

# CONTENTS

	Page
<b>WELCOME &amp; GENERAL COURSE DESCRIPTION</b>	<b>2</b>
<b>COURSE OVERVIEW</b>	<b>3</b>
<b>COURSE AIM AND OBJECTIVES: Module 1</b>	<b>8</b>
<b>GENERAL COURSE SCHEDULE</b>	<b>11</b>
<b>SESSION - CBDRM<sub>1.1</sub> – Setting the Scene</b>	<b>13</b>
<i>Understanding Disaster &amp; it's trends and impact</i>	
<b>SESSION - CBDRM<sub>1.2</sub> - Disaster Management Concepts</b>	<b>29</b>
<i>Understanding disaster terminology and management cycle</i>	
<b>SESSION - CBDRM<sub>1.3</sub> - Disaster-Development Link</b>	<b>43</b>
<i>Understanding the interrelationship between disaster and development</i>	
<b>SESSION - CBDRM<sub>1.4</sub> - A Paradigm Shift in Disaster Management</b>	<b>53</b>
<i>How DM approaches changed over time</i>	
<b>SESSION – CBDRM<sub>1.5</sub> - Introduction to CBDRM Approach</b>	<b>67</b>
<i>Integrating risk reduction into a sustainable development planning</i>	
<b>SESSION – CBDRM<sub>1.6</sub> – CBDRM Process</b>	<b>85</b>
<i>How does CBDRM work –Key steps and stakeholders</i>	
<b>REFERENCES</b>	<b>96</b>
<b>ACTION PLAN</b>	
<b>WORKSHOP EVALUATION SHEET</b>	

## WELCOME NOTE FROM THE FACILITATORS

This generation has witnessed some of the most devastating natural as well as human induced calamities in the world. Millions of the poor people from the developing countries have been most affected by these disasters be it a natural disasters in the form of flood, tsunami, earthquake, draught, landslides, mudslides or human induced violent conflicts and unnecessary wars. Although the occurrence of many of them was impossible to prevent, their impact could have been significantly reduced had we been prepared well. It is unfortunate that we have learnt little from our past experiences which shows that the best people to understand the disaster risks and their impact are those who are facing and affected by these. These are the people who have the historical experience and indigenous knowledge of how to deal with such risks. Development practitioners and disaster managers have not been able to tap into this resource effectively. Therefore, empowering these people and helping them build resilient communities needs to be at the centre of any disaster management or development planning.

Post tsunami response in most of the affected countries and especially in Sri Lanka was slow and poor despite the fact that there was abundant funding support from the generous people from all over the world. This has raised questions on the intentions and capacity of humanitarian assistance providers and government actors in Sri Lanka. Despite the generous flow of funds recovery of the affected people is not as fast as expected. People's vulnerability and livelihood did not improve. There was huge resentment among disaster and conflict affected people. Gaps widened between rebels and government and both returned to violent conflict. Poorly prepared communities and humanitarian assistance providers including government authorities did not have enough skills and capacity to handle massive and complex emergency.

Top heavy decision making process did not work well. It rather contributed to the disempowerment of the communities turning them into mere recipient of handouts. Developing response and preparedness capacity at all level (family, community, NGOs, INGOs, government) including understanding of basic humanitarian principles and minimum standards and applying them in policy formation for responding to future disasters is the key to reducing future disaster risks. There is a realization that people in the frontline of facing such disaster risks are to be prepared so that they can mobilize themselves to deal with future disasters. Thus communities should be at the centre of disaster management or development planning.

Although disasters of such scale needs planning and interventions at national, regional and international level, the most vulnerable people in local communities who are affected most should be at the heart of such planning. The Ministry of Disaster Management and Human Rights through it's Road Map for Disaster Risk management in Sri Lanka has clearly recognized community based disaster risk management (CBDRM) as a tool for risk reduction at the local levels, especially for line agencies and ministries. Initiatives are being taken to formulate a CBDRM policy and develop mechanisms and advance CBDRM as a key strategy to safer Sri Lanka.

It is in this context, RedR/CHA LSCB programme has decided to utilize its expertise and network to contribute towards this initiative by developing and delivering contextualised training in community based disaster risk management (CBDRM). We hope this will help many CBOs, NGOs, INGOs and government actors involved in the disaster risk management in increasing the effectiveness of their work towards making a safer Sri Lanka.

Sincerely

*Prem Chand & Aslam Saja*

Facilitators & Co-Authors of the Course

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## COURSE OVERVIEW

This 15 days long modular course in Community Based Disaster Risk Management (CBDRM) has been developed as 6 distinct modules of 2-3 days long, each dealing with specific set of activities within disaster risk management framework.

CBDRM<sub>1</sub> - Introduction to CBDRM – 2 days

CBDRM<sub>2</sub> - Participatory Approaches in Disaster Risk Management – 3 days

CBDRM<sub>3</sub> - Community based Disaster Risk Assessment -3 days (including field practice)

CBDRM<sub>4</sub> - Community based Risk Management Planning – 2 days

CBDRM<sub>5</sub> - Community based Implementation, Monitoring and Evaluation - 3 days

CBDRM<sub>6</sub> – Standards and Good practices in Disaster Risk Management – 2 days

The modular course is designed and delivered in such a way that it allows the learners sufficient time to understand, grasp the content, reflect on and practice it in their own working environment while minimizing travel time and logistics for the international and regional participants.

We suggest 3 alternative ways to deliver the course:

1. **Workshop based open course:** where there is no possibility of actual field visits this 3 weeks long course is delivered in two 3 clusters of 5 days using presentations, group exercises & simulations. A minimum of 1 month time in between 3 events is allowed for field practice. Learners are expected to complete an assignment and practice in their own work place during this time.
2. **Field based & tailor made course:** whenever, there is an opportunity of visiting community where some kind of participatory processes are in place, the whole course may be delivered in one stretch of 15 days.
3. **Delivering Modular Courses** where each module is delivered separately and it is up to the learners to choose which module they want to learn. A guideline will be provided to the potential participants of any module if it was necessary to attend the previous module.

