the hazards related to the project.

	Earthquake		Drought		Torrential Rains		Fire
	Flooding		Glacier Lake Outburst		Windstorm		Technological
	Landslides		Locust		Tsunami		Intense Erosion
	Avalanche		Cyclone				
	Others						

2. Has the brief history of the identified hazard(s) in the area included in the PC-I.

   ☐ Yes   ☐ No   ☐ Partial   ☐ N/A

3. Is the project prepared keeping in view the Building Codes of Pakistan 2007?

   ☐ Yes   ☐ No   ☐ Partial   ☐ N/A

4. Is the project prepared keeping in view the prevailing Building bye-laws?

   ☐ Yes   ☐ No   ☐ Partial   ☐ N/A

5. Does the project incorporate the prevailing territorial planning regulations (e.g. hazard zoning, institutional jurisdictions)?

   ☐ Yes   ☐ No   ☐ Partial   ☐ N/A

6. Have the components and activities of the project been designed to resist the impact of hazards, prioritized in Q. No. 1 above, and to contribute to the reduction of its vulnerability, and that of its surroundings and beneficiaries?

   ☐ Yes   ☐ No   ☐ Partial   ☐ N/A

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7. What facilities are available in the area for rescue and emergency relief in case of a disaster?

Sr.	Facility	Controlling Organization	Distance from the Project (approx)
1	Fire Fighting Services		
2	1122 Rescue Service		
3	Edhi Service		
4	Other		

8. Are there adequate arrangements within the project site for firefighting?

☐ Fire alarms   ☐ Fire hoses   ☐ Fire extinguishers
☐ Automatic sprinkler system

9. Are there funds for mitigation and periodical maintenance of its components, incorporated and meant to reduce the vulnerability of the project and its surrounding population?

☐ Yes   ☐ No   ☐ Partial   ☐ N/A

10. Does the budget and cash flow of the project include items allowing the coverage of structural activities for risk management?

☐ Yes   ☐ No   ☐ Partial   ☐ N/A

11. Does the budget of the project include provision to respond to emergencies (e.g. alert, contingencies, mitigation, and rehabilitation)?

☐ Yes   ☐ No   ☐ Partial   ☐ N/A

12. Does the project include a campaign of awareness raising, training and understanding to risk management for planners, workers and beneficiaries?

☐ Yes   ☐ No   ☐ Partial   ☐ N/A

13. Does the budget and cash flow of the project include items allowing the coverage of non-structural activities for risk management?

☐ Yes   ☐ No   ☐ Partial   ☐ N/A

14. Do service, transfer, concession and reclamation contracts incorporate provisions for risk management?

☐ Yes ☐ No ☐ Partial ☐ N/A

15. Does the project incorporate an adequate contingency plan for possible disasters?

☐ Yes ☐ No ☐ Partial ☐ N/A

16. Does the project incorporate any instruments for its financial protection during execution and after the completion of the project (insurance, indemnity, guarantee, contingency credit arrangements, etc.)?

☐ Yes ☐ No ☐ Partial ☐ N/A

17. Are there any financial or moral incentives to promote risk management?

☐ Yes ☐ No ☐ Partial ☐ N/A

18. Is there provision in the budget for the periodic training of workers and staff to use fire extinguishers, first aid kits, and light search and rescue equipments available within the project site?

☐ Yes ☐ No ☐ Partial ☐ N/A

19. Is the evacuation plan prepared, evacuation routes and safe assembly areas indentified?

☐ Yes ☐ No ☐ Partial ☐ N/A

20. Is the communication system for emergencies established, including a warning system wherever appropriate?

☐ Yes ☐ No ☐ Partial ☐ N/A

SESSION - 4.3

PUBLIC AWARENESS IN DRM

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Learning objectives

At the end of the session, participants will be able to: -
- Explain the purpose and objective of public awareness.
- Enumerate the key features of public awareness.
- Discuss setting-up a public awareness program.

Key Messages

- Public awareness as a disaster reduction measure aims to increase the community's knowledge about disaster risk and practical preparedness and mitigation measures.
- Community participation from design to implementation is the essential feature of an effective awareness program.
- Use of multiple means for raising public awareness is a key to success.

Session at a Glance

Timing	Topic	Method
10'	Activity 1: Introduction - What is public awareness?	Brainstorming and presentation
10'	Elements and key feature of public awareness	Interactive lecture/presentation
20'	Activity 2: Setting-up a public awareness program and factors for effective communication	Group work and discussion
10'	Activity 3: How to promote public awareness	Exercise
10'	Synthesis and session evaluation	Question and answer

🕐	# 60'
✏️	• Easel board and papers. • Different colour marking pens. • Blue and green meta cards. • Power point presentation/slides.
Preparation	• Prepare power point/chart papers with session objectives. • Prepare power point of elements and key features of public awareness. • Print handout 11 for each participant.

Process

Activity 1: Introduction - What is Public Awareness?   **10'**
Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the end of the session, participants will be able to: -
- Explain the purpose and objective of public awareness.
- Enumerate the key features of public awareness.
- Discuss setting-up a public awareness program.

Ask the participants about the understanding of the public awareness. Write public awareness at the middle of the board. Write responses of the participants around it.
Conclude the discussion using power point related to public awareness, its aim and objectives in DRM context.

Elements and Key Feature of Public Awareness   **10'**
Present the elements and key features which should be kept in mind for formulating and implementing public awareness campaign (content is available in the content section with the same heading) using power point slides in an interactive way by giving relevant examples.

Activity 2: Setting-up a Public Awareness Program and Factors for Effective Communication   **20'**
Divide participants into four groups and asked two groups to write steps required in setting-up a public awareness Program. Ask other two groups to determine critical factors for effective communication with regards to public awareness.
Each group will present their work to other groups, which will be followed by a discussion. Facilitator will make sure that steps and factor for communication are displayed on the projector while it is being presented. For material refer to handout 11.

Activity 3: How to Promote Public Awareness   **10'**
Provide meta cards to participants and ask them to write the means/methods which can be used to promote public awareness (one on each card) and paste it on the board or sticky sheet. Categorize activities as explained in the session below. Conclude the session by sharing the missing activities.

Synthesis and Session Evaluation   **10'**
- Ask the participants if they have questions or clarifications about the topics discussed.
- Answer their questions and provide examples as necessary.
- If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
  - What is the definition of public awareness?
  - What is aim of public awareness
  - What are the objectives of public awareness?
  - What are the elements of public awareness?
  - What are the key features of public awareness?
  - What are the methods of promoting public awareness?
- Thank the participants and inform them of the next session.

Handout

Handout 11: Public Awareness in DRM

PUBLIC AWARENESS IN DRM

What is Public Awareness?
- The extent of common knowledge about disaster risks, the factors that lead to disasters and the actions that can be taken individually and collectively to reduce exposure and vulnerability to hazards. The process of informing the general population, increasing levels of consciousness about risk and how people can reduce their exposure to hazard. This is particularly important to public officials in fulfilling their responsibilities to save lives and property in the event of a disaster (UNISDR).
- The process by which vulnerable populations understand the nature of hazards and their potential for causing disasters(ADPC).
- 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).
- A systematic distribution of information about potential hazards and threats and that people can do about them, in order to encourage people to act to protect their lives and property (CDRC).
- Education successfully communicated to the public (CDRC).

Aim of Public Awareness
- It should advise about: -
  - Means of protection
  - Means of preparedness
  - Means of mitigation
  - Responses to threats
- And instruct the public about: -
  - What
  - When
  - How

......to do or act in the personal and public interest

Objectives of Public Awareness
- To increase the public knowledge about hazards, their nature and the possible consequences of their impact.
- To increase knowledge about practical preparedness measures.
- To inform the public about the warning system that will be employed and what they should do when they receive it.
- To increase knowledge on how to respond to an emergency situation.
- To mobilize support for DRR plans or response activities.

Elements of Public Awareness
- **Purpose**
  - Message.
  - Means.
  - Audience.
  - Intended result.
- **Structure**
  - Has long term and repetitive approach.
  - Is consistent.
  - Utilizes a wide variety of methods and media.

Key Features of Public Awareness

- **On-going Process.** Public awareness is an on-going process, not simply a set of products such as posters, brochures, etc.
- **Participatory.** Target population is active participants in program design and implementation phases, in partnership with individuals having the necessary technical skills.
- **Community Specific.** An assessment of specific hazards is the essential basis for developing public awareness programs.
- **Target Population Specific.** Must be based on need of specific user groups for information, which are essential to them (women, children, and indigenous people).
- Integral part of local warning and response system.

Steps in Setting-up a Public Awareness Program

- **Establish the need**
  - What do people know about the hazards they are prone to?
  - What do they do to prepare for such hazards? Are these adequate?
  - Do people understand the meaning of warnings and what they should do when they hear these?
- **Planning the Program**
  - Define without bias how people will behave before the hazard impact, during the impact and after the impact.
  - Define the critical elements of the program.
  - Who should be informed? Who are the most vulnerable? What are their habits, preferences?
  - What is the common means through which they get information?
  - What type of hazard, potential effects?
  - Who will be involved in the implementation?
  - How can it promote self-reliance and uphold sound indigenous practices?
  - How can results be sustained?
- **Resource Mobilization**
  - List down resources needed and sources.
- Implementation
- Evaluation
- Improvement of the program

Critical Factors for Effective Communication

- **Credibility.** The recipient must have confidence in the source and this may involve building a climate of trust between the sender and receiver.
- **Context.** Must form part of the normal environment of the receiver to enable them to relate to the information. Make the materials as locally specific as possible. People are more likely to take action if they come to understand that they are personally at risk.
- **Content.** Must have meaning for the receiver; it must be compatible with his value system and relevant to the problem. Relate the facts about hazards to human experience rather than solely relying on statistics. Suggest specific actions that can be taken to reduce losses and highlight the benefit of such actions.
- **Clarity.** Must be in simple terms; the further it travels, the simpler it should be. Keep the material simple to ensure that essential facts are easily understood.
- **Continuity and Consistency.** Message should be repeated and should be consistent with one another. Repeat the reinforced message in a continuing rather than in a single awareness effort. Use various means of conveying the same message to sustain interest.

- **Channels.** Established channels of communication should be utilized particularly channels that are used and respected by the audience.
- **Capability.** Must take into account such factors as the receiver's habit, degree of literacy and knowledge of the world. Make certain that materials are in a language, which target audience understands.
- **Creativity.** Must be in form that will take interest of audience. Use pictures or graphic descriptions or earlier losses or people's action, which save them.

How to Promote Public Awareness

- Community meetings
- Community discussion groups
- Wall sheets, posters, newsletters
- Plays
- Leaflets, manuals, handbooks, brochures, books, comics
- Forum
- Press releases national or local newspaper, radio or television
- Transparencies, slide presentations, film, photos for exhibit
- Public speeches, letters to the editors, articles in the printed media
- Radio programs, etc...

REMEMBER

THE NEXT DISASTER OCCURS WHEN THE EARLIER DISASTER IS FORGOTTEN

SESSION - 5.3

MULTI-HAZARD EARLY WARNING AND DISSEMINATION MECHANISMS

Learning Objectives

At the end of the session, participants will be able to: -
- Describe the importance of early warning system.
- Explain the early warning dissemination mechanisms.

Key Messages

- Early warning is the mean of transmitting the message about any imminent danger.
- An effective early warning is necessarily hazard and audience specific.
- For the purpose of dissemination of early warning all possible means should be utilized according to specific audience.

Session at a Glance

Timing	Topic	Method
5'	Introduction	Presentation
10'	What is early warning, why do we give warning and its forms/ways	Interactive lecture
20'	Activity 1: Things to consider when giving warning/dissemination	Exercise
20'	Activity 2: Preparation/devising of early warning massage	Group work and discussion
5'	Synthesis and session evaluation	Question and answer

	60'
	• Easel board and papers. • Different colour marking pens. • Charts. • Power point presentation/slides.
Preparation	• Prepare power point of session objectives, what is DRM and DRM cycle image. • Print copies of essential information for massage preparation during activity 2. • Print handout 12 for each participant.

Process

Introduction 5'
Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the end of the session, participants will be able to: -
- Describe the importance of early warning system.
- Explain the early warning dissemination mechanisms.

What is Early Warning, Why do we give Warning and its Forms/Ways 10'
Discuss the early warning, its purposes and forms/ways of early warning in country context using power point slide in an interactive way (prepare power point using the content in handout section with the same heading).

Activity 1: Things to Consider when giving Warning/Dissemination 20'
Provide meta cards to participants and ask them to write the points to be considered when giving warning or during the dissemination of early warning (one point on each card) and paste it on the board or sticky sheet. Summarize the point as explained in the session below. Conclude the session by sharing the missing points (prepare power point using the content in handout section).

Activity 2: Preparation/Devising of Early Warning Massage 20'
Divide the participants into four groups. Provide essential information/scenario to the participants for formulation of early warning message. Ask participants to devise/prepare an early warning massage for dissemination to likely affect community. At the end of group work ask each group to present their work, facilitator to present suggested template through power point presentation and highlight the missing information. Announce surprise for the group who perform better.

Synthesis and Session Evaluation 5'
- Ask the participants if they have questions or clarifications about the topics discussed.
- Answer their questions and provide examples as necessary.
- If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
    - What is early warning?
    - What are the purposes of early warning?
    - What are the ways/form of warning?
    - What are the essential things to be considered when giving warning or during dissemination?
- Thank the participants and inform them of the next session.

Handouts

- Handout 12: Multi-hazard Early Warning and Dissemination Mechanisms

MULTI-HAZARD EARLY WARNING AND DISSEMINATION MECHANISMS

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

Why do we give Warning?

- To inform community about hazards, elements at risk (who and what might be affected) and what is the risks.
- To advise on means of protection and preparedness; e.g. preventive evacuation, sandbagging to reinforce the flood dike or fire suppression etc.
- To instruct community who will do what to deal with the impending hazard.

Ways/Form of Warning. Different ways of giving warning and/or receiving warning include: -

- Village/community meetings.
- Notices/posters/billboards.
- Verbal or pictorial messages.
- Cartoon series/mascots.
- Other indigenous forms and channels.
- Radio/TV/newspaper.
- Films.
- Announcements.
- Sirens.

Things to Consider when giving Warning/Dissemination

- Make warning and communication system inclusive for all.
- Inform the people of the different phases of warning and their meaning.
- Inform or update the evacuees/community of the forecast and the warning using symbols or sounds that everybody can understand.
    - 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.
    - 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.
- "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.
- 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-induced).
- The flow of information from the "field" until it is processed and packaged for information dissemination to the community should be clear.
- Identify roles and responsibilities: -
    - For any one element, an organization or an individual must be able to determine that it has: -
        - Primary role - responsibility for initiating and maintaining action.
        - Secondary role - responsibility for undertaking risks in support organization.
        - Or individual with a primary role, or no role at all.

- Following two methods of describing the roles and responsibilities can be used by the information committee: -
  - List organizations involved and describe their roles for each hazard.
  - 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) organizations overall involvement.
- The warning should be: -
  - Based on information collected from reliable sources.
  - Area specific and people specific.
  - Hazard specific.
  - Based on the hazard, vulnerability and capacity assessment.
  - Able to give advice on what to do.
  - Able to inform community of the possible effects/risks that may cause them if they don't follow or do what is advised.
  - 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.
  - Warning is given in simple form and in the local dialect and disseminated through fastest means.

Suggested Template
- A suggested specimen for group discussion is as under: -

<center>**TEMPLATE EW MESSAGE**</center>

Essential Information
- Following scenario may be given to the participants for formulation of early warning message: -
  - You are resident of village Saeedabad, Tehsil Ali Pur, District Muzaffargarh. The village is located fifteen kilometers downstream of Panjnat Headwork on the western bank of River Indus. DDMA Muzaffargarh has received following information from PDMA Punjab/NDMA on 10th June 2019: -
    - River Indus is in state of high flood, whereas low flooding is expected in River Chenab.
    - Water discharge on night of 14th June 2019, at Taunsa Barrage is likely to be 5 lacs cusec, which is likely to reach Panjnat Headwork on 15th June 2019. However due to contribution of Chenab River discharge water discharge at Panjnat Head works is likely to be 6 to 7 lacs cusec.
    - Water is likely to recede after 4-5 days.
  - Based on the information received from PDMA and applying the past knowledge, the DDMA has perceived that your village is likely to be affected by 15th June 2019 and will face severe floods. Due to flood water, spread of diarrhea and malaria is likely. In order to save lives, moveable property and spread of diseases, DDMA has to issue an early warning message to all vulnerable communities through the concerned department, for which camping sites, assembly points and evacuation routes has been selected (to be envisaged).
  - The groups formed for formulation of early warning message should be asked to draft a message as DDMA Muzaffargarh. Information not provided may be imagined by the participants.

Note: Dates may be changed as the training schedule.

Suggested Template/Message

- Following is the suggested template/massage, however facilitator may add more information: -

"Based on the latest warning received from the provincial authority, flood water is expected to reach your village on 15th June 2019, which would flow through the main village settlement and surrounding localities. According to the information this is going to be severe flood as compared to the last one which destroyed houses and cops and killed animals (number and location within the village may be added).

Therefore, all the residents of the area are advised to evacuate to their designated evacuation centers (location may be added). Please bring food, cooking utensils, bed sheets and water and other valuables that are likely to be damaged by the flood water.

We have three hours to prepare before our organized evacuation. After necessary preparations, please proceed to the place where vehicles are waiting (at ------) to pick all of us for evacuation centers.

It is estimated that the floodwater would recede within four to five days, and we would be able to get back to our home on June 19/20, 2019. Spread of malaria and diarrhea is likely, therefore take precaution and consult health worker in the camp immediately if you get affected.