At the end of each session is a learning log and action planner. We encourage you to complete the learning log at the end of the session. Learning logs are a way to enhance learning by helping you think about what you have learnt and how you could apply it back at your workplace.

## [CBDRM1- Introduction to Community Based Disaster Risk Management \(CBDRM\)](#)

This is the first introductory module on CBDRM modular course series. **Five discrete sessions** are presented sequentially to build the basic knowledge and understanding about CBDRM and its relationship with development. These sessions in module 01 will lead the participants towards an understanding of the disaster management concepts, CBDRM approach and link between development and disaster development.

**CBDM1.1 - Understanding the disaster trends and their impact on the communities:** This Session introduces disaster- what, where, why, when, who and how? ; discusses the different types of disasters; history of major disasters; global and local disaster trends and their impact on the community. The session closes with an attempt to find your own role in addressing disaster issues

**CBDM1.2 - Disaster Management concepts and terminologies:** During this session the learners go through disaster related terms and definitions (disaster / emergency language), discuss the disaster management cycle and disaster management concepts. The session concludes with an introduction to community centred approach- an evolving concept in disaster risk management

**CBDM1.3 - Disasters - Development link:** This session attempts to find out the relationship between disasters and development; discusses dangers of development; defines sustainable development in relation to disaster risk reduction. The session concludes with an attempt to highlight a need to integrate disaster risk reduction in development planning

**CBDM1.4 –Disaster Management- A Paradigm Shift:** This session discusses how the understanding and treatment of disaster management changed over a period of time. It describes a paradigm shift disaster management approaches from an emergency response model to risk reduction and community based sustainable development model. It concludes with discussion on Disaster Crunch Model to understand the underlying causes of the disaster risks.

**CBDM1.5 - Introduction to CBDRM Approach:** This session discusses meaning of CBDRM, compares conventional and CBDRM approaches, fundamental principles in CBDRM, benefits and challenges in CBDRM,

**CBDM1.6 – Processes and Steps in CBDRM:** During this session the learners discuss about the common steps involved in CBDRM, understand similarities and differences between CBDRM and development management process and; establish a relationship between the CBDRM cycle and the development project cycle.

## [CBDRM2- Community Participatory Approaches in Disaster Risk Management](#)

This is the second module on community based disaster risk management (CBDRM) training series which introduces community based participatory approaches, tools and techniques used throughout the disaster risk management cycle. This session helps the learners to understand the applications of the participatory tools in community based initiatives for disaster risk reduction. The tools and techniques introduced under this module will be applied to carry out the disaster risk assessment, community based disaster risk management planning; designing local initiatives and participatory monitoring and evaluation.

This 3 days long learning workshop aims at developing practical skills among the learners on the applications of participatory tools and techniques to carry out CBDRM activities.

### Objectives:

By the end of the module the participants will be able to:

- Understand the context in which CBDRM initiatives are to be implemented including social, political, economic, ecological and cultural (SPEEC) aspects of community
- Understand concepts of Community Participatory Approaches (CPA), importance, applications and challenges while practicing CPA in disaster risk management
- Understand and apply the selected participatory tools and techniques in CBDRM to carry out community based research including identification & analysis of hazards, vulnerabilities, community assets/resources, community capabilities.
- Apply CPA tools to integrate disaster risk reduction in community based development planning

### Contents:

**CBDRM2.1 - Understanding communities:** understanding Socio, Cultural, Economic, Ecological and Political (SPEEC) aspects of community, community profiling

**CBDRM2.2 - Introduction to Community Participatory Approaches (CPA):** Importance, applications & challenges and steps in participatory development; cross cutting issues in community participation & disaster management- gender, children, disadvantaged groups etc

**CBDRM2.3 - Communicating with communities:** breaking the barriers of communication, identifying appropriate ways to communicate to minimize unnecessary expectations and increasing participation

**CBDRM2.4 - Cross cutting issues in participatory DRM – gender, children, most vulnerable individuals**

**CBDRM2.5 - Introduction to CPA tools & techniques-** basic features of participatory research tools, their applications during the CBDRM cycle, data collection, synthesis and analysis tools

**CBDRM2.6 - Stakeholder analysis & community relations web –** identifying key stakeholders, their interest and influence in CBDRM activities

**CBDRM2.7 - Community Organization for CBDRM –** organizing, mobilizing and sustaining community based groups for disaster risk management

### CBDRM<sub>3</sub> - Community Based Risk Assessment (CBRA)

The third module on CBDRM is a 3 days long course which aims at preparing learners to help the communities assess and analyse the disaster risks in the community. This session deals with the assessment of hazard, vulnerability and capacity using the community participatory tools & techniques introduced in module 2.

#### Objectives:

By the end of this learning session, participants will be able to:

- Understand the risk assessment framework and relationship of Hazard, Vulnerability and Capacity with risk
- help the community to carry out participatory HVCA (hazard, vulnerability, capacity assessment) using the CPA tools
- assist community members to prepare CBRA reports which will be used for community based risk management planning

#### Contents:

**CBDRM<sub>3.1</sub> - Introduction to Community based risk assessment (CBRA)** – Why and how CBRA, defining disaster risk, interrelation among Hazard, Vulnerability, Capacity and disaster risk

**CBDRM<sub>3.2</sub> - Hazard Assessment and CVA matrix:** Hazard assessment methods, CPA tools and techniques for hazard, Capacity and Vulnerability assessment

**CBDRM<sub>3.3</sub> - Practicing the tools** –Analysing the collected data on HVC and carrying out HVC assessment and developing a risk profile, prioritising the risks

**CBDRM<sub>3.4</sub> - Risk assessment and CBRA report** – Preparation, presentation and applications of CBRA report

## CBDRM4- Community based risk management planning

The fourth 2 days long module focuses on developing a community based disaster risk management (CBDRM) plan. This module builds upon module 3. New participatory tools and techniques such as VOSA (Vision, Obstacle analysis, Strategic objectives and Action plan) will also be introduced along with other tools for community based planning.

### Objectives:

By the end of the module the participants will be able to:

- Understand the context, importance and application of participatory practices in developing a community based disaster risk management plan.
- Understand and apply the participatory tools and techniques used in community based planning (VOSA technique)
- Discuss types of CBDRM planning and their relationship with development planning
- Draft a simple community Action Plan for disaster risk management

### Contents:

**CBDRM4.1 - Introduction to the community based risk management planning:** understanding guiding principles in CBRM planning, CBRM planning process and steps (10 step processes)

**CBDRM4.2 - Intro to community based participatory planning technique-** VOSA techniques for participatory planning & its application to CBDRM planning

**CBDRM4.2.1 - Shared community visioning:** exercise on creating a community's shared vision for future in general and disaster management in particular

**CBDRM4.2.2 - Obstacles/ Risk Analysis:** understand, identify and prioritize disaster risks (referring to HVCA) and other internal and external obstacles that may prevent a community from achieving its' shared vision of safer community

**CBDRM4.2.3 - Developing Strategies** – to move towards a shared vision of safer and desired community by identifying the ways to reduce risks and deal with the internal and external obstacles.

**CBDRM4.2.4 - Action Planning-** understanding key elements in community based action plans, developing action plans for each strategic objectives, need for actor specific plans at various level e.g. individual, family, neighbourhood and community level; identifying key risk reduction measures and activities necessary to deal with the internal and external obstacles for each of the strategic objectives

**CBDRM4.3 - Actor/ Stakeholder Analysis**– identifying actors for each activity, analysing the interest, power and influence of each group of actors on the issue, also find the ways to engage them in support of the community based activities

**CBDRM4.4 - Resource Analysis** – identifying resources needed for proposed activities, analysing access to internal and external resources and identifying actions to fill resource gaps

**CBDRM4.5 - Drafting Community Action Plan-** understanding key elements in community based action plans, collating information from previous sessions and drafting the plan



# MODULE – CBDRM<sub>1</sub>: INTRODUCTION TO COMMUNITY BASED DISASTER RISK MANAGEMENT

## AIMS & OBJECTIVES

This 2 days learning workshop is the first introductory module on community based Approaches to disaster management (CBDM). This module aims at introducing basic concepts of community based disaster risk management and develop a common understanding among the learners about the link between disaster and development management.

By the end of the module the participants will be able to:

- Understand the global and local disaster trends; their impact on communities
- Understand the basic concepts and terminologies used in disaster management
- Understand the link between disaster risk management and community development
- Understand the significance of CBDRM approach and processes involved in it

## COURSE CONTENT & WORKBOOK STRUCTURE

**Six discrete sessions** are presented sequentially to build the basic knowledge and understanding about CBDRM and its relationship with development. These sessions in module 01 will lead the participants towards an understanding of the disaster management concepts, CBDRM approach and link between development and disaster development.

**CBDM<sub>1.1</sub> - Understanding the disaster trends and their impact on the communities:** This Session introduces disaster- what, where, why, when, who and how? ; discusses the different types of disasters; history of major disasters; global and local disaster trends and their impact on the community. The session closes with an attempt to find your own role in addressing disaster issues

**CBDM<sub>1.2</sub> - Disaster Management concepts and terminologies:** During this session the learners go through disaster related terms and definitions (disaster / emergency language), discuss the disaster management cycle and disaster management concepts. The session concludes with an introduction to community centred approach- an evolving concept in disaster risk management

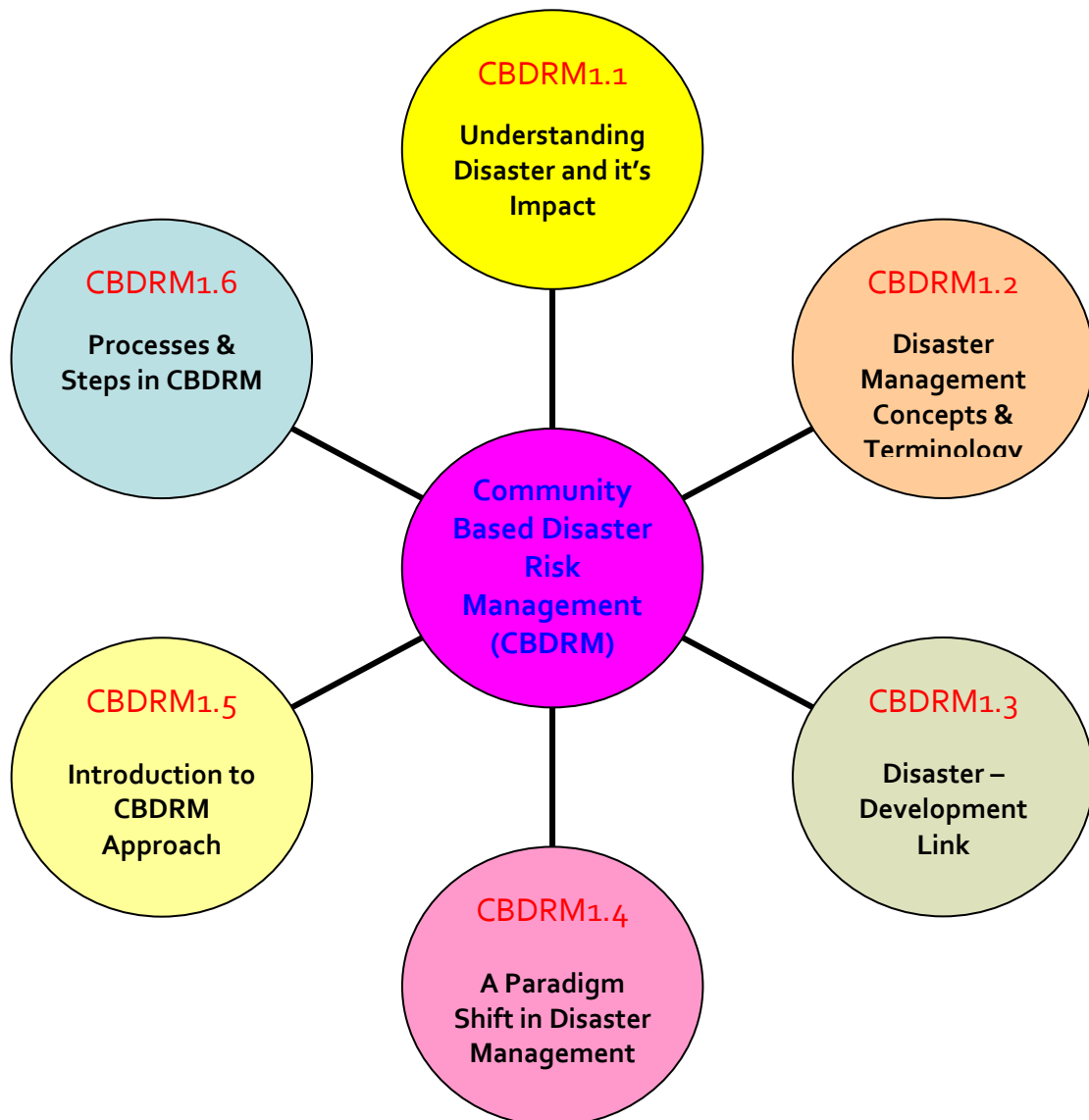
**CBDM<sub>1.3</sub> - Disasters - Development link:** This session attempts to find out the relationship between disasters and development; discusses dangers of development; defines sustainable development in relation to disaster risk reduction. The session concludes with an attempt to highlight a need to integrate disaster risk reduction in development planning