MODULE - 4

DISASTER RESPONSE

SESSIONS

Session - 1.4: Response Mechanism

Session - 2.4: Evacuation and Camp Management

Session - 3.4: United Nation's Response Mechanism

Session - 4.4: Disaster Recovery

Session - 5.4: Logistics Management
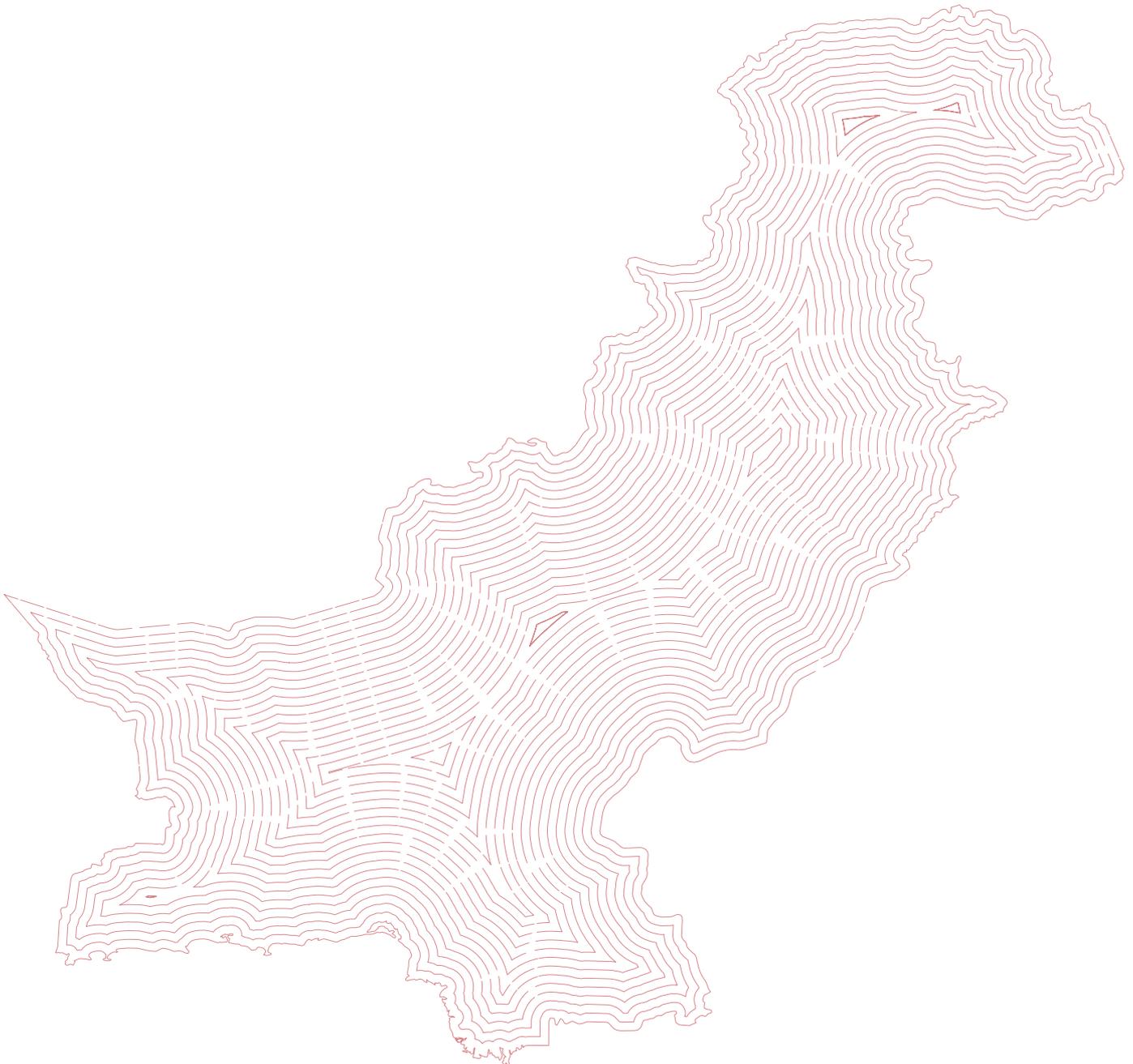
SESSION - 1.4

RESPONSE MECHANISM

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Learning Objectives

At the end of the session, participants will be able to: -
- Discuss the basic concept of response management.
- Explain the different activities under response management.
- Outline the essential considerations, characteristics and requirements of response and activation of response systems.

Key Messages

- Response is an extraordinary measure which is taken in time of a disaster to minimize the suffering of people.
- Response is comprised of a series of activities which are carried out in systematic sequence.
- Response should be well planned based on proper coordination with all s takeholders.
- For rapid and effective response, there is a needs to be a system for activating emergency response and resource organizations.
- Vulnerable groups must be given due attention during all phase/activities of response.

Session at a Glance

Timing	Topic	Method
5'	Introduction	Presentation
15'	Disaster response and triggers for response	Interactive lecture
40'	Activity 1: Response activities	Exercise
20'	Important considerations, characteristics, requirements of disaster response and activation of response systems	Interactive lecture
10'	Synthesis and session evaluation	Question and answer

	90'
	- Easel board and papers. - Different colour marking pens. - Charts. - Meta cards. - Power point presentation/slides.
Preparation	- Prepare power point of session objectives. - Prepare power point of disaster response, triggers for response, important considerations, characteristics, requirements of disaster response and activation of response systems. - Print handout 13 for each participant.

Process

Introduction   **5'**
Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the end of the session, participants will be able to: -
- Discuss the basic concept of response management.
- Explain the different activities under response management.
- Outline the essential considerations, characteristics and requirements of response.
- Describe activation of response systems.

Disaster Response and Triggers for Response   **15'**
Discuss the disaster response and its tiers and triggers using power point slide in an interactive way (prepare the power point using the content in handout section with the same heading).

Activity 1: Response Activities   **40'**
Provide meta cards to participants and ask them to write the activities of the disaster response (one activity on each card) and paste it on the board or sticky sheet. Categorize activities as explained in the session below. Conclude the session by sharing the missing activities.

Important Considerations, Characteristics, Requirements of Disaster Response and Activation of Response Systems   **20'**
Discuss the gender and vulnerability considerations, important characteristics of response and requirements of effective response by giving and asking for relevant examples (prepare power point using the content in hand out section with the same heading).

Synthesis and Session Evaluation   **10'**
- Ask the participants if they have questions or clarifications about the topics discussed.
- Answer their questions and provide examples as necessary.
- If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
    - What is disaster response?
    - Tiers of response?
    - Requirements of effective response?
    - Response activities.
    - Role of national emergency operation center?
- Thank the participants and inform them of the next session.

Handout

- Handout 13: Response Activities

RESPONSE MECHANISM

What is Disaster Response?

- The provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected

Response Actors

- Community
- Government agencies
- NGOs, CBOs and philanthropists
- UN system, INGOs and donors etc (normally get activated when international appeal is launched)
- Humanitarian partners

Tiers of Response

Source: NDRP 2019

Triggers for Response

- The DDMA/DDMU is responsible to manage the disaster and meet the requirements of relief etc with their integral resource and one provided by the provincial governments. As a guideline DDMA/U may ask for PDMA intervention when 50% of the held resources are consumed.
- P/GB/S DMAs is responsible to manage the disaster and meet the requirements of relief etc within the province from integral resource and one provided by the federal governments. PDMA may ask for additional resources from NDMA when 50% of the held resources are consumed. In case more than one district has been affected, coordination between the district and with provincial departments will be carried out by PDMA for effective response.
- The Federal agencies will continue to perform their functions, roles and responsibilities; however, NDMA will mobilize and deploy its resources particularly the relief stocks available as " Federal Reserve " to assist in the relief operations, where provincial resources fall short of meeting relief needs. In case geographical

spread of disaster is more and two or more provinces are affected, coordination for comprehensive response will be carried out by NDMA

- Armed forces may be involved and requested for assistance by the respective district/provincial/national level disaster management authorities at any stage particularly for rescue, evacuation and emergency relief phases, in respective affected areas.
- The international community and the UN systems would only be requested for assistance in case of the escalation of the situation beyond National Government's capacity to manage with its own resources. The overall coordination role would rest with NDMA, which is engaged with UN and has workout pre-defined coordination mechanisms, incase international assistance is requested.

Response Activities

- **Search & Rescue (SAR).** Is the search for and provision of aid to people who are in distress or imminent danger. The general field of search and rescue includes many specialty sub-fields, typically determined by the type of terrain the search is conducted over. These include mountain, ground search and rescue, including the use of search and rescue dogs, urban search and rescue in collapse structure, combat search and water rescue. Various mediums like helicopters, boats, hovercrafts or field rescue teams can be used for search and rescue of people during disasters. For the purpose of urban search and rescue, NDMA has raised six teams (2 x heavy & 4 x medium) and have been positioned at different location namely Islamabad, Rawalpindi, Karachi, Lahore, Mardan and Gilgit.
- **Fire Fighting and First Aid including Mass Casualty Management.** Provision of medical assistance and firefighting (if required) can be a simultaneous action during search & rescue.
- **Evacuation.** Is the immediate and urgent movement of people away from the threat or actual occurrence of a hazard. Ranges from the small scale evacuation of a building due to a storm or fire to the large scale evacuation of a district or approaching cyclones etc. Evacuations may be carried out before, during or after disasters for which evacuation plans are developed to ensure the safest and most efficient evacuation time of all expected affectees. Planning process and detail procedure of evacuation is covered in session 2.4 of the module.
- **Rapid Need Assessment.** Carried out by the Government alone or in conjunction with UN System immediately following a sudden-onset disaster. The aim of the assessment is to acquire fundamental information on the needs of affected populations and to support the identification of strategic humanitarian priorities. It thus enables the Government and other stakeholders, a common understanding of the situation and its likely needs for immediate interventions. To identify the relief needs, NDMA in coordination with OCHA has finalized multi-sector initial rapid assessment (MIRA) methodology to be followed by all for rapid need assessment. Main highlights of the methodology are: -
  - **Purpose.** To help decision-makers on the nature and dynamics of the crisis and to further define strategic humanitarian priorities.
  - **Timeline**
    - Within 72 hours, a situation overview based on primarily secondary data and other sources (i.e. remote sensing)
    - Within 7 days carry-out a field assessment on community level to identify needs and priorities of the affected and vulnerable population.

- **Process.** The MIRA process and report encompasses three main steps: -
  - Review and analysis of secondary data which is the basis for the situation overview.
  - Community-level field assessment and primary data collection based on key informant interviews and structured observations.
  - Final inter-sectoral analysis and release of final MIRA report.
- **Relief.** Is the provision of services and public assistance during or immediately after a disaster to save lives, reduce health impact and meet basic subsistence needs of the people affected. During the relief phase, focus is on provision of food, shelter, health assistance and water, sanitation & hygiene. Generally, the time period for relief is three months, after which ideally recovery should begin. However, in certain it may surpass if required. Government agencies are the major relief provider, however philanthropists, civil society organizations, Pakistani community abroad, Un system in the country, international countries and donors also take part in the relief depending upon the magnitude of the disaster. Some of the important features of effective relief are: -
  - Elaborate planning and guidelines/SOPs on provision of relief.
  - Non-discrimination and taking care of vulnerable groups.
  - Logistic system for receipt and distribution and timely flow of relief goods.
  - Freedom of action and facilitation for relief workers/humanitarian community.
  - Coordinated operation.
  - Efficient/transparent cash grant system.
  - Information management.
  - Media handling.
  - **Basic Ethics to be followed by the Government Officials**
    - In time of disaster survivors go through very difficult times and they are more demanding than they would be in normal circumstance. Government officials also have a lot to deal with in that situation, however they are obligated to adopt a caring attitude towards the survivors in terms of being responsive to their needs.
    - It is also true that to follow the ethical priorities during disaster is often difficult for people in need and government officials alike. This difficulty is amplified when government officials face pressures from different authorities. Nonetheless, they should be ethically strong enough to withstanding all the pressures to ensure the wellbeing of the needy population. Government officials should withstand: -
      - Political pressure.
      - Religious/sectarian pressure.
      - Ethnic pressure.
      - Friends and family's pressure.
- **Recovery.** The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors is termed as recovery. The main purpose is returning individuals and families, critical infrastructure and essential government or commercial services back to a functional, if not pre-disaster state. The action often characterized by temporary actions that provide a bridge to permanent measures. Recover activities may begin when the emergency has ended. In some case recovery activities can be undertaken alongside the relief activities. During recovery, the focus is on shelter, agriculture, food security, health & nutrition, education, water & sanitation, governance, livelihood and community infrastructure sectors. Thematic areas of DRR, gender, environmental and protection should be mainstreamed in all the sectors during recovery interventions.

- **Determining the Recovery Needs.** In order to determining the recovery need, recovery need assessment (RNA) is conducted. A comprehensive methodology for RNA has been formulated by NDMA in collaboration with UNDP. The assessment is based on the primary data collected by the government authorities, verification by the joint team and analysis. Based on the assessment, the recovery needs are worked out for all the sectors.
- **Rehabilitation and Reconstruction.** Post-disaster reconstruction is a complex process. It requires multi-sectoral involvement, very significant resources and a wide range of skills. Primarily reconstruction is the responsibility of the Government, however humanitarian agency, donors and countries can be engaged in reconstruction either by providing finical resources or undertaking the projects as per the Government's priorities. Damage and reconstruction needs are determined by conducting damage and need assessment.
  - **Damage and Need Assessment (DNA).** DNA is initiated with the objective of estimating the extent of the damage and the required needs for rehabilitation and reconstruction of the damaged assets and infrastructure; and restoration of livelihoods and economic productivity. Globally the Asian Development Bank and the World Bank leads assessment the assessment process in close coordination with government. In Pakistan context Economic Affairs Division (EAD), Ministry of Finance initiate, the request for conduct of DNA, whereas all coordination is done by NDMA/PDMAs.
  - **Methodology.** For the estimation of the effects and impact of the disaster, the methodological tool developed by UN are used. The impact of the disaster on each sector of the economy is estimated with the following three costs: -
    - **Direct Damage.** Referring to the monetary value of the completely or partially destroyed assets, such as social, physical and economic infrastructure immediately following a disaster.
    - **Indirect Losses.** Referring to income losses, comprising of both the change of flow of goods and services and other economic flows such as increased expenses, curtailed production and diminished revenue, which arise from the direct damage to production capacity and social and economic infrastructure.
    - **Reconstruction costs.** Measuring the cost of rebuilding lost assets and restoring lost services, assessed as the replacement cost with a premium added for building back smarter.
  - Data from district and tehsil level is collected by the Government and, verified and validated by the DNA sector teams. The data received by the DNA sector teams is validated through a number of measures including: field damage inspection visits by sector teams; interviews with stakeholders; desk review; satellite imagery and GIS data comparisons; and other plausibility checks. Based on the above, analytical work is undertaken by sector teams for a comparative pre and post disaster assessment of the infrastructure and services affected.

Gender and Vulnerability Considerations

- it has been established that the effective of disaster are more pronounced on the vulnerable groups of society such as women, children, elderly person and persons with disabilities. Within these categories there may be even more vulnerable groups, such as female heading their households, children with disabilities or persons with mental health issues. Because of their vulnerabilities, at times these groups have limited access to relief commodities.

- It is therefore imperative for the responders to safeguard the rights of vulnerable people in disaster. They must be accorded priority in rescue operation and all other activities of response. It is also essential to cater to the unique needs of these groups while planning for and executing the response

Important Characteristics of Response

- Effective response to reduce the impact of disaster is critical, mainly in order to: -
  - Limit causalities.
  - Alleviate hard ship and suffering of affectees.
  - Restore essential life support and community systems.
  - Mitigate further damage and loss.
  - Provide the foundation for subsequent recovery.

Requirements of Effective Response

- Information.
- Resources.
- Efficient response system.
- Co-ordination of response operation.

Activation of the Response System

- For rapid and effective response, there usually needs to be a system for activating emergency response officials and resource organizations. It is useful to implement activation in stages. These might be alert, stand-by and action. The benefit of this arrangement is that if, after the initial warning, the disaster does not materialize, activation can be called off. Thus, full mobilization of resources can be avoided and minimum of disruption is caused to normal life. It is advisable for government departments and other resource organizations to work to this system of different stages in to their own internal plans.

Coordination of Response Operations

- Coordination of the action taken in response operations is very important. Good coordination ensures that resource organizations are utilized to best effect, therefore avoiding gaps or duplication in operational tasks. For the purpose of effective coordination, emergency operation center (EOC) will be activated at all level. The EOC will serve as the hub for receiving early warning and issuing information to the public, media, ministries, departments and humanitarian response agencies. The EOCs will also lead the coordination and management of relief operation in affected areas and will function and manned 24/7. The main objectives of the EOC are to: -
  - Disseminate warning on time.
  - Issue instructions to all stakeholders.
  - Communicate with stakeholders
  - Coordinate with different stakeholders for effective response.
  - Organize and manage emergency operations at national.
  - Collect information, undertake analysis and arrange dissemination.

- **Functions of National Emergency Operation Center (NEOC)**

  - Collect, consolidate, analyze and circulate information related to emergency operations to the key stakeholders.
  - Screen and issue emergency warnings and information to the public concerning preparedness and safety.
  - Prepare damage and relief need assessment reports.
  - Mobilize and deploy resources e.g. search and rescue, medical teams in the affected areas.
  - Supply food, drinking water, medical supplies, non-food items to the affected population.
  - Coordinate and provide technical support to the Provincial and District Emergency Operations Centres (P/D EOC) for emergency response.
  - Coordinate with concerned ministries, departments and commissions/authorities at federal level for emergency response.
  - Coordinate with humanitarian organizations, bilateral and multilateral agencies for resource mobilization and deployment in the affected areas.
  - Coordinate relief operations.
  - Prepare press release and other information for general public and specific group. Organize regular media and public information briefings.
  - Prepare situation report (SITREP) on daily and weekly basis and circulate to the Prime Minister, NDMC Members, PDMC Members, PDMA, Armed Forces and other stakeholders.
  - Preparation and consolidation of reports, record keeping, public information and resource management at national level.

Availability of Relief Supplies and Commodities

- The ready availability of relief supplies and commodities is an important factor in effective response. After disaster impact, there is usually an urgent need to provide and distribute the food, water, shelter/tents and medical supplies and assistance.
- Emergency response action therefore needs to cover two main areas, namely obtaining the various commodities from stores (already stockpiled), commercial supplies and international assistance sources and organizing the distribution of these commodities according to the best possible orders of priority.
- International assistance resources often play a valuable part in response operations. These resources mainly comprise relief commodities, especially food, shelter and medical supplies. However, international assistance is mostly received when the Government launches an international appeal for assistance.
- For federal, provincial and district recourse stockpiling, NDMA in collaboration with WFP has constructed eight strategically located humanitarian response facilities (HRF) in all province/region/state to enhance the country's emergency response capacity. The HRF covers 9.1 acres and has four climate-controlled warehouses to store temperature sensitive items such as ready-to-use food and medicines. The total covered storage capacity of the facility is 3,000 metric tons and an open space of up to 10,000 metric tons. Four pre- fabricated offices and a reinforced paved area to facilitate truck movement have also been constructed. Other than HRF, 51 flospans have been constructed in the districts to be used by DDMA/U for storage of relief commodities.

Media Cooperation

- Disaster, especially major disaster, is news. Consequently, requirements for information by local and international media are inevitable. Thus, it is clearly advisable to have well-organized arrangements to deal with this aspect. It is important that conditions in the affected country should be accurately reported internationally and that there is no misreporting. Therefore, to avoid possible misunderstandings and misrepresentations, it is important to give appropriate briefing and information to media representatives about disaster impact. Delays may lead to some media representatives making their own news, which may not be in the best interests of the country.
- Good relations with the local media are also important and usually two-way benefits are involved. Not only do the local media benefit from good cooperation from the disaster risk management authority, but they can also perform valuable services such as warning and public awareness. It is recognized that during pressurized response operations, disaster management authorities may regard media information as having to take a low priority. However, this should be avoided.

Monitoring and Evaluation

- During the execution of response to track the progress and facilitate the mid-course correction, effective monitoring is essential. Methodology for the monitoring of the response activities may be determined by the DDMA/U. Frequent interaction with non-government actors can be an effective measure to monitor their activities.
- Post disaster evaluation is vital to determine the relevance and fulfillment of objectives. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned. The best practices adopted during the execution of response may also be recorded, analyzed and implemented in future disasters.