**CBDM<sub>1.4</sub> – A Paradigm Shift in Disaster Management:** This session discusses how the understanding and treatment of disaster management changed over a period of time. It describes a paradigm shift disaster management approaches from an emergency response model to risk reduction and community based sustainable development model. It concludes with discussion on Disaster Crunch Model to understand the underlying causes of the disaster risks.

**CBDM<sub>1.5</sub> - Introduction to CBDRM Approach:** This session discusses meaning of CBDRM, compares conventional and CBDRM approaches, fundamental principles in CBDRM, benefits and challenges in CBDRM,

**CBDM<sub>1.6</sub> – Processes and Steps in CBDRM:** During this session the learners discuss about the common steps involved in CBDRM, understand similarities and differences between CBDRM and

development management process and; establish a relationship between the CBDRM cycle and the development project cycle.



## TRAINING METHODS

Learning requires the development of new knowledge, skills and attitudes. This module will assist participant learning by using both didactic (instructional) methods together with experiential learning to build a deeper understanding of concepts and their relevance to the Sri Lankan context.

Training methods will therefore include:

- 📖 Experiential and adult learning
- 📖 Self reflection and analysis
- 📖 Participatory learning approaches including pairs, triads and small group work, role plays, simulations, case studies; quizzes and games
- 📖 Presentations and audio visuals
- 📖 Critical feedback and evaluation within a supportive environment

## WS-1.1 Expectations & Fears from the Workshop



My Expectations



My Fears

What am I going to achieve from this workshop?

What may go wrong during the workshop?

How am I going to contribute to the learning?

What do I expect from other participants?

### Review it at the end of the workshop

*To what extent did it meet your expectations?*

*Did you find anything new that you were not expecting? What was it?*

# Workshop Schedule

## CBDM1- Introduction to Community Based Disaster Risk Management (CBDRM)

### Day-1

Session	Topics	Time
	Registration & Setting up	08:00-08:30
CBDRM1.0	<b>Welcome &amp; Introduction:</b> Workshop briefing & Introduction of participants, setting ground rules; expectations & fears of Workshop	08:30-09:30
	<b>Pre-test /quiz:</b> knowing what we already know- a group response	09:30-10:15
	<b>TEA BREAK</b>	<b>10:15-10:30</b>
CBDRM1.1	<b>Understanding the disasters &amp; their impact on communities:</b> disaster-what, where, why, when, who and how? ; types of disasters; history of major disasters; global and local disaster trends and their impact on the community; your own role in addressing disaster issues	10:30-11:30
CBDRM1.2	<b>Disaster management concepts and terminology</b> – introduction to Disaster Management terms used in disaster management sector (disaster / emergency language), management concept using Disaster Management Cycle (DMC);	11:30-13:00
	<b>LUNCH BREAK</b>	<b>13:00-14:00</b>
CBDRM1.3	<b>Linking Disaster with development:</b> relationship between disasters and development; dangers of development; defining sustainable development in relation to disaster risk reduction; a need to integrate disaster risk reduction in development planning.	14:00-15:30
	<b>TEA BREAK</b>	<b>15:30-15:45</b>
CBDRM1.4	<b>Disaster Management Approaches</b> : a paradigm shift in understanding and management of disaster; a journey from emergency response approach to risk reduction and sustainable and community centred development approach - an evolving concept in disaster risk management	15:45-17:00

### Day-2

Session	Topics	Time
	Recap of day-1	08:30-09:00
CBDRM1.5	<b>Introduction to CBDRM Approach</b> : meaning of CBDRM, conventional vs CBDRM approach, Key features of CBDRM, fundamental principles in CBDRM, benefits and challenges in CBDRM	09:00-10:15
	<b>TEA BREAK</b>	<b>10:15-10:30</b>
CBDRM1.6	<b>Processes and Steps in CBDRM:</b> CBDRM cycle, steps involved in CBDRM, similarities and differences between CBDRM and community development processes	10:30-13:00
	<b>LUNCH BREAK</b>	<b>13:00-14:00</b>
	<b>Processes and Steps in CBDRM: ...contd....</b> Understanding communities and community profiling	14:00-15:15
	<b>TEA BREAK</b>	<b>15:15-15:30</b>
	<b>Plenary session:</b> Q&A session on concepts,	15:30-16:00
CBDRM1.0	<b>Workshop Assessment, Certification &amp; Wrap up</b>	16:00-17:00

### Learning keys:

The more you put into it, the more you take away. Active participation is the rule.

Practical problems have practical solutions. So bring your own problems, share with others and hopefully you will go with number of alternative solutions.



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# SESSION-CBDRM 1.1

## Understanding the disasters and their impact on the communities

### Rationale

Disasters are widely perceived as an event or series of events leading to a situation beyond human control. Disasters events are caused by existing hazards which may be natural or human-made. Any of these events can lead to mass migrations of people who are struggling to survive by escaping from a potential hazard or an actual emergency. If an emergency is not managed well, it can become a disaster or catastrophe. Thus the humanitarian and development practitioners need to understand the global disaster trends and their impact on the communities which will help them to devise strategies to combat against the underlying causes behind these disasters. In particular, it is also important for the practitioners to understand the different disaster scenarios in our context.

### Learning Outcomes


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

- 📖 Understand the definition and concept of disaster
- 📖 Understand the global as well as local disaster trends and its impact in the community
- 📖 Understand different types of disasters and the underlying causes
- 📖 Explore their own role and responsibility in dealing with disasters

### Content

- 📖 *Understanding a disaster- What is disaster? What are the different types of disasters? When does a disaster occur? Why does it occur? Who is affected? Who should address it? How does it happen and how can it be addressed?*
- 📖 *Types of disasters and their underlying causes*
- 📖 *Global and local disaster trends and influencing factors*





 *Why should I be concerned of the disaster trends? Am I affected? Do I have a role to play?*





### WS-1.2- Understanding disaster - Brainstorming session


Please try to respond to each of the following questions based on your current understanding of the disaster.


 What do you understand by the term disaster? What makes it happen? What are the underlying causes?

 When does it happen? When do you need to deal with it?

 Who is involved? Who is affected? Who should deal with it?

 Where does it happen? Where will you address?

 How does it happen? How can it be managed?

 Why is it important to you? Why should you be concerned about it? Am I affected? Do I have a role to play?



## WS-1.3 - Understanding Disaster & Impact on the Communities

Find out the appropriate terms for the explanations given below and solve the cross word puzzle. Discuss the terms with the group members.

					1														
									2										
													3						
		5				4													
								6											
				7															

### Across

- .....is a phenomenon or situation, which has the potential to cause disruption or damage to people, their property, services and environment/ there is a potential for an event to occur
- When a community is affected by a hazard impact causing a serious disruption in their survival and L..... system an emergency situation arises.
- ..... occurs when the scale of the impact is so large that a community can not cope with the emergency situation.

### Down

- Set of conditions that reduces people's ability to prepare for, withstand or respond to a hazard is termed as .....
- Positive conditions which increase a community's ability to deal with hazards and risks are called .....
- When a community is affected by a hazard impact causing a serious disruption in their survival and livelihood system an.....situation arises.
- ..... is defined as the probability of harmful consequences, or expected loss (of lives, people injured, property, livelihoods, economic activity disrupted or environment damaged) resulting from the impact of a particular hazards .

Please ask questions regarding the terms and definitions used (if any)

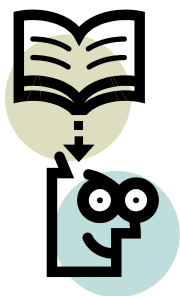


## WS-1.4 - Understanding Disaster & Impact on the Communities

Please discuss among the group members and complete the following statements by filling in the blank spaces. (Note that the first letter of the blanked out word is already completed to give you a clue!). Check if the statement is true or false. Give reasons.

	Statements	True / False
1	D..... occurs when there is a serious disruption of the functioning of a community causing widespread human, material or environmental losses.	
2	There is no such thing as N..... D....., there are N..... H..... that can trigger D.....	
3	Floods, droughts, fires, landslides, earth tremors or earthquakes, storm surges, coastal erosion, cyclones, and epidemics of diseases, pests or Tsunami are considered N..... D.....	
4	Ethnic, national or international conflicts or other accidents that release industrial toxins into the environment, fires, transport accidents, or from industrial explosions may be considered as H..... induced H.....	
5	When a community is affected by H..... impact causing a serious disruption of life and livelihood system, D..... occurs	
6	When a community can not cope up with an E..... situation created by hazard impact, D..... takes place	
7	D..... can be reduced, and in some instances even prevented, by supporting people's ability to resist hazard impacts, for example by promoting seismic resistance in building design or construction of cyclone shelters	
8	A severe disruption to a community's survival and livelihood systems results from people's V..... to hazard impacts on a scale which overwhelms their C..... to cope unaided.	
9	In general, the communities which are V..... and in proximity to the H..... are likely to be affected by the D.....	
10	A natural phenomena by itself is not a D..... - only an earthquake, or wind, or flood, or volcano, or drought, etc. Likewise, a population may be V..... to a disaster for many years, yet without the trigger event there is no disaster. A D..... happens when these two come together.	





## 1.1 Understanding Disasters

### *What is it?*

**Disaster** is defined as a serious disruption of the functioning of a community causing widespread human, material or environmental losses which exceed the ability of the affected community to cope using its own resources.

### *When does it occur?*

When a community is affected by a **hazard impact** causing a serious disruption in their survival and livelihood system an emergency situation arises. When the scale of the impact is so large that a community can not cope with the emergency situation, disaster takes place.

### *What are the different types of disasters / Hazards?*

Hazards come in all shapes and sizes. Disasters can be categorised as natural or human induced as per the origin of the associated hazards.

**Natural hazards** may include floods, droughts, fires, landslides, earth tremors or earthquakes, storm surges, coastal erosion, cyclones, and epidemics of diseases or pests or Tsunami

**Human induced hazards** and corresponding disasters may include ethnic, national or international conflicts or other accidents that release industrial toxins into the environment, fires, transport accidents, or from industrial explosions.