SESSION - 2.4

EVACUATION AND CAMP MANAGEMENT

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Learning Objectives

At the end of the session, participants will be able to: -
- Discuss the concept of evacuation before or during disaster.
- Explain the process involved in evacuation planning.
- Appraise the role and responsibility of evacuation committee and functioning of evacuation center.
- Define camps and its types.
- Explain the roles of actors in camp management.
- List key sphere minimum standards related to camp management.

Key Messages

- The evacuation is an organized movement of people from an area of risk to a safer location in the wake of looming disaster.
- Preparation for evacuation and final evacuation will be based on the early warning which is primary responsibility of the Government. Role of evacuation committees is vital in a disaster scenario and they have specific functions to perform pre, during and post evacuation.
- Evacuation center must be established for monitoring the evacuation process. The safe evacuation routes should be identified and mapped by the community to ensure minimum exposure to the hazard and other obstacles during evacuation.
- A temporary camp-life requires its inhabitants to become an active part of the process in terms of managing things on daily basis rather than becoming passive recipients of aid and help by the public or private sectors.
- The international/global standards demand the Governments and the humanitarian agencies to ensure that the arrangements are made in a way that protect the basic rights of the affected populations in camp (s).
- In a camp setup and in view of the expected life of the camp, different activities become an essential part of daily life and it depends upon the volume of available resources to decide as to what are the priorities and how the organizers would ensure their implementation and for how long the camps shall sustain.

Session at a Glance

Timing	Topic	Method
10'	Introduction	Presentation
40'	Activity 1: Evacuation	Group work and discussion
50'	Activity 2: Camp management	Role play
10'	Synthesis and session evaluation	Question and answer

⏰	# 110'

🖌️	• Easel board and papers. • Different colour marking pens. • Charts. • Meta cards. • Power point presentation/slides.
Preparation	• Prepare power point of session objectives and groups tasks. • Print handouts 14 and 15 for each participant.

Process

Introduction   **10'**
Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the end of the session, participants will be able to: -
• Discuss the concept of evacuation before or during disaster.
• Explain the process involved in evacuation planning.
• Appraise the role and responsibility of evacuation committee and functioning of evacuation center.
• Define camps and its types
• Explain the roles of actors in camp management.
• List key sphere minimum standards related to camp management.

Activity 1: Evacuation   **40'**
Divide the participants into four groups. Assign the following tasks to the groups: -
Group 1: What is evacuation? reasons of evacuate, preventive evacuation and stages of evacuation.
Group 2: What factors should be kept in mind while preparing an evacuation plan?
Group 3: What are the roles and responsibility of evacuation committee (pre, during and post evacuations)?
Group 4: What are the functions of evacuation centers (during and after evacuation)?
At the end of the presentation of each group, present relevant content through power point presentation and highlight the missing information.

Activity 2: Camp Management   **50'**
In 2 groups, ask participants to prepare and perform a role play. Read handout 15 and try to cover all the content in the role play. Ask participants that they have to share key learnings at the end of the performance? Announce surprise gift for the group who perform better.

Synthesis and Session Evaluation   **10'**
• Ask the participants if they have questions or clarifications about the topics discussed.
• Answer their questions and provide examples as necessary.
• If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
  - What are evacuation types?
  - What are the functions of evacuation committee?
  - What are the functions of evacuation centers?

- What is the role of camp administrator?
- What is the role of camp manager?
- Considerations for the selection camp site?
- Thank the participants and inform them of the next session.

Handouts

- Handout 14: Evacuation
- Handout 15: Camp Management

EVACUATION

In order to minimize the human losses, people are evacuated from the area in the wake of looming disaster. Evacuation plan can be prepared on the basis of hazard assessment and preparation for evacuation and final evacuation will be based on the early warning.

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

Reason of Evacuate. Evacuation is required in following situations: -
- Floods or cyclones.
- Urban or forest fire.
- Massive earthquake.
- Complex emergency.

Preventive Evacuation. Preventive evacuation refers to evacuating when the flood water and other hazards or threats have not yet reached the houses of peoples at risk.

Phases/Stages of Evacuation
- Warning.
- Evacuation instruction.
- Evacuation and evacuation center management.
- Return to former or new place and rehabilitation.

Evacuation Planning. Following factors should be kept in mind while preparing an evacuation plan. Evacuation committee formulated for the purpose should coordinate with local authority for safe evacuation of community members: -
- Determine the population for need to be evacuated.
- Identify a safe place for evacuation.
- Identify shortest and safest route including alternative route.
- Safe assembly area or areas for assembling the community before evacuation.
- Forming groups of people to be transported out of the endangered area.
- Means and procedures of transportation of valuables and cattle etc.
- Identifying critical items, like medicine, edibles and water, to be taken along during evacuation.
- Necessary documents, like identity cards, educational certificates and property ownership documents, to be identified for taking along during evacuation.

Evacuation Committees and its Responsibilities. Role of evacuation committees is vital in a disaster scenario and they have specific functions to perform in pre, during and post evacuation which are as follow: -
- **Pre Evacuation**
  - Prepare evacuation plan including warning system in consultation with warning team.
  - Training and education of community members.
  - Identify and prepare logistical needs for evacuation.
  - Networking, coordination and resource generation for the purpose of evacuation with the government disaster management authorities to make the best use of their resources and facilities.

- **During Evacuation**
  - Passing on evacuation instructions.
  - Finalizing evacuation arrangements including transportation, guiding to identify evacuation routes and taking special care of vulnerable groups.
  - Ensuring orderly evacuation.
  - Act as marshals/guides during evacuation.
  - Search and rescue.
  - Identify health needs in coordination with health/first aid team.
- **In Evacuation Center**
  - Coordinate with health, food, sanitation, security, information committee.
  - Manage relief operations while in evacuation center.
  - Networking, public information, advocacy, resource generation.
- **Post Evacuation**
  - Ascertain through credible sources that situation is perfectly normal.
  - Area must be assessed for safety before entering buildings and locality.

Management of Evacuation Center. Evacuation center must be established for monitoring the evacuation process. Functions of these centers are: -
- **During Evacuation**
  - Registration and monitoring of evacuees.
  - Space assignments to evacuees.
  - Maintain order (people, health, sanitation, garbage disposal etc).
  - Coordination delivery of services (relief, medical mission etc).
  - Provision of information.
  - Networking and resource generation.
- **After Evacuation**
  - 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.
- **Identifying Safe Evacuation Routes.** The safe evacuation routes can be identified and also be mapped by the community. Some of the things that can be kept in mind while identifying safe evacuation routes for the vulnerable community are as follows: -
  - Select evacuation route that minimize the exposure to the hazard and other obstacles.
  - The evacuation route should lead to a safe area for assembly of people.
  - Since, loss of electric power, poles, towers, fire breakout etc may affect the safe route so alternative routes should also be mapped and highlighted so that the entire community is aware of it.
  - Route should be direct.
  - Evacuation route should be easily accessible to even the most vulnerable group like women, children aged and people with critical disabilities.
  - A sign board highlighting the safe evacuation routes should be put so that people can easily spot such routes.
  - The evacuation routes should be reviewed and monitored regularly. In case of issues adjustments have to be made and the communicated to the village populace at the earliest.

CAMP MANAGEMENT

Why in Camps? Disaster or complex emergency events can rapidly leave people homeless and in need of protection and assistance. The aim of establishing camp is to protect the people from outside dangers and create spaces inside to protect their privacy and bring back feelings of security.

Types of Camps
- **Self-Settled/ Spontaneous Camps.** People may decide to settle in camps, independently of assistance from local government or the aid community. The major problem with these unplanned and scattered camps is that neither the government nor the humanitarian agencies find it easy to reach out to all of them with basic relief needs. It requires a lot of additional logistical arrangements, efforts, time and resources.
- **Planned Camps.** People may decide to find accommodation on purpose-built sites and a full service infrastructure is provided. These are established after important considerations with regards to location, availability of basic facilities, role and responsibilities of different stakeholders including the affected populations and the phasing out of the camp. These could be in shape of: -
- Tent city either established and manned by government or by the humanitarian community.
- Collective centres such as community centres, town halls, school building, factories or religious buildings.

Camp Building Blocks
- **International Law and Standards.** International law provides a framework for assistance and protection activities. Standards ensure consistency and accountability in response activities.
- **Participation.** Members of displaced community identify and express their own views and needs. Collective action is taken to reflect those views and meet those needs.
- **Protection.** Protection activities in a camp should ensure that displaced populations have access to all facilities without any discrimination. The Government has the primary responsibility for the physical, legal and material security of the displaced population. UN agencies and NGOs - national and international can support the Government as necessary. Activities ensure that displaced populations have access to: -
  - **Physical Security.** Protection against physical harm, protection against violence.
  - **Legal Security.** Access to justice, a legal status and identification documentation.
  - **Material Security.** Equal access to basic goods and services (water, shelter and food etc).

Camp Management. Camp management is about providing assistance and protection to the residents of the relocation site in accordance with international law and standards and ensuring that every member of the community has the opportunity to participate in the activities of the relocation site.

Key Actors for Camp Management

- **Camp Administrator.** Camp administration refers to the functions carried out by governments and national authorities that relate to the overseeing of activities in camps and camp-like situations. It comprises such sovereign state functions as: -
  - Designating, opening and closing camps.
  - Securing land and occupancy rights for temporary settlements and resolving disputes arising from land appropriation.
  - Providing security.
  - Issuing documentation, permits and licenses (e.g. birth certificates, ID cards).
  - Protecting citizens and preventing evictions (forced removals) and relocations.
  - Facilitating access to camps by humanitarian agencies.
- **Camp Coordinator.** Refers to the overall coordination of the roles and responsibilities in the camp response, in support of the national/regional plans. Camp coordinator's primary objective is to create the humanitarian space (secure access) necessary for the effective delivery of protection and assistance. The camp coordinator agency works in close coordination with camp administration and camp manager, as well as with other humanitarian and development partners, such as agencies providing assistance, civil society, donors, the diplomatic community, the host community, the media, and with other clusters involved in delivering an appropriate and effective response.
- **Camp Manager.** Camp manager function where an agency is not present. Responsible for coordination of assistance and services at the level of a single camp. Camp manager is responsible for: -
  - Coordinating services at camp level.
  - Establishing governance and community participation.
  - Ensuring maintenance of camp infrastructure.
  - Collecting and sharing data.
  - Providing defined services.
  - Monitoring the service delivery of other providers in accordance with agreed-upon standards.
  - Identifying gaps in the provision of protection and assistance.
  - Referring all problems that cannot be resolved at the camp level to the camp coordinator.
  - Assisting camp coordinator in defining standards and indicators that are to be applied in particular responses.

Standards - Camp Management

- For camp management, sphere standards developed by a group of NGOs and the Red Cross and Red Crescent Movements as a consequence of the lessons learned in Rwanda 1994 are followed. These standards are used for following, details of spheres are covered in sphere standards issued by UN System: -
  - Site/structure selection.
  - Structure and site assessment (planning/design or refurbishment/design).
  - On-going care and maintenance.
  - Monitoring overall protection and assistance.
  - Promoting community participation.
  - Data collection, gap identification and coordination.
  - Contingency planning (preparedness).

Site Selection

- Site selection for a relief camp is one of the basic but critical things that require a great amount of attention by the government organizations/departments mandated to do so. Usually, the relief camps are established with a short-term plan in mind but it may go beyond a shorter period.
- Since relief camps cannot be established and run in deserted areas or far away from settled local communities, it becomes close to inevitable that the host communities would also suffer in one way or other in case the relief camp continues to exist beyond days and weeks. It is of utmost importance that a careful and objective analysis of the host communities as well as the incoming displaced communities is undertaken before deciding on a specific location. Some of the physical characteristics are as under: -
  - Absorptive and stable soil.
  - Potential for cultivation.
  - Gentle slope, between 1% and 5% gradient.
  - Lowest point of the site 3 meters or more above the maximum water table level.
  - Sufficient space, including room for expansion.
  - For collective centers: structural quality, existing infrastructure, proper ventilation/insulation, accessibility, feasibility for partitioning space.

Closure of Camp

- Multiple factors may cause the closure of a relief camp. For instance, in view of an improved situation in their home areas, people leave the camp voluntarily. This is most favorable option for the management to close down a camp. At time camp are closed and the people are made to leave against their wish, called as forced closure. In the humanitarian context, this is the most unfavorable decision by the authorities to consider. Another possibility could be the integration of the camp population in the host community. This, however, is quite rare in view of the cultural and social differences among host and the displaced communities. Ideally, the government should try its best to create an enabling and conducive environment so that the camp communities could go back to their homes with dignity and a deep sense of security and safety. The government authorities should do a detailed and careful assessment of the situation before implementing the decision of phasing out the camp operations. An abrupt closure may potentially generate any untoward situation.

SESSION - 3.4

UNITED NATION's RESPONSE MECHANISM

Learning Objectives

At the end of the session, participants will be able to: -
- Describe the UN hierarchy and response mechanism.
- Explain the structure and role & responsibilities of clusters.

Key Messages

- The aim of the cluster approach is to strength partnership and ensure more predictability and accountability in international responses to humanitarian emergencies.
- Humanitarian response is led by the HC, managed by HCT and supported by inter-cluster coordination group.
- Clusters provide a clear point of contact and are accountable for adequate and appropriate humanitarian assistance. Cluster create partnership between international humanitarian actors, national and local authorities, and civil society.
- The cluster system provides the national governments to make its use in times of disasters.
- OCHA manages a number of tools to facilitate coordination of multiple actors and resources. In particular, it chairs a forum of the most experienced relief agencies and prepares common humanitarian action plan and joint appeals with them.

Session at a Glance

Timing	Topic	Method
20'	Introduction and UN hierarchy	Interactive lecture and presentation
40'	Activity 1: Response mechanism and appeal process	Group work and discussion
15'	Synthesis and session evaluation	Question and answer

🕐	**75'**	
🖌️	• Easel board and papers. • Different colour marking pens. • Charts. • Meta cards. • Power point presentation/slides.	
Preparation	• Prepare power point of session objectives, UN hierarchy, response coordination & information management and appeal process.	

Process

Introduction   **20'**
Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the end of the session, participants will be able to: -
• Describe the UN hierarchy and response mechanism.
• Explain the structure and role & responsibilities clusters.
Explain the UN hierarchy using power point slides in an interactive way (prepare the power point using the content given in the section with the same heading).

Activity 1: Response Mechanism and Appeal Process   **40'**
Divide the participants into 4 groups. Ask the groups to work on the following task by answering the "challenges in Pakistan related to assign topic"
- Group 1: Response through cluster approach
- Group 2: Responsibilities of sector/cluster leads
- Group 3: Inter-cluster coordination
- Group 4: International appeal process
Explain the assign topic with examples. Facilitator to use the content given in the section.

Synthesis and Session Evaluation   **15'**
• Ask the participants if they have questions or clarifications about the topics discussed.
• Answer their questions and provide examples as necessary.
• If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
  - True or False? When a country-level cluster is activated, the global lead agency is always designated as the in-country lead agency, as well.
  - True or false? The humanitarian coordinator is appointed by the emergency relief coordinator.
  - True or False? The humanitarian coordinator leads the humanitarian country team.
  - True or False? The humanitarian country team determines priorities and strategies for humanitarian assistance in a conflict or crisis-affected country.
  - Which of the following might be represented on the humanitarian country Team? Select all that apply.
    - A - National Government
    - B - International organization for migration
    - C - The United Nations
    - D - National and international NGOs
    - E - Red Cross/Red Crescent Movement
    - F - Donors
  - True or False? The main criterion for participation on the humanitarian country team is level of funding by international donors.
  - How many clusters are there at the global level?
• Thank the participants and inform them of the next session.

UNIT NATION's RESPONSE MECHANISM

- In recent years, the role of humanitarian community in responding to natural disasters along with the Government has grown, due to various factors. The most important one is increase number of disasters and their magnitude. To ensure an effective, timely and well-coordinated humanitarian response to populations affected by disasters, the Government of Pakistan at time rely on support of the humanitarian community. Contribution of UN Agencies, INGOs, national NGOs, CBOs and philanthropists in relief and recovery during Earthquake 2005 and Floods of 2010 and 2011 was commendable.

UN Hierarchy
- **Emergency Relief Coordinator (ERC).** Is the Under Secretary General for Humanitarian Affairs, and leads the IASC. The emergency relief coordinator is responsible for the oversight of all emergencies requiring UN humanitarian assistance. In a country affected by a disaster, the emergency relief coordinator may appoint a HC. The emergency relief coordinator ensures IASC endorsement of the HC proposal for cluster activation and cluster lead appointments.
- **IASC.** Is a unique inter-agency forum for coordination, policy development and decision-making involving the key UN and non-UN humanitarian partners. Under the leadership of the emergency relief coordinator, the IASC develops humanitarian policies, agrees on a clear division of responsibility for the various aspects of humanitarian assistance, identifies and addresses gaps in response, and advocates for effective application of humanitarian principles.
- **HC.** Is responsible for assessing whether or not an international response to crisis is warranted and for ensuring the humanitarian response efforts, if needed, are well organized. The HC is accountable to the emergency relief coordinator. HC lead the HCT in deciding the most appropriate coordination solutions for the country, taking into account the local situation
- **HCT.** Is a strategic and operational decision-making and oversight forum established and led by the HC to lead and coordinate international humanitarian assistance in support of existing national efforts. Composition includes representatives from the UN, IOM, international NGOs, the Red Cross/Red Crescent Movement. Some HCTs include donors and NGO. Agencies that are also designated cluster leads should represent the clusters as well as their respective organizations. The HCT is responsible for agreeing on common strategic issues related to humanitarian action.
- **OCHA.** Works closely with global cluster lead agencies and NGOs to develop policies, coordinate inter-cluster issues, disseminate operational guidance and organize field support. At the field level, OCHA helps ensure that the humanitarian system functions efficiently and in support of the HC's leadership. OCHA provides guidance and support to the HC and HCT, and facilitates inter-cluster coordination. OCHA also helps ensure coordination between clusters at all phases of the response, including needs assessments, joint planning, and monitoring and evaluation.

  OCHA serves as the secretariat for critical inter-agency coordination mechanisms such as the IASC, rapid-response tools, such as the UN disaster assessment and coordination system, and the INSARAG. OCHA also promotes efficient interaction between civilian and military actors in humanitarian operations, bridges gap in environmental emergency management, and maps global emergency relief stockpiles on behalf of the whole humanitarian community.