Another way of categorising disasters is as follow:

- Extraterrestrial- Asteroid collision
- Internal Geo-dynamic processes- Earthquake, tsunami, volcanic eruption
- External geodynamic processes- Landslide, soil erosion
- Hydro meteorological- Floods, Tropical storms, drought
- Ecological / environmental- Pollution, crop disease,
- Epidemics- SARS, HIV / AIDS, Avian Flu
- Technological- Industrial accidents
- Conflicts- War, land mines, terrorism

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***WS – 1.5 - What else do you know about the types of Disasters? Prepare a list of disasters you have come across in and around your community.***

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### **Why does it occur?**

A severe disruption to a community's survival and livelihood systems results from people's vulnerability to hazard impacts on a scale which overwhelms their capacity to cope unaided. Key elements that are important for the disaster to occur are:

- hazard impact / event
- vulnerability and proximity to hazard
- scale of the impact
- community's coping capacity
- presence/absence of aid/ support

This means that disasters – even so-called 'natural disasters' – are not uncontrollable events, though they are often seen as such. Disasters can be reduced, and in some instances even prevented, by supporting people's ability to resist hazard impacts, for example by promoting seismic resistance in building design or construction of cyclone shelters.

### **Who is affected? Who should address it?**

In general, the communities which are vulnerable and in proximity to the hazards are likely to be affected by the disasters. However, the statistics show that the number and seriousness of disasters is increasing, disproportionately affecting poor countries and poor communities. The recorded number of disasters, the number of people they affect and the property losses they cause, have risen dramatically. An average year will see disasters kill over 60,000 people and affect at least a quarter of a billion. The recent years saw witnessed some of the world worst disasters such as Indian Ocean Tsunami (2004), Bam (Iran) earthquake, Turkey earthquake, Hurricane Katrina (USA), Gujrat (India) earthquake, China earthquake, Mynmar cyclone and Koshi (Indo Nepal) flooding.

More than half of disaster deaths occur in low human development countries, even though only 11% of people exposed to hazards live there. These countries suffer far greater economic losses relative to their GDP than richer countries. Not all disasters affect the poorest most, yet poorer people tend to be both more exposed and more susceptible to hazards, suffer greater relative loss of assets, and have a lower capacity to cope and recover. Furthermore, disasters can induce poverty, making better-off people poorer and the poor destitute

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***WS -1.6 - Think about one of the disasters that occurred in your community. Discuss why did it happen? Who were affected? Who are the key players who dealt / are dealing with it?***

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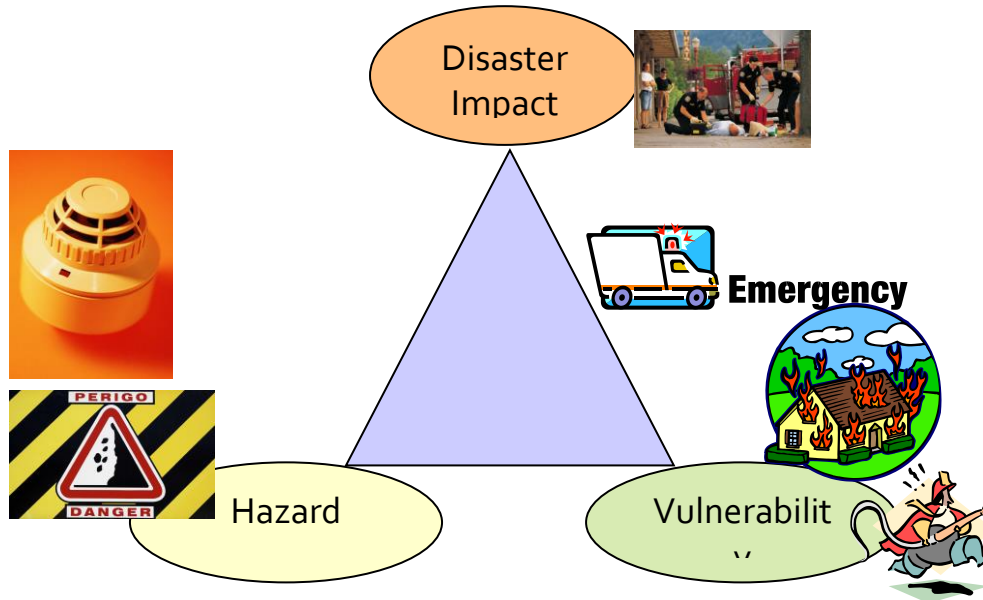
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**How does it happen and how can it be addressed?**

A **disaster** happens when, and only when, a hazard impacts on a vulnerable community or people. A natural phenomena by itself is not a disaster - only an earthquake, or wind, or flood, or volcano, or drought, etc. Likewise, a population may be **vulnerable** to a disaster for many years, yet without the **trigger event (hazard)** there is no disaster. *A disaster happens when these two come together.*



This can be further explained using an equation:

$$\text{Disaster Impact} = \frac{\text{Hazard} \times \text{Vulnerability}}{\text{Capacity}}$$

If we are to reduce the disaster impact for a given hazard, the focus should be in reducing the vulnerability or strengthen community's capacity to deal with it and cope with the situation.

**WS – 1.7 – From your understanding of the disaster concept, give at least 2 examples for each of the terms: Hazards, Vulnerability, Capacity and Disaster Impact, preferably from your own surroundings. Discuss the relationships among them.**

<p><b>Hazards</b></p>	<p><b>Vulnerability</b></p>
<p><b>Disaster Impact</b></p>	<p><b>Capacity</b></p>

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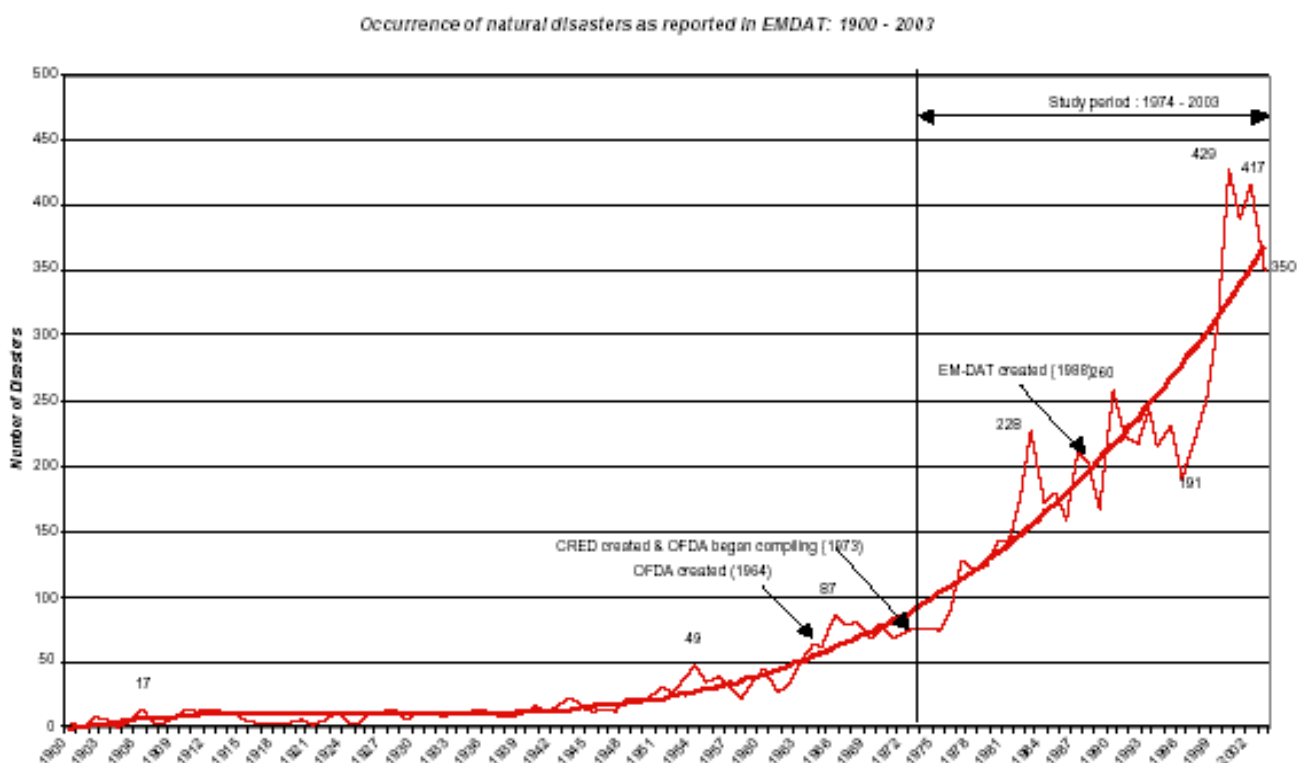
## 1.2 Global Disaster Trends

Today, the world is facing disasters on an unprecedented scale: more than 255 million people were affected by natural disasters globally each year, on average, between 1994 and 2003, with a range of 68 million to 618 million. During the same period, these disasters claimed an average of 58,000 lives annually, with a range of 10,000 to 123,000. **In the year 2003, 1 in 25 people worldwide was affected by natural disasters.**

Scientific predictions and evidence indicates that global climate change will increase the number of extreme events, creating more frequent and intensified natural hazards such as floods and windstorms. Population growth, urbanization and the inability of poor populations to escape from the vicious cycle of poverty makes it all the more likely that there will be an increase in the number of people who are vulnerable to natural hazards, with a resulting increase of natural disasters and environmental emergencies.

### 1.2.1 Disasters – A global scenario (Facts and Figures)

Based on the data in Centre for Research on the Epidemiology of Disasters' (CRED) EM-DAT database, between 1974 and 2003 there were 6,367 natural disasters, not counting epidemics. This resulted in the