Humanitarian Response

- Humanitarian response is led by the HC, managed by the HCT, supported by an inter-cluster/sector coordination group. The response agencies include a broad range of actors, including UN agencies INGOs and NGOs.
- **Response Actors**
    - **UN Agency.** UN Agency take part in the response in the area as per their mandate. Relief and recovery project are executed either directly or through INGOs/NGOs.
    - **INGOs.** Number of international organization are engaged in humanitarian work in Pakistan. INGOs respond to any situation either independently or as an implementing partner of any UN Agency. In Pakistan their actions are being coordinated PHF. All INGOs are required to get themselves registered with Ministry of Interior. PHF head represent all INGOs in HCT.
    - **NGOs.** National NGOs play a very important role in humanitarian work in Pakistan. Being local, their acceptability in the masses is high and they are more familiar to local cultural value and norms. National NGOs also respond either independently or as an implementing partner of any UN Agency/INGOs. NHN coordinated all activities of local NGOs in Pakistan. Provincial Social Welfare Department is responsible to register the national NGOs. NHN lead represent all NGOs in HCT.
    - **Red Cross/Red Crescent Movement.** All Red Cross/Red Crescent Societies/ Movement are also one of the major response actor. PRCS coordinate all activities carried out of the societies/movement. Red Cross/Red Crescent Movement has status of observer in HCT.
- **Response Coordination and Information Management**
    - OCHA is responsible for bringing together humanitarian actors to ensure a coherent response to emergencies. A key pillar of the OCHA mandate is to "coordinate effective and principled humanitarian action in partnership with national and international actors". Humanitarian coordination seeks to improve the effectiveness of humanitarian response by ensuring greater predictability, accountability and partnership. OCHA is leading the international community's efforts to develop a better architecture for the humanitarian system, including strong in-country humanitarian leader; representative and inclusive HCT; an effective and well-coordinated framework within which all humanitarian organizations can contribute systematically; and predictable funding tools.
    - OCHA's role is to support the leadership of the HC and to ensure effective coordination, including strengthening the cluster approach, data and information management, and reporting. By ensuring that the right structures, partnerships and leaders are supported, OCHA and its humanitarian partners can better prepare for and more effectively coordinate humanitarian situations.
    - **Information Management.** In the UN context information management is the responsibility of OCHA. OCHA and humanitarian partners ensure that relevant information related to a humanitarian emergency is provided to the right person at the right time in a usable form to facilitate situational understanding and decision-making. OCHA with help of cluster/sector leads at the country level ensures that information management activities support national information systems, standards, build local capacities and maintain appropriate links with relevant national, provincial and local authorities. In Pakistan for information sharing 4Ws format is being followed.

Response Mechanism

- **Response through Cluster Approach**
  - In the past few sectors had clearly mandated lead agencies, while others have not. Recognizing this, in September 2005 the IASC agreed to designate global "cluster leads" specifically for humanitarian emergencies in nine sectors or areas of activity.
  - The aim of cluster approach is to ensure a more coherent and effective response by mobilizing groups of agencies, organizations and NGOs to respond in a strategic manner across all key sectors or areas of activity, each sector having a clearly designated lead, as agreed by the HC and HCT. Cluster are groups of humanitarian organizations (UN and non-UN) working in the main sector of humanitarian action, e.g. shelter and health.
  - The cluster approach was applied for the first time following the 2005 Earthquake in Pakistan. Nine clusters were established within 24 hours of the earthquake. Independent reports found that the cluster system gave the Government of Pakistan a clearer and more predictable interface with the humanitarian community. Since 2005, the cluster approach has made significant progress. It is now used in more than 30 countries to deliver humanitarian assistance.
- **Activation of Clusters**
  - They are activated on the request of the host government and when clear humanitarian needs exist within a sector, when there are numerous actors within sectors and when national authorities need coordination support. It goes without saying that cluster provide a clear point of contact and are accountable for adequate and appropriate humanitarian assistance. Clusters create partnership between international humanitarian actors, national and local authorities, and civil society.
- **Aim and scope of the Cluster Approach**
  - To strengthen humanitarian response by demanding high standards of predictability, accountability and partnership in all sectors or areas of activity.
  - To achieve more strategic responses and better prioritization of available resources by clarifying the division of labor among organizations, better defining the roles and responsibilities of humanitarian organizations within the sectors.
- **Cluster Lead**
  - Cluster leads at the have been designated by the IASC for nine sectors or areas of activity which in the past either lacked predictable leadership in situations of humanitarian emergency, or where there was considered to be a need to strengthen leadership and partnership with other humanitarian actors. At global level cluster lead are indicated in the table below: -

Sector	Cluster Lead
Technical Areas	
• Agriculture	FAO
• Education	UNICEF and Save The Children (UK)
• Emergency Shelter	
• Disasters	IFRC (Convener)*
• Complex emergencies	UNHCR
• Food	WFP
• Health	WHO
• Nutrition	UNICEF
• Water, Sanitation and Hygiene	UNICEF
Cross-cutting Areas	
• CCCM	
• Disasters	IOM
• Complex emergencies	UNHCR
• Early Recovery	UNDP
• Protection	
• IDPs (from conflict)	UNHCR
• Disasters/civilians affected by conflict (other than IDPs**)	UNHCR/OHCHR/UNICEF
Common Service Areas	
• Logistics	WFP
• Emergency Telecommunications	OCHA/UNICEF/WFP

* IFRC has made a commitment to provide leadership to the broader humanitarian community in emergency shelter in disaster situations, to consolidate best practice, map capacity and gaps, and lead coordinated response. IFRC has committed to being a 'convener' rather than a 'cluster lead'. In an MoU between IFRC and OCHA it was agreed that IFRC would not accept accountability obligations beyond those defined in its constitutions and own policies and that its responsibilities would leave no room for open-ended or unlimited obligations. It has therefore not committed to being 'provider of last resort' nor is it accountable to any part of the UN system.

** UNHCR is the lead of the global protection cluster. However, at the country level in disaster situations or in complex emergencies without significant displacement, the three core protection mandated agencies (UNHCR, UNICEF and OHCHR) will consult closely and, under the overall leadership of the HC/RC, agree which of the three will assume the role of Lead for protection.

- **Responsibilities of Sector/Cluster Leads**
  - Cluster leads are responsible for establishing broad partnership bases (i.e. "clusters") that engage in activities in three main areas, as follows: -
  - **Standards and Policy-setting**
    - Consolidation and dissemination of standards; where necessary, development of standards and policies; identification of 'best practice'.
  - **Building Response Capacity**
    - Training and system development at the local, national, regional and international levels.
    - Establishing and maintaining surge capacity and standby rosters.
    - Establishing and maintaining material stockpiles.
  - **Operational Support**
    - Assessment of needs for human, financial and institutional capacity.
    - Emergency preparedness and long term planning.
    - Securing access to appropriate technical expertise.
    - Advocacy and resource mobilization.
    - Pooling resources and ensuring complementarity of efforts through enhanced partnerships.
- **Responsibilities of Sector/Cluster Leads.** The role of sector leads at the country level is to facilitate a process aimed at ensuring well-coordinated and effective humanitarian responses in the sector or area of activity concerned. Sector leads themselves are not expected to carry out all the necessary activities within the sector or area of activity concerned. They are required, however, to commit to being the 'provider of last resort' where this is necessary and where access, security and availability of resources make this possible. Responsibilities of sector leads at the country level include ensuring the following: -
  - Inclusion of key humanitarian partners.
  - Establishment and maintenance of appropriate humanitarian coordination mechanisms.
  - Coordination with national/local authorities, institutions, local civil society and other relevant actors.
  - Participatory and community-based approaches.
  - Attention to priority cross-cutting issues (e.g. age, diversity, environment, gender, HIV/AIDS and human rights).
  - Needs assessment and analysis.
  - Emergency preparedness.
  - Planning and strategy development.
  - Application of standards.
  - Monitoring and reporting.
  - Advocacy and resource mobilization.
  - Training and capacity building.
  - Provision of assistance or services as a last resort.
- **Inter-cluster Coordination**
  - Inter-cluster coordination platform is provided by OCHA. Inter-cluster coordination is a cooperative effort among sectors/clusters and the HCT to assure coherence in achieving common objectives, avoiding duplication and ensuring areas of need are prioritized. Inter-cluster coordination takes place at the national and sub-national level, to coordinate the implementation of the response through each step of the humanitarian program cycle.

- The HC and HCT provide an overall strategic direction to the humanitarian community in support of the national response. Guided by the HCT, inter-cluster coordination provides a platform for clusters to work together to advance the delivery of assistance to affected people effectively and efficiently. It does this by encouraging synergies between sectors, ensuring roles and responsibilities are clearly defined, closing potential gaps and eliminating duplication.
- Inter-cluster coordination plays a critical role in facilitating the development of the strategic response plan and assures a coherent and coordinated approach to planning and operationalizing the shared strategic objectives as set out in the strategic response plan.
- **International Appeal Process**
  - **Types of Appeal**
    - **Flash Appeal.** The flash appeal is a tool for structuring a coordinated humanitarian response for the first three to six months of a new emergency. The UN RC/HC triggers it in consultation with the Government within two days of a major disaster or in response to an ongoing or slow-onset crisis. It contains an analysis of the context and of humanitarian needs (citing whatever specific needs assessments are available, as well as any other evidence such as informal reports, remote sensing, background data, and inference), response plans (at the general strategic level as well as sector plans including specific proposed projects), and information on roles and responsibilities.
    - **Consolidated Appeal.** The consolidated appeals process is a program cycle for aid organizations to plan, coordinate, fund, implement, and monitor their response to disasters and emergencies, in consultation with governments. The consolidate appeal covers the requirement of residual relief and recovery. The appeal contributes significantly to developing a strategic approach to humanitarian action, and fosters close cooperation between host governments, donors, aid agencies, and in particular between NGOs, the Red Cross Movement and UN agencies.
  - **Appeal Process.** Following is the process of launching the international appeal and steps: -
    - Request by the government
    - Need assessment through MIRA
    - Flash appeal document including project in consultation with NDMA, PDMA (s), EAD and MoFA, being the main stakeholders
    - Launch of appeal jointly by the Government & UN System
    - Cluster based intervention, which are coordinated by NDMA & PDMAs
    - Relief and recovery need assessment through recovery need assessment
    - Consolidated appeal document including project in consultation with NDMA, PDMA (s), EAD and MFA, being the main stakeholders
    - Sectors based intervention which are coordinated by NDMA & PDMAs
    - Damage and need assessment by World Bank & ADB on request of EAD
    - Funding requirement for reconstruction
    - Reconstruction process

SESSION - 4.4

DISASTER RECOVERY

Learning objectives

At the end of the session, participants will be able to: -
- Describe disaster recovery concepts and its relevance.
- Explain types of recovery and recovery planning.
- Discuss linkages of recover planning with disaster management cycle and post disaster damage & need analysis for recovery planning.
- Enumerate recovery activities and guiding principles for recovery.
- Elucidate steps/factors for achieving disaster recovery.

Key Messages

- Each disaster recovery context is unique and requires refined approaches.
- Recovery planning should be done well in advance, ideally before the disaster strikes and should be integrated in preparedness planning.
- Recovery principles are the values which guide how recovery will take place.
- Recovery is an opportunity for better development as it provides a 'window of opportunity' for DRR.
- Accurate post-disaster damage assessment and need analysis facilitates efficient and effective utilization of existing logistics.
- The concept of pre-disaster recovery planning is not new but it requires foresight and experience and most importantly political will.

Session at a Glance

Timing	Topic	Method
15'	Activity 1: Introduction - What is recovery and its types?	Brainstorming and presentation
15'	Disaster recovery planning and post disaster damage & need analysis for recover planning	Interactive lecture/ presentation
20'	Activity 2: Recovery activities	Group work and discussion
25'	Activity 3: Guiding principles for recovery	Exercise
25'	Activity 4: Success factors of disaster recovery	Group work and discussion
10'	Synthesis and session evaluation	Question and answer

	110'
	• Easel board and papers. • Different colour marking pens. • Blue and green meta cards. • Power point presentation/slides.
Preparation	• Prepare power point/chart papers with session objectives. • Prepare power point of recovery, when it begins and types of recovery. • Prepare power point of disaster recovery planning and post disaster damage & need analysis for recovery planning. • Prepare power point of recovery activities and guiding principles for recovery. • Prepare power point of factors contributing success in achieving disaster recovery. • Print handout 16 for each participant.

Process

Activity 1: Introduction - What is Recovery and its Types?   **15'**
Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the end of the session, participants will be able to: -
• Describe disaster recovery concepts and its relevance.
• Explain types of recovery and recovery planning.
• Discuss linkages of recover planning with disaster management cycle and post disaster damage & need analysis for recovery planning.
• Enumerate recovery activities and guiding principles for recovery.
• Elucidate steps for achieving disaster recovery.
Ask the participants about the understanding of the term recovery and its types. Write participant's response on the board.
Conclude the discussion using power point related to what is recovery, when it begins and types of recovery (use the content of handout to prepare presentation).
Disaster Recovery Planning and Post Disaster Damage & Need Analysis for Recover Planning   **15'**
Present the disaster recovery planning process, its linkages with disaster management cycle and procedure being followed in Pakistan for need analysis for both intermediate/early recovery and long term recovery (content is available in the content section with the same heading) using power point slides in an interactive way by giving relevant examples. For material please refer to handout.

Activity 2: Recovery Activities   **20'**
Divide participants into four groups and asked two groups to write focus areas and activities/actions/steps taken during intermediate/early recovery. Ask other two groups to determine focus areas and activities/actions/steps taken during long-term recovery.
Each group to present their work to all, which will be followed with a discussion. Facilitator will make sure that steps and factor are displayed on the projector while it is being presented. For material please refer to content section.

Activity 3: Guiding Principles for Recovery 25'
Provide meta cards to participants and ask them to write the guiding principles which guide the process of recovery (one on each card) and paste it on the board or sticky sheet. Categorize activities as explained in the session below. Conclude the session by sharing the missing activities.

Activity 4: Success Factors of 25'
Divide participants into four/five groups (depending upon the total strength) and asked them to discuss and list down the factors likely to stimulate a successful recovery.
Each group will present their work, which will be followed with a discussion. Facilitator will make sure that success factors are displayed on the projector while it is being presented. For material please refer to content section.

Synthesis and Session Evaluation 10'
- Ask the participants if they have questions or clarifications about the topics discussed.
- Answer their questions and provide examples as necessary.
- If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
  - What is recovery and when should it begins?
  - What are the types of recovery?
  - What are the assessment practices being followed in Pakistan for damage & need analysis?
  - What are the activities/action undertaken both for early and long-term recovery?
- Thank the participants and inform them of the next session.

Handout

Handout 16: Disaster Recovery

DISASTER RECOVERY

The term "recovery" is used to describe post-disaster rehabilitation and reconstruction, including development post-disaster. Each recovery context is unique and requires a refined approach and novel thinking. Nature of recovery differs from event to event, place to place and time to time. The damage caused by floods, earthquakes and cyclones is on a much larger scale than other disasters and recovery after these disasters poses a challenge. In disasters like drought, the relief phase is prolonged and since there is no damage to the infrastructure and property, the rehabilitation is confined to restoration of livelihoods. Recovery in case of epidemics is more in the form of sanitizing the community against any future recurrence and may also involve counselling of the victims. Industrial disasters being quite varied in nature, the rehabilitation efforts spanning over a generation of victims apart from restoring livelihoods and providing social and psychological assistance. Rehabilitation following disasters such as landslides and avalanches is localized and is of a similar nature as in earthquakes but on a smaller scale.

What is Recovery? The UNISDR defines recovery as the restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors.

When it Begins. Ideally recovery continuum begins before a disaster strikes. Preparedness activities such as planning, capability building etc, which contribute to the community's and the nation's resilience can be undertaken. The recovery task of rehabilitation and reconstruction begins soon after the emergency phase has ended or in the early stages of the response operations or it could be overlapping. It is based on pre-existing strategies and policies that facilitate clear institutional responsibilities for recovery action and enable public participation. Recovery programs, coupled with the heightened public awareness and engagement after a disaster, afford a valuable opportunity to develop and implement DRR measures and to apply the "build back better" principle.

Types of Recovery. Recovery efforts following rescue and relief in any disaster can be classified into two types as follows: -

- **Intermediate Recovery/Early Recovery.** Involves returning critical infrastructure and essential government or commercial services back to a functional, if not pre-disaster state. Such activities are often characterized by temporary actions that provide a bridge to permanent measures. The term early recovery is widely used for defining and designing recovery framework. Early recovery is a multi-dimensional process guided by development principles that begins in a humanitarian setting and seeks to build on humanitarian programs and catalyze sustainable development opportunities. It aims to generate and/or reinforce nationally owned processes that are resilient and sustainable. It encompasses the restoration of basic services, livelihoods, transitional shelter, governance, environment and other socio-economic dimensions.

- **Long-term Recovery.** Process of recovery that follows a disaster event and may continue for months and years. Examples include the development, coordination and execution of service and site restoration plans, the reconstitution of Government operations and services, individual, private sector, non-governmental and public assistance programmes to provide housing and to promote restoration, long-term care and treatment of affected persons, additional measures for social, environmental and economic restoration, evaluation of the incident to identify lessons learned, post-incident reporting and development of initiatives to mitigate the effects of future incidents.

Disaster Recovery Planning

- Ideally, the recovery continuum begins before a disaster strikes, with preparedness activities such as planning, capability building, exercising, and establishing tools and metrics to evaluate progress and success; mitigation planning and actions; economic development planning, and vital partnership building, all of which contribute to the community's and the nation's resilience. Post disaster recovery activities begin in the early stages of the response operations and may last for years. Actions that help recovery, resilience, and sustainability should be built into the steady state operations of governments at all levels.

- As response activities often set the stage for recovery, therefore can influence long-term recovery and be choice-limiting, and these long term recovery impacts must be considered for their potential impact prior to implementation. As response actions wind down, stabilization activities are primary. Stabilization is the process in which the immediate impacts of an event on community systems are managed and contained, thereby creating an environment where recovery activities can begin. The various elements of a community system will stabilize on different time frames, leading to a situation in which response, stabilization, and restoration activities can occur concurrently.

Recovery Planning and Disaster Management Cycle

- The single most effective means of strengthening the capacity to plan and implement sustainable recovery efforts is preparing and planning for disaster recovery before a disaster happens. Integrating recovery planning throughout the disaster management process can expedite well-informed decision-making through the: -
    - Identification of existing vulnerabilities and capacities.
    - Formulation of a vision and framework for post-disaster planning.
    - Engagement and capacity building of potential partners.
    - Development or strengthening of institutions and regulations to facilitate disaster operations.

- When governments do not engage in recovery planning until a disaster occurs, typically the result is: -
    - Hasty and reactive decisions that sacrifice relevance and sustainability or
    - Careful but delayed planning that sacrifices the need for urgency and must address potentially conflicting recovery efforts that have taken place in the waiting period.

Post-Disaster Damage and Needs Analysis for Recovery Planning

- Understanding of post-disaster damage and needs analysis is crucial for planning recovery. Recovery planning could only be effective if detailed assessment is carried out and made available for policymaking. The primary objective of assessment is to provide a clear, concise picture of post-disaster situation, to identify needs and to develop strategies for recovery. In Pakistan context following types of analysis/assessment is conducted to determine the needs of recovery: -
    - **Intermediate Recovery/Early Recovery.** In order to determining the recovery need, recovery need assessment (RNA) is conducted. A comprehensive methodology for RNA has been formulated by NDMA in collaboration with UNDP. The assessment is based on the primary data collected by the government authorities, verification by the joint team and analysis. Based on the assessment, the recovery needs are worked out for all the sectors.

- **Long-term Recovery.** Damage and need assessment (DNA) is initiated with the objective of estimating the extent of the damage and the required needs for rehabilitation and reconstruction of the damaged assets and infrastructure; and restoration of livelihoods and economic productivity. Asian Development Bank and the World Bank leads assessment the assessment process in close coordination with government. Economic Affairs Division (EAD), Ministry of Finance initiate the request for conduct of DNA, whereas all coordination is done by NDMA/PDMAs.
  - **Methodology.** For the estimation of the effects and impact of the disaster, the methodological tool developed by UN are used. The impact of the disaster on each sector of the economy is estimated with the following three costs: -
    - **Direct Damage.** Referring to the monetary value of the completely or partially destroyed assets, such as social, physical and economic infrastructure immediately following a disaster.
    - **Indirect Losses.** Referring to income losses, comprising of both the change of flow of goods and services and other economic flows such as increased expenses, curtailed production and diminished revenue, which arise from the direct damage to production capacity and social and economic infrastructure.
    - **Reconstruction Costs.** Measuring the cost of rebuilding lost assets and restoring lost services, assessed as the replacement cost with a premium added for building back smarter.
  - Data from district and tehsil level is collected by the Government and, verified and validated by the DNA sector teams. The data received by the DNA sector teams is validated through a number of measures including: field damage inspection visits by sector teams; interviews with stakeholders; desk review; satellite imagery and GIS data comparisons; and other plausibility checks. Based on the above, analytical work is undertaken by sector teams for a comparative pre and post disaster assessment of the infrastructure and services affected.

Recovery Activities
- **Intermediate Recovery/Early Recovery**
  - **Focus Area**
    - Shelter
    - Agriculture and food security
    - Health and nutrition
    - Education
    - Water, hygiene and sanitation
    - Governance
    - Livelihood
    - Community infrastructure
    - DRR, gender equality, environment and protection issue shall be integrated in all areas as cross cutting themes
  - **Activities.** Are often characterized by temporary actions that provide a bridge to permanent measures. The actions are: -
    - Providing accessible interim housing (in or outside the affected area depending on suitability) and planning for long-term housing solutions.
    - Returning of displaced populations and businesses if appropriate.
    - Reconnecting displaced persons with essential health and social services.
    - Providing supportive behavioral health education, intervention, including continuing to provide crisis, grief, and group counseling and support.

- Providing access and functional needs assistance to preserve independence and health.
- Updating hazard and risk analyses to inform recovery activities.
- Establishing a post-disaster recovery prioritization and planning process.
- Developing an initial hazard mitigation strategy responsive to needs created by the disaster.
- Ensuring that national and local critical infrastructure priorities are identified and incorporated into recovery planning.
- Developing culturally and linguistically appropriate public education campaigns to promote rebuilding to increase resilience and reduce disaster losses
- Supporting capacity assessment of local, state, and tribal governments to plan and implement recovery.
- Complete assessments of natural and cultural resources and develop plans for long-term environmental and cultural resource recovery.

- **Long-term Recovery.** Is the phase of recovery that follows intermediate recovery and may continue for months to years. Examples include the complete redevelopment and revitalization of the damaged area. It is the process of rebuilding or relocating damaged or destroyed social, economic, natural, and built environments in a community to conditions set in a long-term recovery plan. The goal underlying long-term redevelopment is the impacted community moving toward self-sufficiency, sustainability, and resilience. Activities may continue for years depending on the severity and extent of the disaster damages, as well as the availability of resources, and include the following: -
  - Identifying of risks that affect long-term community sustainment and vitality.
  - Developing and implementing disaster recovery processes and plans, such as a long term recovery plan, mitigation plan, land use planning and management.
  - Rebuilding to appropriate resilience standards in recognition of hazards and threats.
  - Rebuilding educational, social, and other human services according to standards for accessible design.
  - Implementing mitigation strategies, plans, and projects.
  - Implementing permanent housing strategies.
  - Reconstructing and/or relocating, consolidating permanent facilities.
  - Implementing economic and business revitalization strategies.
  - Implementing plans to address long-term environmental and cultural resource recovery.
  - Ensuring an ongoing and coordinated effort among all entities to deter and detect waste, fraud & abuse.

Guiding Principles for Recovery. The following principles attempt to guide the process so that, while addressing the most pressing needs of the affected population, all opportunities for change are seized to achieve the desired sustainability of the recovery effort.

- **Mainstreaming DRR in the Recovery/Development Process.** The integration of risk reduction into all aspects and proposals of the redevelopment process is essential to achieve the overarching goal of sustainable recovery. All recovery programs and proposals must aim at improving safety standards and reducing risk, avoiding the danger of rebuilding previous vulnerabilities or creating new risks. The recovery process fully backed by an approved government policy, an enabling national system, the appropriate tools and the advocacy among all the actors including civil society are the few basic pre-requisites for DRR mainstreaming to occur successfully.

- **Coordinated Approach.** The aftermath of a major disaster is frequently characterized by a multiplicity of actors, national and international, promoting and initiating recovery activities. Coordination and information sharing thus become even more essential to avoid duplications & gaps and to optimize the resources available for sustainable recovery. The Government must seek the assistance and advantages offered by all sections of society, including academia, media and civil society organisations (CSOs) and encourage the establishment of appropriate CSO-Government partnership mechanisms to assist in planning and implementing recovery.
- **Participatory Approaches and Decentralized Planning.** Recovery plan must be prepared on the basis of a sound, participatory assessment of needs and capacities of the affected population, so that the local initiative, resources and capacities are fully understood and utilized. It must be demand driven and designed to reach the most vulnerable population.
- **Building Local Capacities.** Achieving the goal of building local and national capacities implies that external technical assistance must complement existing capacities, be conceived as supportive and not directive, and must entail transfer of technology, know-how and capacities for increased resilience, risk management and sustainable development.
- **Integration of Ongoing Initiatives.** The recovery process represents an opportunity to review on-going development initiatives and reorient as necessary and feasible in order to contribute to building resilience and capacities in the affected communities. As a minimum, ongoing initiatives should be reviewed to ensure that they do not contribute to the further accumulation of risk.
- **Building Back Better.** Recovery activities should contribute to improving the living conditions of the affected communities and sectors through the revival of production (agriculture, industry), trade and services, and the creation of income-generation/employment opportunities. The goal should go beyond the simple restoration of pre-disaster levels, but aim towards the creation of more sustainable infrastructure. The authorities should focus on a policy of "building back better" while implementing the recovery strategy, to ensure that the challenges to human development and poverty reduction are not further exacerbated by recurrent natural disasters. Moreover, to secure future development gains, affected populations will be encouraged to acquire new skills with a view to diversifying their livelihoods to decrease the risk to local economies.
- **Gender Sensitivity.** The recovery process should aim at reducing the vulnerability of social groups and increase gender equality. Particular attention should be paid in the assessment, planning and programming stages for recovery, to the vital role that women play as community members and leaders. Needs of vulnerable groups including poor, disabled, women/women-headed households, children and orphans must be recognized and priority should be given to the specific needs of these populations. Authorities must ensure that there is no restriction on assistance based on gender, ethnicity, religion, age, social status, disability, etc.
- **Monitoring, Evaluating and Learning.** Recovery programs and plans must include appropriate, participatory monitoring and evaluation mechanisms that allow timely implementation of corrective measures, capturing the experience and the voices of the target population, building on the demonstrative effects, increasing effectiveness and learning. Moreover, robust quality control mechanisms, such as the involvement of the Space and Upper Atmosphere Research Organisation and the National Database and Registration Authority to verify the extent of damage and the lists of affected people, should be utilized.

Success Factors of Disaster Recovery. Factors likely to stimulate a successful recovery are: -

- **Citizen Engagement, Public Participation, and Public Communications.** Collaboration to maximize the use of available resources for recover in a resilient manner and community participation for transparency and accountability must be ensured. Continuous communication with citizens on various recovery programs, as well as the overall recovery progress will increase public confidence.
- **Decision-Making and Coordination.** Realistic metrics (preferably during pre-disaster planning and updated as soon as possible after disaster) for tracking progress, ensuring accountability, and reinforcing realistic expectations among stakeholders must be established for informed and timely decisions.
- **Coordination and Integration of Community Recovery Planning Processes.** Development of pre-existing recovery plans to improve the speed and quality of post-disaster recovery decisions is essential. A process and criteria for transparently identifying and prioritizing key recovery actions and projects for community will ensure success.
- **Recovery Management.** Well-established, pre-disaster partnerships at all level will help to drive a successful recovery. Leverage and coordinate disaster and steady-state public and private assistance programs are likely to accelerate the recovery process and avoid duplicative efforts.
- **Financial/Acquisition Management.** Access to broad and diverse funding sources is critical to financing recovery efforts. Flexibility of program funds and resources is critical to finance planning, recovery management, program administration, and implementation in a post-disaster environment. Recovery management programs must have the capability to develop and maintain adequate financial monitoring and accounting systems that detect & deter fraud, waste and abuse.
- **Organizational Flexibility.** Recovery structures at all government levels should be able evolve, adapt and develop new skills and capacities to address the changing landscape of post-disaster environments. Functional and effective intergovernmental relations can influence the efficiency of recovery process. Flexible staffing and management structure can enhance the adaptability of the governmental structure; moreover, pre-disaster partnerships can help reduce or avoid the challenges of establishing new partnerships in a post-disaster environment.

SESSION - 5.4

LOGISTICS MANAGEMENT

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Learning objectives

At the end of the session, participants will be able to: -
- Differentiate between humanitarian supply chain and logistics management.
- Describe humanitarian supply chain's elements and requirements.
- Explain process of assessment for logistics planning.
- Elucidate logistics planning process and planning cycle.
- Describe procurement principles, objectives and process involved.
- Explain transport and cargo planning process.
- Illustrate purposes of warehouse, site selection criteria and inventory management.

Key Messages

- Logistics is a diverse and dynamic function and changes according to the various constraints and demands.
- Supply chain management encompasses all activities including logistics management.
- Planning, sourcing and logistics are the three main components of the humanitarian supply chain.
- Logistics assessment is the process of gathering, analysing and disseminating logistics related information.
- Logistics planning is not a standalone activity, rather a component of overall operation.
- Transparency, accountability and efficiency & cost effectiveness are the three important principles of humanitarian logistics procurement.
- Warehouse as a transshipment point, facilitates timely and cost efficient movement of humanitarian cargo.

Session at a Glance

Timing	Topic	Method
5'	Introduction	Presentation
15'	Activity 1: Supply chain vs logistics and elements & requirements of humanitarian supply chain	Brainstorming and presentation
30'	Activity 2: Logistics planning and assessment	Group work and discussion
15'	Procurement and transportation	Interactive lecture/ presentation
15'	Warehousing and inventory management	Presentation and discussion
10'	Synthesis and session evaluation	

	90’
(clock icon)	
(easel icon)	• Easel board and papers. • Different colour marking pens. • Blue and green meta cards. • Power point presentation/slides.
Preparation	• Prepare power point/chart papers with session objectives. • Prepare power point defining supply chain & logistics, elements & requirements of humanitarian supply chain. • Prepare power point of purpose, process of logistics assessment and essential factors for logistics planning. • Prepare power point of principles, objectives, police & process of procurement, mode of transport available in Pakistan, aspects of transport planning transport constrain in Pakistan and purpose, considerations for selection of warehouse, space utilization criteria and inventory management. • Print handout 17 for each participant.

Process

Introduction   **5'**
Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the end of the session, participants will be able to: -
• Differentiate between humanitarian supply chain and logistics management.
• Describe humanitarian supply chain's elements and requirements.
• Explain process of assessment for logistics planning.
• Elucidate logistics planning process and planning cycle.
• Describe procurement principles, objectives and process involved.
• Explain transport and cargo planning process.
• Illustrate purposes of warehouse, site selection criteria and inventory management.

Activity 1: Supply Chain vs Logistics and Elements & Requirements of Humanitarian Supply Chain   **15'**
• Ask the participants about the difference between supply chain and logistics. Write participant's response on two separate board, one each for supply chain and logistics.
• Conclude the discussion using power point highlighting differences between two terms (use the content of section to prepare presentation).
• Discuss elements and requirements of humanitarian supply chain.

Activity 2: Logistics Planning and Assessment   **30'**
Divide participants into three groups and asked them to discuss and formulate their response on chart paper as per the following distribution
Group 1: Purpose and process of logistics assessment.
Group 2: Process of logistics planning.
Group 3: Essential factors for logistics planning.

Each group will present their work, which will be followed with a discussion. Facilitator will make sure that response to each is also displayed on the projector while it is being presented. For material please refer to content section.

Provide meta cards to participants and ask them to write the components of logistics planning cycle (one on each card). Write planning cycle in the middle of the chart and ask participants to paste the cards around it. Categorize components as explained in the session below. Conclude the session by sharing the missing components.

Procurement and Transportation   **15'**

Present the principles, objectives, policy & process of procurement. Also highlight the mode of transport available in Pakistan, aspects of transport planning and transport constrains in Pakistan (content is available in the section with the same heading) using power point slides in an interactive way by giving relevant examples.

Warehousing and Inventory Management   **15'**

Present the purpose, considerations for selection & setting-up warehouse, space utilization criteria and inventory management (content is available in the section with the same heading) using power point slides in an interactive way by giving relevant examples.

Synthesis and Session Evaluation   **10'**

- Ask the participants if they have questions or clarifications about the topics discussed.
- Answer their questions and provide examples as necessary.
- If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
    - What is the difference between supply chain and logistics?
    - What is the purpose of logistics assessment?
    - What are the essential factors for logistics planning.?
    - What are the principles and objectives of procurement process?
    - What are the considerations for selection & setting-up of warehouse?
- Thank the participants and inform them of the next session.

Handout

Handout 17: Logistics Management

LOGISTICS MANAGEMENT

Introduction

- Logistics planning is a key component of any disaster reduction effort. Planning is both necessary and practical, since it is generally possible to foresee the types of disasters that may affect a given location and the needs that such disasters will be likely to engender. Logistics planning must be based on the vulnerability and resource assessment. Logistics is a diverse and dynamic function that is flexible and changes according to the various constraints and demands.
- There is often confusion between "logistics" and "supply chain management". Logistics is one activity of the end-to-end process of supply chain management. On the other hand, supply chain management deals with the management of materials, information, and financial flows in a network consisting of suppliers, manufacturers, distributors, and customers. Humanitarian logistics slightly differs commercial as business logistics and commercial supply chains are sophisticated operations based on demand, inventory control and a number of models that optimize a dynamic and fast moving system. Humanitarian supply chains are essentially the same but with the following significant differences: -
  - Unpredictable demand in terms of timing, geographic location, type and quantity of commodity;
  - Short lead time and suddenness of demand for large amounts of a wide variety of products and services;
  - High humanitarian stakes regarding timelines in the face of a sophisticated global media and the high anticipatory attention of the donors;
  - Lack of initial resources in terms of supply, human resource, technology, capacity and funding.

What Is Supply Chain Management? According to the Council of Supply Chain Management Professionals, *"Supply chain management encompasses the planning and management of all activities involved in sourcing and procurement...and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies."* (CSCMP)

What Is Logistics?

- The CSCMP also defines logistics management as "the part of supply chain management that plans, implements, and controls the efficient, effective forward and reverses flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customers' requirement... Logistics management is an integrating function, which coordinates and optimizes all logistics activities, as well as integrates logistics activities with other functions including marketing, sales manufacturing, finance, and information technology." (CSCMP 2011)
- Logistics activities can also be termed as the operational component of supply chain management, including quantification, procurement, inventory management, transportation and fleet management, and data collection and reporting. Supply chain management includes the logistics activities plus the coordination and collaboration of staff, levels, and functions. The supply chain includes global manufacturers and supply and demand dynamics, but logistics tends to focus more on specific tasks.

Humanitarian Supply Chain Elements. Following are the three components of the humanitarian supply chain: -

- **Planning.** Can be defined as translating programme requirements into logistics planning and includes the development of a strategy to select and manage the required resources as well as a set of metrics to monitor the supply chain's efficiency.
- **Sourcing.** Refers to the process of identifying sources of supply that can meet the organisations immediate and future requirements for goods and services. In an emergency situation the immediate needs would be priority consideration.
- **Logistics.** Is the only a part of the supply chain and is concerned with physical material and information flows from raw material through to the final destination of the finished product. Major emphasis is now placed on the importance of information as well as physical flows, and an additional and very relevant factor is that of reverse logistics - flow of products and packaging back through the system.
- Information (gathering and sharing) is a key component of the success of the humanitarian supply chain. It starts with gathering correct information concerning needs identification and includes information sharing and coordination between different parts of the humanitarian supply chain.

Humanitarian Supply Chain Requirements. Supply chain will depend on following factors: -

- **Operational Context.** The operational context determines the constraints that emergency response /logistics staff face when setting up their logistics operation. Such constraints will in turn influence the choice of supply routes and modes of transport, the selection of service providers and the type of contract issued.
- **Humanitarian Cargo.** The type of cargo to be distributed greatly influences the selection of storage, transportation, and distribution options. Logistics staff will need to develop good knowledge of the characteristics and handling requirements of the different types of humanitarian cargo in order to optimize the supply chain.

Preparedness for Response
- **Logistics Planning and Assessment**
  - **Assessment.** Logistics assessment is the process of gathering, analysing and disseminating logistics related data and information in relation to the impact of a disaster. It determines the extent of the impact and the logistical needs. Assessments should be continuous in nature and enable organizations to monitor changes as a response or intervention evolves.
    - **Purpose of Assessment**
      - Identifies impact on infrastructure, etc.
      - Identifies most urgent needs - prioritization.
      - Identify the most affected areas - enable positioning of hubs, etc.
      - Defines level of response depending on complexity.
      - Highlights special concerns.
      - Identifies any other assessments that need to be done.
      - Provides baseline data to benchmark and monitor.
    - **Assessment Process**
      - Clarify the nature of the intervention.
      - Collect data & Information.
      - Analyze and interpret data & information.
      - Report conclusions and provide a logistics response plan.

- **Planning**
  - **Planning Process.** Planning is largely a decision making process that involves choosing among alternatives. The seven basic steps of planning are: -
    - Problem identification - Is it a natural disaster, or a complex emergency?
    - Data or information gathering - community needs, response team needs such as relief items. vehicles, environmental assessment.
    - Choosing among alternative solutions.
    - Implementing the solution.
    - Following up implementation and taking action where changes are required.
    - Exit strategy.
  - Logistics planning is not a standalone activity, rather a component of overall operation. The active engagement of all stakeholders and logistics staff at all levels is vital for good results. The involvement of logistics in program planning inevitably results in the delivery of quality services that contribute to well-coordinated, effective and efficient interventions.
  - **Planning Cycle.** A response can only be successful if program needs are fully understood and addressed. The key to this is an integrated collaborative planning process across functions

  - **Factors to Consider in the Development of a Good Logistics Plan**
    - Financial resources availability.
    - Staff availability:
    - Information management tools.
    - External infrastructure available.
    - Stocks and movements.
    - Financial resources and staff availability.
    - Transport information.
    - Distribution, monitoring and evaluation.
    - Security arrangements.
    - Exit strategy.

- **Procurement and Transportation**
  - **Procurement.** Procurement is the process of identifying and obtaining goods and services. It includes sourcing, purchasing and covers all activities from identifying potential suppliers through to delivery from supplier to the users or beneficiary.
    - **Procurement Principles.** Three important principles of humanitarian logistics procurement are: -
      - **Transparency.** All phases in the procurement process are fair and accurately documented.
      - **Accountability.** Accountability may require certain rules laid by the Government/donors to be followed when using the money, they have provided.
      - **Efficiency and Cost Effectiveness.** Meeting the six rights of supply; price, right time, right quantity, quality services, delivery to the required places and from the most cost effective source.
    - **Procurement Objectives.** The aim and objective of procurement is to carry out activities related to procurement in such a way that the goods and services are procured according to the "Six Rights." These "Six Rights" are: -
      - Right QUALITY
      - Right SOURCE
      - Right COST
      - Right QUANTITIES
      - Right PLACE
      - Right TIME
    - **Procurement Policies.** Procurement policies will vary depending upon the source of funding. In case public/government funds, the Public Procurement Regulatory Authority (PPRA) rules have to be followed. However, if resources entrusted to by the donors, rules specified by them needs to be followed for all procurements.
    - **Procurement Process.** For emergency response purposes the procurement process can be wrapped into following steps: -
      - **Pre-tender Process**
        - Needs identification.
        - Determine specification.
        - Chose procurement method.
        - Prepare solicitation documents
      - **Tender Process**
        - Seek, clarify and close offers
        - Evaluate offers.
        - Seek approval
      - **Contract Management**
        - Award contract.
        - Negotiate contract.
        - Manage contract.
        - Evaluate procurement.
  - **Transportation.** In the context of humanitarian organizations transport is defined as "the activities involved in moving supplies from point of origin to internal customers or beneficiaries". The aim of transport is to physically move supplies in a reliable and safe manner, on time, cost effectively and efficiently to its destination.

- **Mode of Transport.** The following modes of transport are available in Pakistan: -
  - Air
  - Sea
  - Road
  - Rail
  - Others
    - Animal
    - Boats
- **Transport Planning.** For efficient/effective planning, following aspects to must be considered: -
  - **External Environmental**
    - Weather
    - Infrastructure
    - Seasonal limitations
  - **Internal Operational Requirements**
    - Budget
    - Operational scope
  - **Transport Market**
    - Availability of transporters
    - Market structure
    - Competition
- **Cargo planning.** Cargo planning mainly depends on following facts: -
  - **Constraint of Volume or Weight.** When planning the transport of different kinds of cargo, weight and the volume of the consignment must be considered. Because some relief items are either lighter or more voluminous, calculating a truckload by looking at the metric tonne (MT) capacity of the truck is not sufficient.
  - **Value of the Goods and Security Concerns.** Value and security concern will also dictate the type i.e. requirement of closed or open trucks.
  - Vulnerability to damage due to poor handling
- **Volumes of Commonly used Trucks in Pakistan**

Vehicle Type	Volume (M3)	MT Capacity
• 5 Tonner	12 m3	4-5 MT
• 10 Tonner	28 m3	10-12 MT
• 30 Tonner	85 m3	30 MT
• 20 Feet container	33.2 m3	23 MT
• 40 Feet container	67.4	27 MT

Transport Constraints in Pakistan
  - Lack of supervision by the government.
  - Non standards trucks specifications/local modifications.
  - Non-compliance to axle load limitations.
  - Fuel prices instability
  - Transport sticks
  - Non-availability of trucks on religious events like Eid etc.
  - Seasonality
- **Warehousing and Inventory Management**
  - **Warehousing.** Warehouse is a planned space for the storage and handling of goods and material. In general, warehouses are focal points for product and information flow between sources of supply and beneficiaries. However, in humanitarian supply chains, warehouses vary greatly in terms of their role and their characteristics.

- **Purpose of warehouse.** Following are the two main purposes of warehouse: -
  - As a transshipment point the warehouse facilitates the timely and cost efficient movement of humanitarian cargo. This includes: -
    - Dividing humanitarian cargo arriving in break-bulk for eventual dispatch to other warehouses.
    - Consolidating humanitarian cargo received from different suppliers/shipments.
    - Combining and preparing humanitarian cargo for dispatch and/or distribution.
  - To store and protect humanitarian cargo.
- **Selection and Setting-Up a Warehouse**
  - **Determining Needs.** In determining needs, one should look beyond the basic need of a warehouse to store things. Whilst, this is correct there are also other considerations like: -
    - Volume of goods to be stored.
    - Breaking bulk location.
    - Area for sorting and consolidating different goods.
    - Enhance the speed of the response.
    - As a buffer in the event of a break-down or delay in the supply pipeline.
  - **Selecting a Suitable Location.** There are a range of factors to consider when deciding on the location of a new warehouse facility and these may vary depending on whether you are selecting a location for a temporary building or selecting from one of a number of existing buildings. These may include:
    - Proximity to ports of entry and beneficiaries.
    - Availably of existing buildings and security.
    - Site condition, access and services available.
    - Land size available, purpose of warehouse and previous use of the facility.
    - Floor weight.
    - Access to labour.
  - **Selection of Warehouse.** Factors to consider are: -
    - Nature and characteristics of goods to be stored.
    - Nature of handling equipment available.
    - Duration of storage needed i.e. short term or long term.
    - Need for other activities, e.g. repackaging, labelling, kitting, etc.
    - Access and parking for vehicles.
    - Number of loading docks required.
    - Secure compound.
  - **Space Utilization and Handling.** Warehouse operation is composed of four key work activities: -
    - Goods receipt
    - Storage
    - Picking
    - Goods dispatch
  - To estimate the space for warehouse, requirements for each key work activities given above may be estimated separately and then combined together, taking into account the way that the activities are phased during the, in order to make an estimate of the total space/resources required. Following diagram explain the space utilization of a warehouse: -

A1 A2 A3 A4

Order picking ← ← Order picking ←

Shipment
Preparation

A5 A6 A7

Goods Dispatch

GOODS OUT

GOODS IN

Storage → Order picking → Storage

Goods Receipt

Office

B1 B2 B3 S1 S2 S3 S4

Key:
A1 to A7   - Household and shelter materials
BI to B3   - Medical Equipment
SI to S4   - Camp Supplies
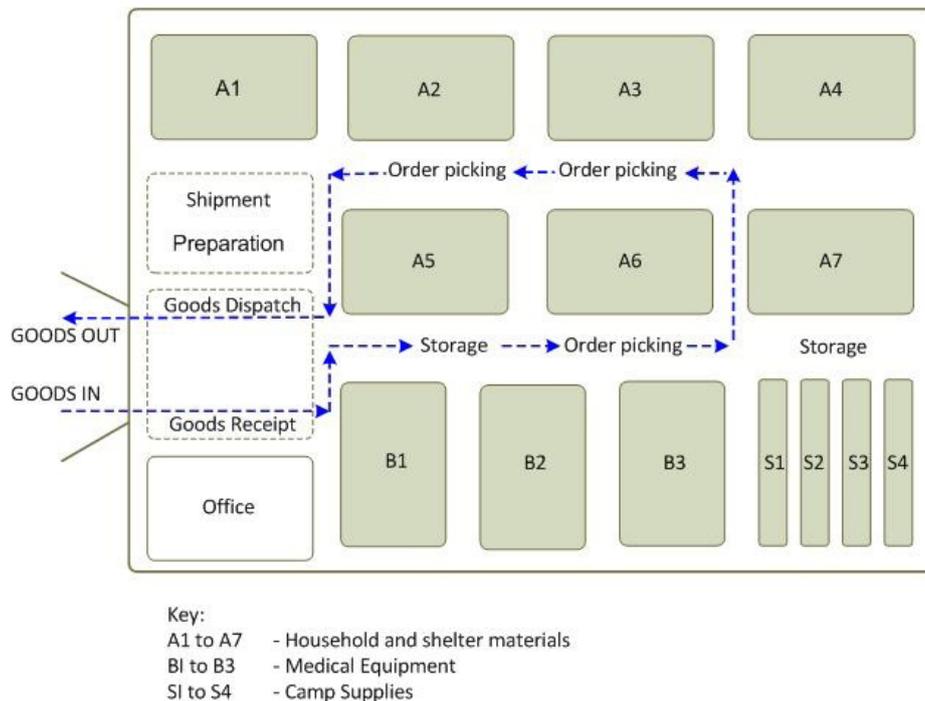
- **Consideration for Managing the Warehouse Operations.** Following aspect may be considered for the warehouse operation: -
  - Planning the workload and allocating resources accordingly.
  - Space utilization & handling, (see the diagram above).
  - Receiving and storing goods.
  - Assembling and despatching consignments.
  - Disposal of goods.
  - Pest control.
  - Security.
  - Inventory management.
  - Handling and stacking techniques.
  - Occupational health and safety.
- **Inventory Management.** Inventory management is done to ensure that stock is available to meet the needs of the beneficiaries as and when required. Inventory represents a large cost to the humanitarian supply chain e.g. cost of the inventory itself, cost of transportation, cost of managing the goods and keeping the goods in warehouses. It must be ensured that the warehouse always have sufficient stocks to cover the lead-time for replacement stocks to avoid stock-outs.
  - **Inventory Control.** There are two methods of inventory control that are applicable to emergency situations: -
    - Reorder level policy
    - Reorder cycle policy.
- Both are applicable to humanitarian situations and have associated pros and cons. Economic order quantity (EOQ) in practice only works in a fairly stable environment where demand variability and replenishment lead-time are reasonably stable and predictable such as refugee camps and perhaps later in a relief/recovery phase and not in an emergency situation.

MODULE - 5

MAINSTREAMING GENDER, AGE AND DISABILITIES

SESSIONS

Session - 1.5: Mainstreaming Gender, Age and Disabilities
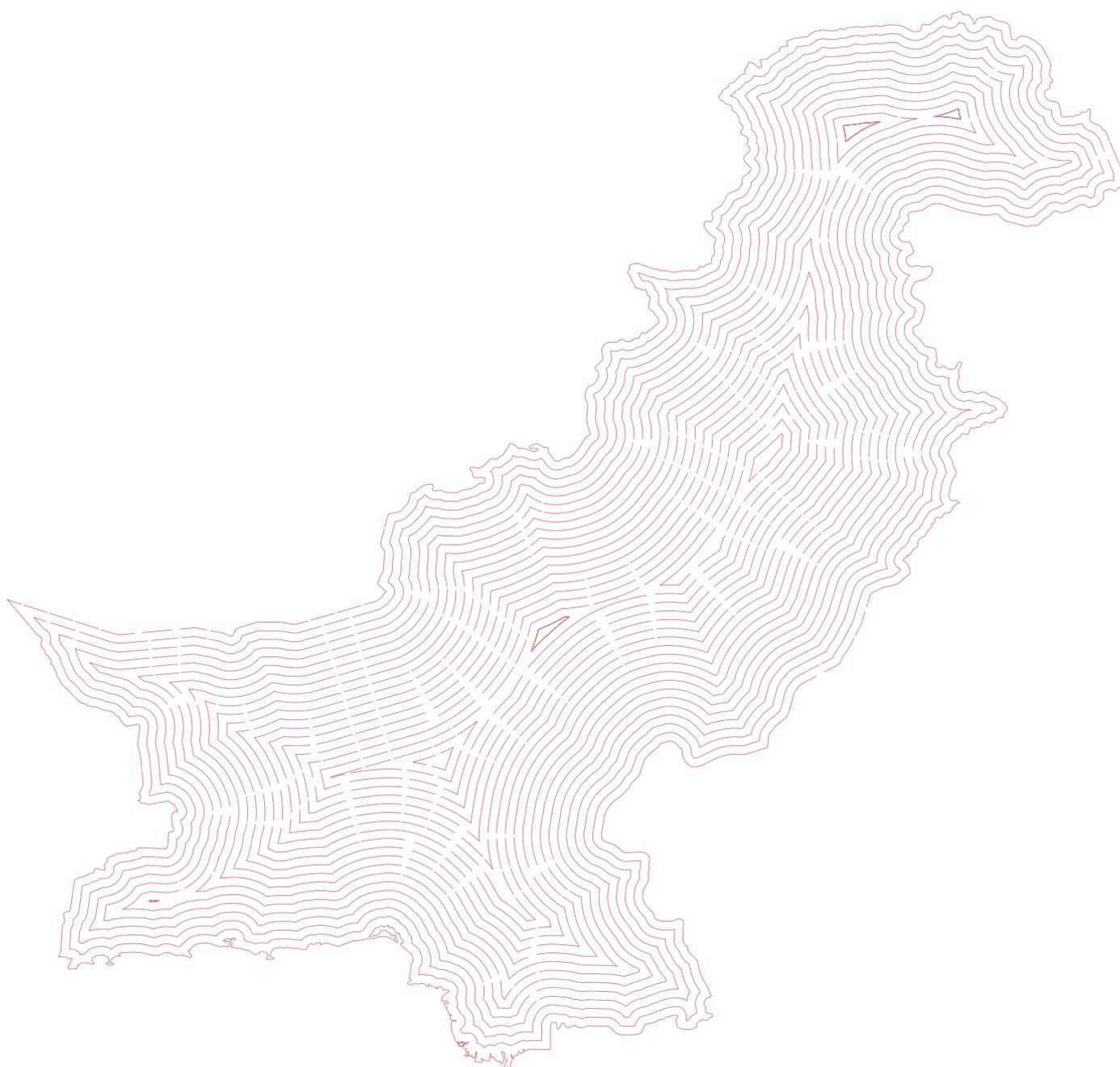
SESSION - 1.5

MAINSTREAMING GENDER, AGE AND DISABILITIES

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Learning Objectives

At the end of the session, participants will be to: -
- Explain the concept of gender, age and disabilities and its relationship with disaster management.
- Describe the guidelines for mainstreaming gender in disaster planning and response.
- Explain the basic concepts related to disabilities and its relationship with disaster management.
- Explain the importance of mainstreaming person with disabilities.

Key Messages

- Gender refers to the social attributes and opportunities associated with being male and female.
- Gender determines what is expected, allowed and valued in a women or a man in a given context.
- Gender mainstreaming is a strategy for making women's as well as men's concerns and experience an integral part of the design, implementation, monitoring and evaluation of policies and programs in all political, economic and social spheres.
- Most disaster-relief polices fail to cater to the unique needs of females, which create the need of addressing women specific issues at policy level.
- PWDs are more sensitive and detest obvious sympathetic treatment considering it as humiliation.
- Words, phrases and language are very important while dealing with PWDs and there is need to develop guidelines to assist PWDs with dignity.
- There is a significant different between impairment, disability and handicap and there is essential to take into account the ethical and technical aspects of this issue.

Session at a Glance

Timing	Topic	Method
5'	Introduction	Presentation
15'	Activity 1: Gender	Discussion
30'	Activity 2: Gender mainstreaming	Debate
20'	Activity 3: Disability and its types	Video & discussions
15'	Human Rights of PWDs and guidelines for its mainstreaming	Interactive lecture
10'	Synthesis and session evaluation	Question and answer

	90'
	• Easel board and papers. • Different colour marking pens • Charts. • Meta cards. • Power point presentation/slides.
Preparation	• Prepare power point slides of learning objectives, gender, gender mainstreaming guidelines, disability and its types and sensitivities, human rights of PWDs and guidelines for mainstreaming age and disability. • Print handout 18 for each participant.

Process

Introduction   **5'**

Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the end of the session, participants will be to: -
• Explain the concept of gender, age and disabilities and its relationship with disaster management.
• Describe the guidelines for mainstreaming gender in disaster planning and response.
• Highlight the basic of disabilities and describe why mainstreaming disabilities into disaster management is indispensable.

Activity 1: Gender   **15'**

Ask the participants
• What is the difference between gender and Sex?
• What is the difference between gender equality and equity?
• What are vulnerable groups?
Conclude the discussion using the power point slides

Activity 2: Gender Mainstreaming   **30'**

Divide the participants into 4 groups. Ask them to go through handout 18. Ask them to select 1 debater from your group for: -
-   Group 1 & 3: Will prepare arguments that gender mainstreaming unavoidable and it should be done at any cost.
-   Group 2 & 4: Will prepare arguments that there is no need of gender mainstreaming and there are other priority actions to be taken?
-   Debater from each group will come and give his/her arguments for 3 minutes.
During the debate, nobody will be allowed to ask questions or make comments. Questions and discussion will be made at the end of the debate.

Activity 3: Disability and its Types   **20'**

Play video using the following link
https://www.youtube.com/watch?v=CbLTPQsF1AQ
Ask the participants to answer the following questions after watching the video.
Q1. What is disability?
Q2. What are the types of Disability?
Q3. What is the difference between disability and impairment?

Q4. What are the sensitivities related to disabilities?

Conclude the discussion using power point presentation by focusing on the points which may missed by the participants.

Rights of PWDs and Guidelines on Mainstreaming and Disability   **15'**

Using the power point, discuss the human rights of PWDs and guidelines for its mainstreaming with examples (prepare power point presentation using the handout 18).

Synthesis and Session Evaluation   **10'**

- Ask the participants if they have questions or clarifications about the topics discussed.
- Answer their questions and provide examples as necessary.
- If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
    - What is the difference between gender and sex?
    - What is the difference between gender equality and equity?
    - What are the types of disabilities?
    - What are guidelines of gender mainstreaming?
- Thank the participants and inform them of the next session.

Handout

- Handout 18: Gender Mainstreaming

MAINSTREAMING GENDER, AGE AND DISABILITIES

Gender

- In common usage, the word gender often refers to the sexual distinction between male and female. Gender is the set of relations between and among men and women in different societies based on socially constructed roles, behaviours considered appropriate for men and women. In simple words, gender refers to the set of relationships between men and women at a particular point of time in a given society.
- While discussing gender, we generally refer to the social differences and relations between men and women, which are learned and transformed. The term gender does not replace the term sex, which refers exclusively to biological differences between men and women. The following are the broad differences between gender and sex for a clear understanding in the subsequent analysis: -

Gender	Sex
• Socially constructed	• Biologically defined
• Differs between and within cultures	• Determined by birth
• Includes variables identifying differences in roles, responsibilities, opportunities, needs and constraints	• Universal
• Can be changed	• Unchanging

Vulnerable Groups

- Person or a group having less or no coping capacity to respond to a certain hazardous phenomenon. In local context these includes, women, children, disabled and elderly persons.
- Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments. Most developed world countries have accepted the chronological age of 65 years as a definition of 'elderly' or older person, but like many westernized concepts, this does not adapt well to the situation in Africa. While this definition is somewhat arbitrary, it is many times associated with the age at which one can begin to receive pension benefits. At the moment, there is no UN's standard numerical criterion, but the UN agreed cutoff is 60+ years to refer to the older population.

Heterogeneous Vulnerable Groups

- Those groups whose needs do display many similarities but are nevertheless divergent as well e.g. children, older people and person with disabilities.

Gender Equality

- Gender equality implies, equality between women and men or gender equality promoting the equal participation of women and men in making decisions; empowering or supporting women and girls so that they can fully exercise their rights; and reducing the gap between women's and men's access to and control of resources and the benefits of development is still out of reach for most women worldwide.
- In disaster management, the gender equality means their equal participation in all the spheres of disaster management. Their needs being specific must be kept in mind while planning and exestuation part if equitable and sustainable progress is to be achieved, women's status must be improved, their rights must be respected, and their contributions must be recognized.

Gender Mainstreaming

- Is a strategy for making women's as well as men's concerns and experience an integral dimension of the design, implementation, monitoring and evaluation of policies and programs on all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality." *(NDMA guidelines on vulnerable groups)*

Gender Mainstreaming in DRR

- In the context of DRR, gender mainstreaming "refers to fostering awareness about gender equity and equality, to help reduce the impact of disasters, and to incorporate gender analysis in disaster management, risk reduction and sustainable development to decrease vulnerability.
- Owing to conventional and cultural practice, women are vulnerable to disasters, but they are the one with greater responsibility with regard to physical safety of family members. May be women are alone at home at the time of rapid-onset of a disaster. In such a situation, women have to ensure the safety of children, elderly people and PWDs. Women have valuable knowledge and experience in coping with disasters. It is in the larger interest of the family and community to take women on board at policy and decision making level so that these valuable resources do not go waste, and become dependent.

Guidelines to Mainstream Gender to DRR

- Following are key guidelines to pushing the agenda of gender mainstreaming in DRR: -
  - **Women's Representation in Disaster Management Institutions.** As a first step, women's participation and representation should be increased in the overall hierarchy: NDMA, PDMA and DDMA/Us. Policy makers tend to miss gender perspective during the policy formulation process. Involvement of female public servants at policy level would help incorporating the gender perspective in DRR policies, as well as would enhance their technical skills on DRR.
  - **Establishment of Gender Units.** They should be establishment in key disaster management institutions at all level.
  - **Gender and Disaster Training.** In all the trainings by various institutions women participation must be encouraged. Training for the departments responsible for gender mainstreaming should be ensured to sensitize them about gender. Such trainings and awareness would convince the decision makers to address the concerns of women, disabled people, and children while proposing any project for hazard prone areas.
  - **Involving Universities and Research Institutes.** DRR managers should engage with universities and research institutions to facilitate new researches to identify the level of women's participation in DRR.
  - **Linkages with Gender Institutions.** It is important for DRR managers to solidify linkages with departments and institutions working on gender issues. Institutions at national, provincial and district level should be taken on board at policy level to incorporate gender perspective at all level.

Guidelines for Gender Sensitive Risk Assessment

- Involving women in risk assessment process.
- Gather demographic and existing sex disaggregated socioeconomics data on disaster occurrence.
- Identify secondary hazards, which specifically affect women. Secondary hazards include trafficking, sexual abuse, forced marriage etc.

- Design strategies and operational framework for mainstreaming gender in vulnerability and capacity assessment.
- Gather date on women related issue during and after the disaster.
- Identify women needs during relief operation.
- Address special needs of women during evacuation planning process.
- Identify women and children friendly means of communication to disseminate early warning.
- Assess the education and training needs of women with regard to disaster management.

What is Disability?
- PWDs, as per the UN Convention, have long-term physical, mental, intellectual, or sensory impairments such as blindness, deafness, impaired mobility, and developmental impairments. Some people may have more than one form of disability and many, if not most people, will acquire a disability at some time in their life due to physical injury, disease or ageing (United Nations, 2007).
- A disability is an umbrella term, covering impairments, activity limitations, and participation restrictions. Impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations. Thus disability is a complex phenomenon, reflecting an interaction between features of a person's body and features of the society in which he or she lives.

Types of Disabilities
- **Physical Disability.** Any impairment which limits the physical function of limbs or fine or gross motor ability is a physical disability.
- **Sensory Disability.** It is impairment of one of the senses. The term is used primarily to refer to vision and hearing impairment, but other senses can be impaired. Following are some key impairments: -
  - **Visual Impairment.** Visual impairment (or vision impairment) is vision loss to such a degree as to qualify for an additional support need through a significant limitation of visual capability resulting from either disease, trauma, or congenital or degenerative conditions that cannot be corrected by conventional means, such as refractive correction, medication, or surgery.
  - **Hearing Impairment.** Hearing impairment or hard of hearing or deafness refers to conditions in which individuals are fully or partially unable to detect or perceive at least some frequencies of sound which can typically be heard by most people. Mild hearing loss may sometimes not be considered a disability.
  - **Balance Disorder.** A balance disorder is a disturbance that causes an individual to feel unsteady, for example when standing or walking. It may be accompanied by symptoms of being giddy, woozy, or have a sensation of movement, spinning, or floating. Balance is the result of several body systems working together. The eyes, ears and the body's sense of where it is in space need to be intact. The brain, which compiles this information, needs to be functioning effectively.

Difference between Impairment and Disability

- Impairment does not necessarily result into disability. Disability occurs when impairment interacts with attitudinal and environmental barriers erected by the society. For instance, a person who lost both his legs to an accident, but able to read and understand the process of emergency management. He knows what to do in case of fire eruption. He had read a lot of literature and participated in training activities to deal with such situation. Another person with similar problem is less literate and does not know what to do if such an emergency arises. First person's physical state has not turned into disability in that situation due to his capability of reading and having training. On the contrary the second person's impairment has resulted in disability.

- The government should take vigorous actions to reduce the vulnerabilities of PWDs. They can become active members of the society if the government mainstream issues related to PWDs into development and different awareness programs.

Sensitivities Related to PWDs

- PWDs are more sensitive and detest obvious sympathetic treatment considering it as humiliation. Usage of appropriate language is very important while writing the policies about PWD. As language influence attitude of those who directly deal with PWD in the field, during disaster or in peace times. There should be clear and specific guidelines to be followed by all.

Ensuring the Human Rights of PWDs

- PWDs are seen sympathetically by the society, especially, society like ours takes pity on them. In reality, it is the least requirement of the PWDs. Such treatment evokes the feelings of helplessness and makes them feel humiliated. What they need is equal treatment and equal rights as others enjoy. As for physical care, PWDs certainly need it but it varies according to the type of impairment.

- UN Convention on Rights of Persons with Disabilities (CRPD) was ratified by Pakistan in July, 2011. It is now legally binding for Pakistan to incorporate CPRD into all the concerned program, projects and policies at all level. Key features of CRPD are: -

    - **During the Emergencies (Art. 11).** States Parties shall take, in accordance with their obligations under international law, including international humanitarian law and international human rights law, all necessary measures to ensure the protection and safety of persons with disabilities in situations of risk, including situations of armed conflict, humanitarian emergencies and the occurrence of natural disasters.

    - **Women and Children with Disabilities.** Article 6 and 7 is concerned about women with disability and children with disabilities respectively. It urges the state parties to recognize that women and girls with disabilities are subject to multiple discriminations. In this regard, governments should take measures to ensure the full and equal rights set out in the present convention. Similarly, children with disabilities should be treated on an equal basis with other children, and to be provided with disability and age-appropriate assistance to realize that right.

    - The CRPD also include provision of accessibility, awareness, access to information, legislative, administrative measures, and research etc.

Guidelines on Mainstreaming Age and Disabilities

- PWDs are generally denied the due resources and facilities due to lack of resources. PWDs hardly reach the realm of decision and policy making, their fate remains in the hand of those who more active than PWDs. Since, 'normal' people are the decision makers; they generally ignore the needs of the people with special needs on the pretext of lack of resources.
- DRM context it is important for all governments agencies to take into account the special needs of the PWDs in planning and response phase of disaster management.

MODULE - 6
INFORMATION MANAGEMENT

SESSIONS

Session - 1.6: Information Management
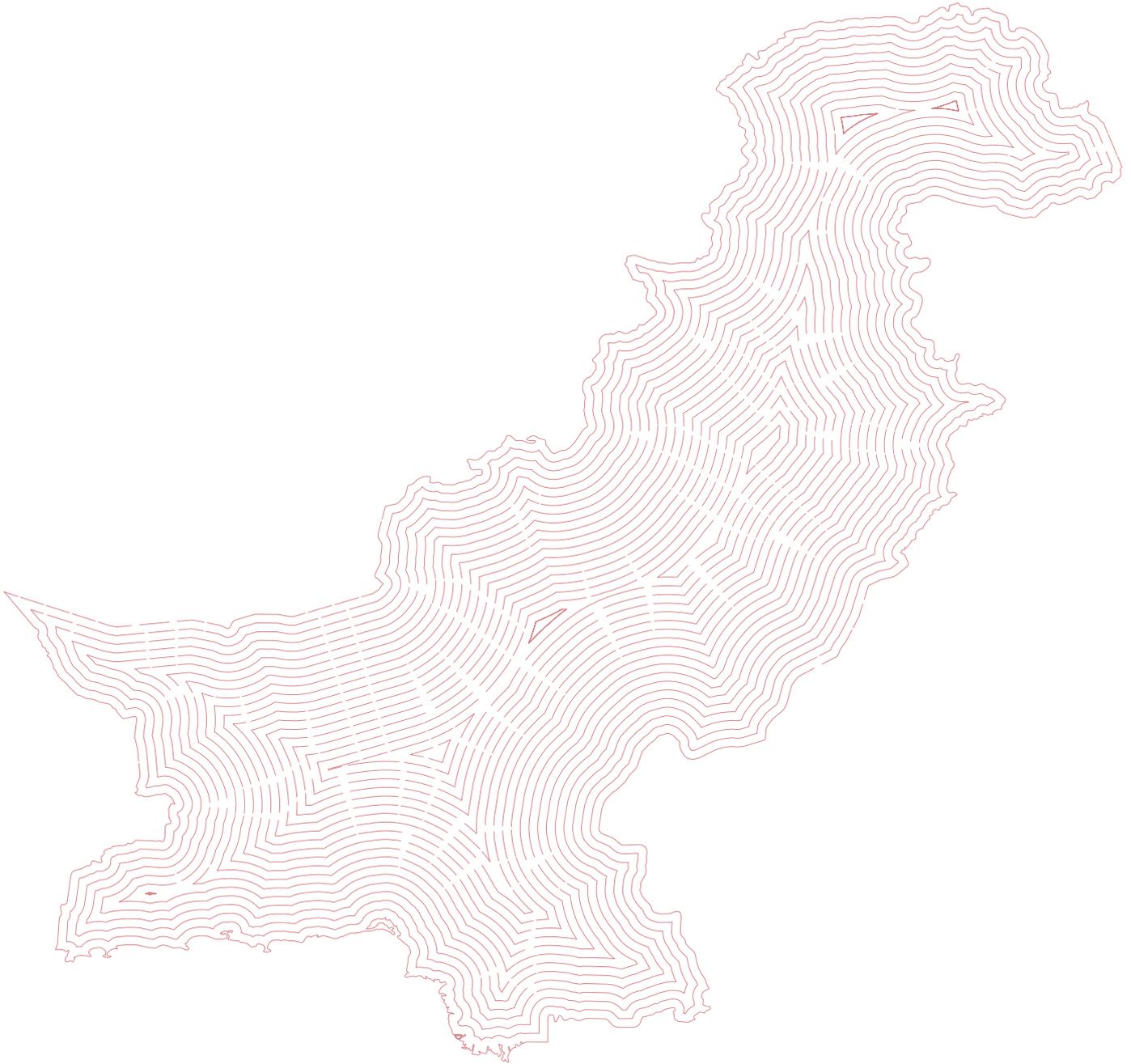
SESSION - 1.6

INFORMATION MANAGEMENT

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Learning Objectives

At the end of the session, participants will be able to: -
- Explain the concept of information management and its purpose in emergency response.
- List down steps involve in information management.
- Define principles and standards for information management.
- Explain the importance of information management in disasters & emergencies and information management cycle.
- Summarize information needs by various audience during emergency response.

Key Messages

- Information is the most valuable commodity during emergencies or disasters for decision purposes.
- Aim of information management is to design, develop, manage, and use information with insight and innovation.
- Collection, collation, analyze, disseminate and storage are some of the important steps for information management.
- During an emergency, timely and transparent production and dissemination of information generates trust and credibility.
- Information should be accurate, consistent, and based on sound methodologies and should be made accessible to all humanitarian actors.
- Information management cycle is a comprehensive approach to managing the flow of an information.

Session at a Glance

Timing	Topic	Method
5'	Introduction	Presentation
15'	Information management and its steps	Interactive lecture
30'	Activity 1: Principles and standards for information management	Exercise
15'	Activity 2: Important of information management and its cycle	Brainstorming and demonstration
20'	Activity 3: Information need of audience during emergency response	Group work
5'	Synthesis and session evaluation	Question and answer

⏰	90'
🪨	• Easel board and papers. • Different colour marking pens. • Charts. • Meta cards. • Power point presentation/slides.
Preparation	• Prepare power point presentation of learning objectives, information management and its steps. • Prepare power point presentation of Importance of information management and cycle.

Process

Introduction   **5'**

Explain the learning objectives and the outline of your session and the specific learning they expected to achieve from the session. At the end of the session, participants will be to: -

• Explain the concept of information management and its purpose in emergency response.
• Acquaint with steps involve in information management.
• Tell principles and standards for information management.
• Explain the importance of information management in disasters & emergencies and information management. cycle.
• Explore information needs by various audience during emergency response.

Information Management and its Steps   **15'**

Use interactive lecture and power point presentation to explain the information management and its steps. Share examples and ask participants to share examples? (prepare power point presentation using the same heading given in the section)

Activity 1: Principles and Standards for Information Management   **30'**

• Each person will receive either: a blue card (title of principle) or a green card (definition of principle).
• Ask them to find the person with a matching card (title of principle with definition), discuss with your pair and come up with one example.
• Conclude the activity by summarizing the discussion.

Activity 2: Important of Information Management and its Cycle   **15'**

• Ask the participants about the importance of information management in disaster and emergencies? Write their response on board and conclude the discussion by sharing key missed points from the text given in the session below
• Project the information management cycle on the screen and ask the participants to explain the image to the group.
• Make clarification and corrections if require using trainers' note.

Activity 3: Information need of Audience during Emergency Response   20'
Divide participants into four groups and ask them what is your (assigned audience) information needs during emergency response
Group 1: Operational agencies
Group 2: Government departments
Group 3: Donor
Group 4: Community and people affected by disaster/beneficiaries
Ask them to share their work in front of the class. Make clarification and corrections if require using trainers' note.

Synthesis and Evaluation   5'
- Ask the participants if they have questions or clarifications about the topics discussed.
- Answer their questions and provide examples as necessary.
- If there are no more questions, ask the participants if the discussions on the topic met their standards. Ask them few questions to validate their learning. Randomly choose the people who will answer the questions.
  - What are the steps of information management?
  - Name principles of information management?
  - What is information management cycle?
  - What is the information needs of: -
    - Community
    - Donor
    - Operational agencies
    - Government department
- Thank the participants and inform them of the next activity/concluding session.

INFORMATION MANAGEMENT

Information is the most valuable commodity during emergencies or disasters and it is needed to make decisions. Information are necessary for rapid and effective assistance for those affected by a disaster. Information is the main element in the damage and needs assessment process and is the basis for coordination and decision making in emergency situations. It has a powerful impact on how national and international resources are mobilized. It is essential for after-action analysis, evaluation, and lessons learned. Moreover, public and social communication and media relations have become key elements in efficient emergency management. Technical operations in highly charged political and social situations must be accompanied by good public communication and information strategies that take all stakeholders into account.

Information Management and its Steps

- **What is Information Management.** Information management is the development and implementation of a systematic approach for identifying, collecting, analyzing and sharing data for decision support in humanitarian responses.
- **Purpose.** The purpose of information management is to design, develop, manage, and use information with insight and innovation. Support decision making and create value for individuals, organizations, communities, and societies.
  - **Steps for Information Management**
    - **Collect.** Is the process of information gathering about any event. The collection should be on wide range of topics and should be ensured that collected information is not lost.
    - **Collate.** Structuring of the information is called the collate process. Following must be ensure during the process: -
      - Information should be filed in a structured order.
      - Easy for retrieval, comparison and analysis.
      - Ideally, file information in both electronic and paper form.
      - This process should be initiated from in place before the disaster
    - **Analyze.** Evaluation/analysis of the information is a critical step in the information management process. Information has to be linked to the country-specific situation, trends and indicators of problems must be detected and recognize. During the process information be linked to recommendations for action to be taken.
    - **Disseminate.** The process of spreading information to all concerned is known as dissemination. Available information should be disseminated to the humanitarian community on-site in a timely, structured and appropriate manner. Efficient dissemination has a positive effect on the team's coordination efforts as it shows transparency and dedication.
    - **Storage.** Data storage is the recording of information in a storage medium. Data can be stored in any type that can be rendered in digital format and placed in electronic media.

Data

1 Collection

2 Collation

3 Analysis

Information

4 Dissemination

4 Storage

Communication
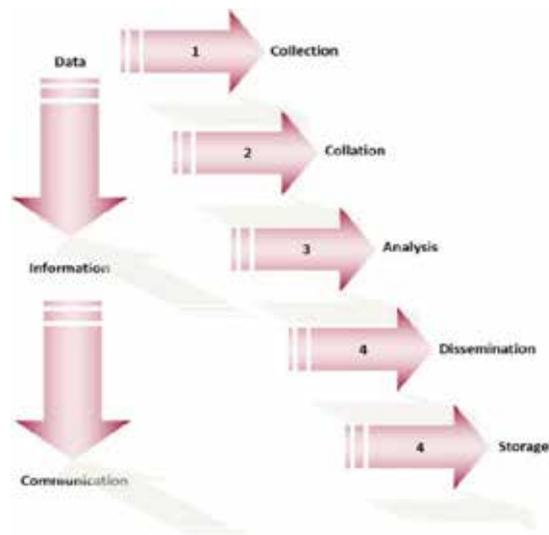
- **Principles and Standards for Information Management**
  - **Accessibility.** Humanitarian information and data should be made accessible to all humanitarian actors by applying easy-to-use formats and by translating information into common or local languages when necessary. Information used for humanitarian purposes should be widely available through a variety of online and offline distribution channels, including the media.
  - **Inclusiveness.** Information management and exchange should be based on a system of collaboration, partnership, and sharing. There should be a high degree of participation and ownership by multiple stakeholders, especially representatives of the affected population.
  - **Inter-operability.** All sharable data and information should be made available in formats that can be easily retrieved, shared, and used by humanitarian organizations.
  - **Accountability.** Users must be able to evaluate the reliability and credibility of data and information by knowing its source. Information providers should be responsible to their partners and stakeholders for the content they publish and disseminate.
  - **Verifiability.** Information should be accurate, consistent, and based on sound methodologies, validated by external sources, and analyzed within the proper contextual framework.
  - **Relevance.** Information should be practical, flexible, responsive, and driven by operational and decision-making needs throughout all phases of a crisis.
  - **Objectivity.** Information managers should consult a variety of sources when collecting and analyzing information so as to provide varied and balanced perspectives for addressing problems and recommending solutions.
  - **Humanity.** Information should never be used to distort, to mislead, or to cause harm to affected or at-risk populations and should respect the dignity of victims.
  - **Timeliness.** Humanitarian information should be collected, analyzed, and distributed efficiently, and must be kept up-to date.
  - **Sustainability.** Humanitarian information and data should be preserved, catalogued, and archived so that it can be recovered for future use in areas such as preparedness, analysis, lessons learned, and evaluation.

- **Importance of Information Management in Disasters and Emergencies.** Information is vital for everyone to make decisions. During emergencies or disasters, it is necessary in order to respond for provision of to those affected by a disaster. Moreover, public and social communication and media relations have become key elements in efficient emergency management. Technical operations in highly charged political and social situations must be accompanied by good public communication and information strategies that take all stakeholders into account. Following are aspects of information that are important in the context of emergencies and disasters: -
  - During an emergency, timely and transparent production and dissemination of information generates trust and credibility. National authorities, international agencies, humanitarian assistance organizations, the affected population, and the communication media will demand information in the form of data, figures, reports, and situation analysis or recommendations. These stakeholders depend on this information to guide their work and to translate their interest and concern into concrete action.
  - Information in emergency or disaster situations comes from many sources; it represents different points of views and serves a wide range of interests and needs. For example, following an earthquake, scientific, technical, and operational information will serve decision makers, the affected population, and the international community involved in response efforts. Clearly, the type of information provided reflects the multi-disciplinary nature of emergency and disaster response and the ever-growing number of specialists and organizations from different technical disciplines who are involved in disaster response.
  - The participation and effectiveness of national and international actors will be beneficial to affected populations to the extent that they have precise, timely, and relevant information. This applies to communication channels and tools that can facilitate dialogue and build partnerships.
  - The challenges are to show how communication and information management contribute to more effective and timely response, and therefore to saving lives, and how these activities can lessen the impact of disasters and emergencies and improve the quality of life of affected populations. They must also be recognized as key elements in mobilizing resources, stimulating solidarity and support, increasing visibility, and strengthening the position of humanitarian stakeholders.
- **Information Management Cycle.** Is a comprehensive approach to managing the flow of an information system›s data and associated metadata from creation and initial storage to the time when it becomes obsolete and is deleted. The cycle is often considered a more complex subset of data life cycle management. Following is the recommended cycle: -

No Information is better than Wrong Information
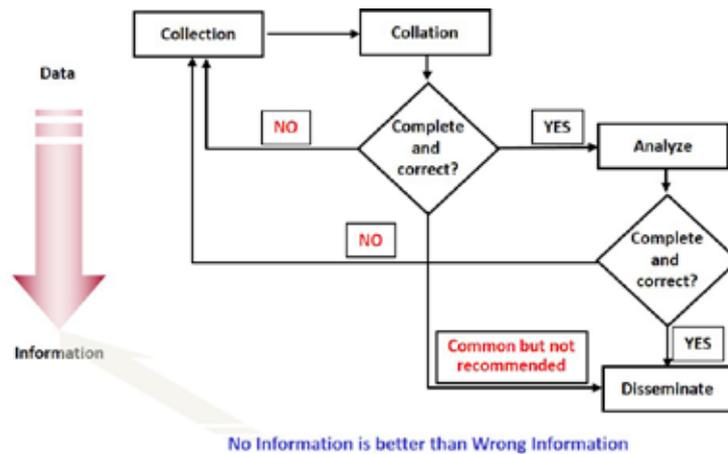
- **Information Needs by Audience during Emergency Response.** Following are the essential information that would be needed by stakeholders during emergency response for planning and execution phase: -

Audience	Products of their Interests
Operational Agencies	• Contact list of partners and authorities • Generic guidance applied to the context • Gaps and needs analysis based on all partners' contributions and mapping support • Meeting schedule and minutes • Policy, strategic document • Flowcharts/ guidance docs • Dashboard, snapshot • Documents available in the country language to allow national partner's full participation
Government Departments	• Contact list of partners, departments and nominated authorities • Policy, strategic document • Gaps and needs analysis based on all partners' contributions and mapping support • Meeting schedule and minutes • Dashboard, snapshot • Who is doing, what, where, when (4-W)
Donors	• Overall interventions • Need - gaps analysis • Funding requirements overall and per agency • Dashboard, Snapshot • Cluster framed within the overall emergency response agreed with the Government
Beneficiary Community	• Communication tools to involve the community in the decision making process and/or awareness raising on the activities to implement

Annex I

Pre and Post Course Test

Province

Date

Venue

This test is simply to gauge your knowledge on workshop topic; you should complete this test in 10 minutes. The test includes 10 questions.

Participant's Name			
Organization/Department			
Designation		Pre-Test	Post-Test

Q1. What is the difference between Disaster Risk Reduction and Disaster Risk Management?

Q2. "Reinforcement or upgrading of existing structures to become more resistant and resilient to the damaging effects of hazards "is (circle the correct one)

   a) Retrofitting
   b) Social Integration
   c) Resilience
   d) Response
   e) None of the above

Q3. Which of the following is/are not the function of NDMA? (Select one or more)

   a) Act as the implementing, coordinating and monitoring body for DM.
   b) Prepare the National Plan to be approved by the National Commission.
   c) Implement, coordinate and monitor the implementation of the national policy.
   d) Lay down guidelines for preparing DM plans by different ministries or departments and the provincial authorities.

Q4. Formulate the provincial/regional/state DM policy obtaining the approval of the Commission.

Q5. Who are the leading agencies of the following clusters? Cluster: Camp Coordination and Camp Management
     Lead Agency ....

   a) Cluster: Shelter
     Lead Agency ....

   b) Cluster: Emergency Tele-Communication
     Lead Agency ....

Q6. In relation to Disaster Risk Management Cycle, which of the following activities are not the part of response phase. (Select one or more)

a) Relief   b) Early Warning   c) Rehabilitation   d) Prevention   ) Recovery

Q7. Write any four components/content of the DRM Plan?

Q8. What is the content of contingency plan?

Q9. Which is not the priority of Sendai Framework 2015-2030.

a) Priority 1. Understanding disaster risk.
b) Priority 2. Strengthening disaster risk governance to manage disaster risk.
c) Priority 3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels.
d) Priority 4. Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction.

Q10. Which of the following is/are the guiding principles of mitigation? (Select one or More)

a) Initiation
b) Management
c) Prioritization
d) Institutionalization

Q11. Following are the steps of..

Step 1 - Awareness Rising. , Step 2 - Enabling Environment , Step 3 - Development of Tools,

Step 4 - Training and Technical Support, Step 5 - Change in Operational Practice, Step 6 - Measuring Progress, Step 7 - Learning and Experience Sharing

Q12. What is key function of following actors in camp management?

• Camp Administrator: ....
• Camp Coordinator: ....
• Camp Manager: ....

Q13. True or False

• When a country-level cluster is activated, the global lead agency is always designated as the in-country lead agency, as well.   True or False
• The Humanitarian Coordinator is appointed by the Emergency Relief Coordinator.   True or False

- The Humanitarian Coordinator leads the Humanitarian Country Team. True or False
- The Humanitarian Country Team determines priorities and strategies for humanitarian assistance in a conflict or crisis-affected country. True or False

Q14. What is the difference between impairment and disability?

Q15. Which of the following is not the step of information management?

a) Collect   b) Collate   c) Collaborate   d) analyze   e) Disseminate   f) Storage

Compilation sheet of Results

Compiled
Workshop Evaluatio
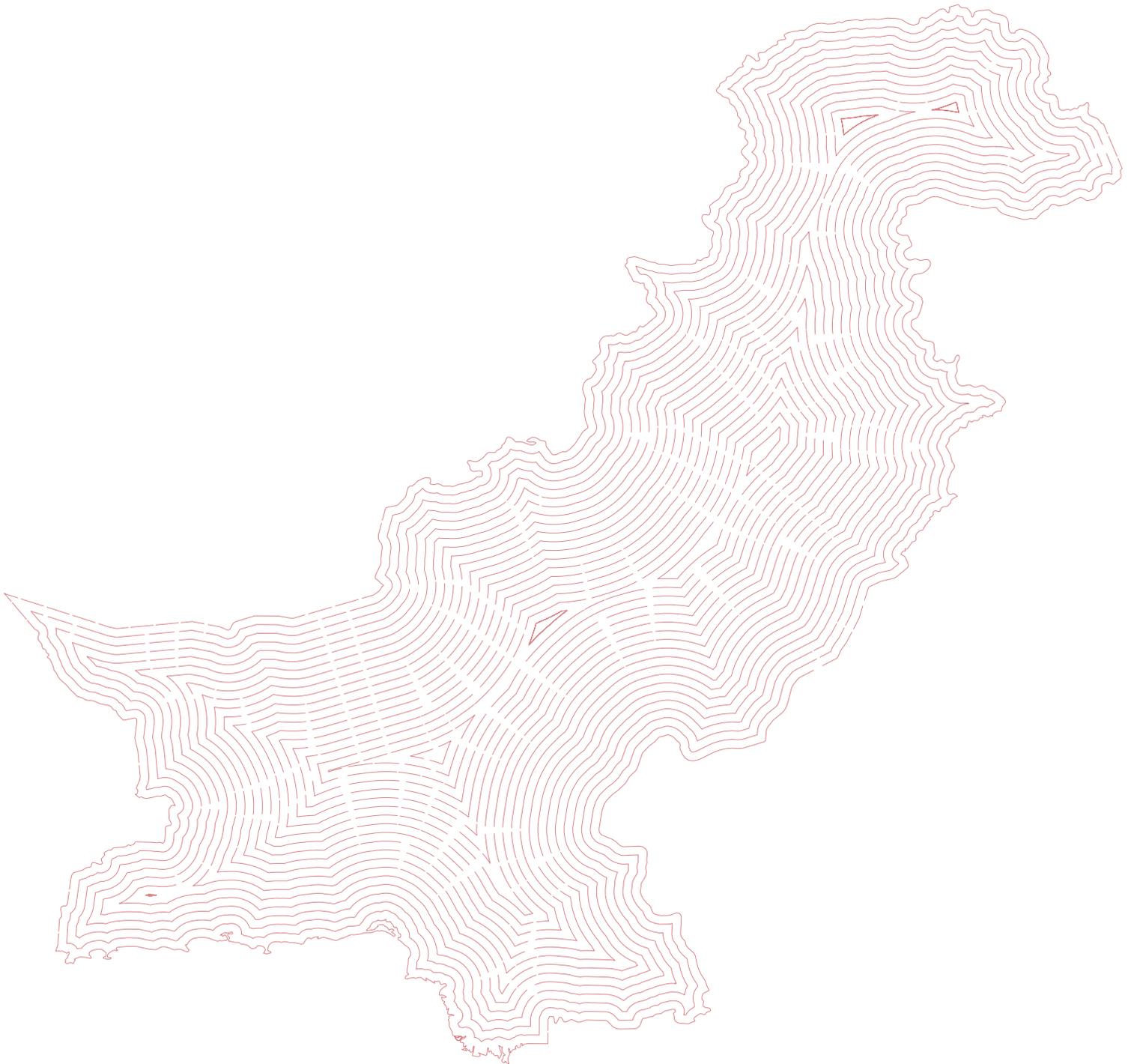
Annex II

فارم برائے روزانہ جائزہ
DAILY FEEDBACK FORM

ٹریننگ کا عنوان-------------------------
تاریخ-------------------
جگہ-------------------

To be filled in by the participants   فارم شرکاء کی طرف سے بھرا جائے

Your honest feedback would greatly assist us in further improving our services

آپ کی سچی رائے ہماری خدمات کو مزید بہتر بنانے میں مددگار ثابت ہوگی

Performance Ranking:

3= Good اچھا	2= Average اوسط	1= Below Average اوسط سے کم
4= Excellent بہترین		N.A= Not Applicable لاگو نہیں ہوتا

==

سوال نمبر 1:

آج آپ نے کون کون سے عنوانات پڑھے؟

1. What topics did you learn today?

....

....

سوال نمبر 2:

کیا بات چیت موضوع کے مطابق تھی؟

2. Were the discussions relevant to the topic?

....

....

....

سوال نمبر 3:

آج تربیت کار نے جو طریقہ کار بتایا اس کے بارے میں آپ کی کیا رائے ہے؟

3. Kindly provide your feedback on the facilitator methodology used during the day?

....

سوال نمبر 4:

آپ تربیت کے موضوعات سے کس حد تک مطمئن ہیں؟

4. How far are you satisfied with the training content?

....

....

سوال نمبر5:

سی ڈبلیو ایس ٹیم کی طرف سے مہیا کی جانے والی سہولیات کے بارے میں آپ کے کیا خیالات ہیں؟

5. Kindly describe the facilitation of Community World Service Asia team?

....
....

سوال نمبر 6:

مزید را ئے

6. Any other recommendation(s)?

....
....
....
....

Assessment of Logistical Arrangements

ورکشاپ کے انتظامات اور سہولیات کے بارے میں مزید آپ کی را ئے

How would you rate	آپ کس طرح کی درجہ بندی کریں گے	1 اوسط سے کم	2 اوسط	3 اچھا	4 بہترین	N/A لاگو نہیں ہوتا
1. Quality of Meal/Tea	۱۔ چائے اور کھانے کا معیار					
2. Quality of Training Venue	۲۔ تربیت کی جگہ کا معیار					
3. Quality of accommodation (for participants getting boarding facility)	۳۔ رہائش کا معیار					
4. Quality of AV aids used during the workshop	۴۔ تدریسی معاونت کا استعمال اور معیار					

Thank you for your feedback.

Annex III

WORKSHOP EVALUATION FORM

(ورکشاپ کی جانچ کا فارم)

Name of workshop

Date--------------------

Location--------------

Your honest feedback would greatly assist us in further improving our practices.

(آپ کی معتبر رائے ہماری مزید بہتری کے لیے یقیناً معاون ثابت ہوگی)

Q.1 Assessment of pre-workshop arrangements

(ورکشاپ کے پہلے کے انتظامات/ کاموں کی جانچ)

		Poor	Fair	Good	Excellent
How would you rate?	آپ کس طرح پرکھیں گے؟	1	2	3	4
1. The quality and content of workshop brochure (ورکشاپ بروشر کا مواد)					
2. Appropriateness of pre-workshop information (invitation, confirmation, etc) through emails and phone calls فون کالز، ای میلز کے ذریعے) (فراہم کردہ ورکشاپ کے دعوت نامہ، تصدیق نامہ وغیرہ کی موزونیت					

Q.2 Assessment of facilities provided:

(ورکشاپ میں مہیا کردہ سہولیات کی جانچ)

How would you rate?	آپ کس طرح پرکھیں گے؟	1	2	3	4
1. Quality of Meals/Tea	چائے/کھانے کا معیار				
2. Quality of Training Venue	ورکشاپ کے مقام کا معیار				
3. Quality of equipment used during the training ورکشاپ میں استعمال ہونیوالے سازوسامان کا معیار					
4. Effectiveness of management team	انتظامی ٹیم کی کارکردگی				

Q.3 Assessment of Workshop Facilitator/Session Delivery

ورکشاپ ٹرینر / Sessions کی جانچ

How would you rate?	آپ کس طرح پرکھیں گے؟	1	2	3	4
1. Facilitator's knowledge on the subject matter ورکشاپ کے متعلق ٹرینر کا علم/جان کاری					
2. Facilitator's ability to communicate concepts with clarity ٹرینر کا سکھانے اور کمونیکیشن کا انداز					
3. Facilitator's skills to ensure participatory and interactive approach/group activities شرکاء کے لیے ٹرینر کی شراکتی اور باہمی عمل کی مہارت					
4. Trainer's behavior تربیت کار کا رویہ					
5. Quality of material (handouts etc.) used, in terms of relevance ورکشاپ میں استعمال اور فراہم کردہ مواد کا عنوان کے لحاظ سے معیار					
6. Time allocation/ logical flow for different sessions of the workshop ورکشاپ کے مختلف Sessions کے لیے متعین وقت					
7. Logical flow between the sessions Sessions کے درمیان معقول ربط					
8. Level of group activities during the workshop ورکشاپ کے دوران گروہی مشقوں کی سطح/معیار					
9. Opportunity to raise concerns and discuss issues شرکاء کی جانب سے مختلف سوالات اور ان پر بحث کرنے کے فراہم کردہ مواقع					

Q4. How would you rate your knowledge of the following topics, now that you've completed the training workshop?

یہ تربیت حاصل کرنے کے بعد نیچے دی گئی چیزیں آپ نے کس حد تک سیکھیں۔

Rate according to usefulness: آپ کس طرح پرکھیں گے؟	1	2	3	4
Topic - 1: Describe the DRM concept & terms and history of disasters in Pakistan. Humanitarian structure & coordination architecture and explain DRM cycle and its components				
Topic - 2: Preparedness planning and formulation of DRM at District level, importance of contingency planning and process involved in developing a contingency plan.				
Topic - 3: Process of DRR, global & national commitments of Pakistan for DRR, prevention and mitigation framework and measures for various hazards and mainstreaming DRR in development process				
Topic - 4: Pakistan response mechanism, process and step involve in evacuation and camp management and responsibilities of various departments. UN's response mechanism being followed in Pakistan.				
Topic— 5: the importance of inclusion/mainstreaming gender, age and disabilities into preparedness, response and recovery phase				
Topic - 6: importance of information management in emergencies and disasters, steps involve in information management, principles and standards for information management and information management cycle.				

Q5. Did this workshop meet your expectations?   کیا ورکشاپ آپ کی توقعات کے مطابق تھی؟

Yes (ہاں) ☐   No (نہیں) ☐   Somewhat (کسی حد تک) ☐

Q6. If you raised any complaint, do you feel it was handled properly by the team?

Yes (ہاں) ☐   No (نہیں) ☐   N/A ☐

If No please state the reason? _____

Q7. What kind of trainings would you be interested in attending in the future? Please share your ideas. آپ مستقبل میں کس قسم کی ورکشاپ میں شرکت کرنا چاہتے ہیں۔ مہربانی کرکے اپنے خیالات کا اظہارکریں

....

....

Q.8 Additional comments: (دیگر آراء)

....

....

Thank you for your Cooperation!
آپ کے تعاون کا بہت شکریہ

Evaluation Compilation Sheet

Compiled
Workshop Evaluatic

Annex IV

PLAN OF ACTION

Training on Disaster Preparedness for Effective Response

Date

Venue

Ser	Activities	June	July	August	Responsible Person(s)
1					
2					
3					
4					
5					
6					
7					
Participant's Name and Designation :					
Organization					