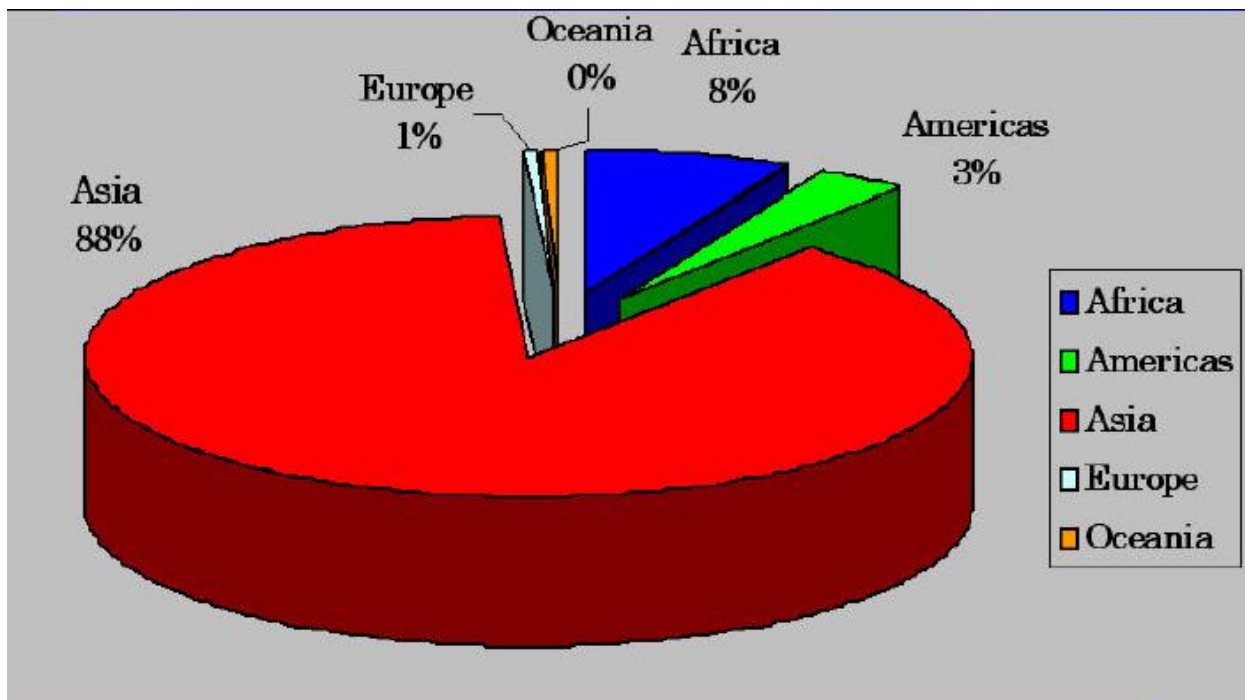


The fig.01 above shows the occurrences of natural disaster as reported in EMDAT: 1900-2003. Since 1900, more than 9,000 natural disasters have been registered in EM-DAT. Of these, about 80% have occurred over the last 30 years. Although this sounds like a dramatic increase, it should be viewed with caution and with some understanding of complexities between disaster occurrences and statistical

reporting and registering. (Please read the full report by CRED on "Thirty Years of Natural Disasters: 1974 – 2003: The Numbers" for further information)

## Global Disasters Trends in the Recent Years<sup>1</sup>

People affected by Natural Disaster Globally (1975-2000)



### Summary of Natural Disaster (1975-2000)

	Number of Disaster occurred	Number of people killed	Number of people affected	Amount of damage (1000 US\$)
World	2,961	754,026	2,116,593,188	687,0260,090
Asia	1,137 (38.4%)	588,654 (78.1%)	1,888,686,026 (89.2%)	373,893,530 (54.4%)

*Source: CRED EM-DAT Database, 2001*

<sup>1</sup> Source : Asian Disaster Reduction Center

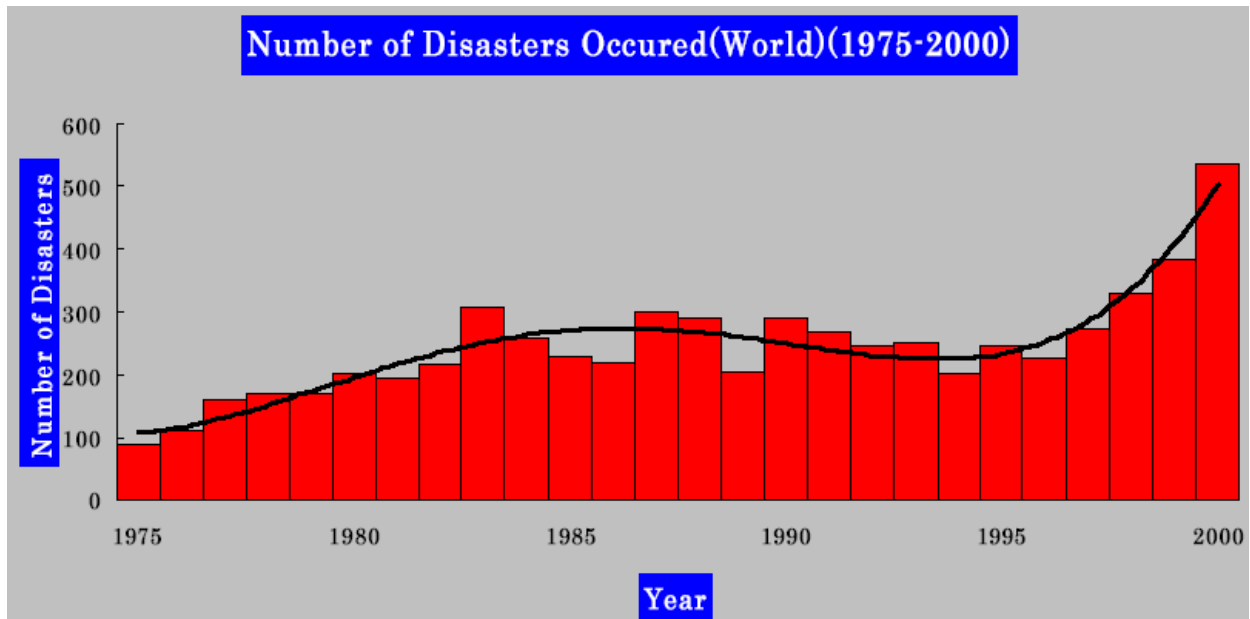
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**Number Global Disasters Occurance (1975-2000)**





**WS - 1.8 - Reflections**

What are your initial observations regarding the disasters trends and their impact on the global community?

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The table 2 below compares the ratios of the number of affected to killed between the first 15 years and the last 15 years of the study period by disaster category. It shows the number of people affected for every one person killed by a specific disaster type.

<b>Table 2 - Proportion of change in ratio of affected to killed by disaster type: 1974-1988 versus 1989-2003</b>					
	<b>1974-1988</b>		<b>1989-2003</b>		<b>Proportion of change between the two periods</b>
	<b>Total number of disasters (1)</b>	<b>Mean number of pesons affected for one killed</b>	<b>Total number of disasters (1)</b>	<b>Mean number of pesons affected for one killed.</b>	
Drought	17	119,883	17	44,748	-63%
Earthquake	160	20,780	248	8,143	-61%
Extreme temperature	6	2,545	48	14,915	+486%
Flood	351	9,503	874	11,763	+24%
Slide	39	1,193	144	335	-72%
Volcano	14	5,395	17	11,960	+121%
Wave/surge	3	61	4	3,096	+4,975%
Wildfire	11	995	39	2,523	+153%
Windstorm	346	5,977	655	21,225	+255%
<b>Total</b>	<b>947</b>	<b>11,526</b>	<b>2,046</b>	<b>13,706</b>	<b>+19%</b>




**[WS-1.9- Understanding Disaster Trends- Brainstorming session](#)**

Discuss among the group members to identify trends in disaster risks for each of the hazards. What could be the underlying causes of these trends?


The table 03 shows the most important disasters in terms of numbers killed or affected over the last 30 years. These all have occurred in all three continents of the developing world. (For updated version of the details, refer EM-DAT database)

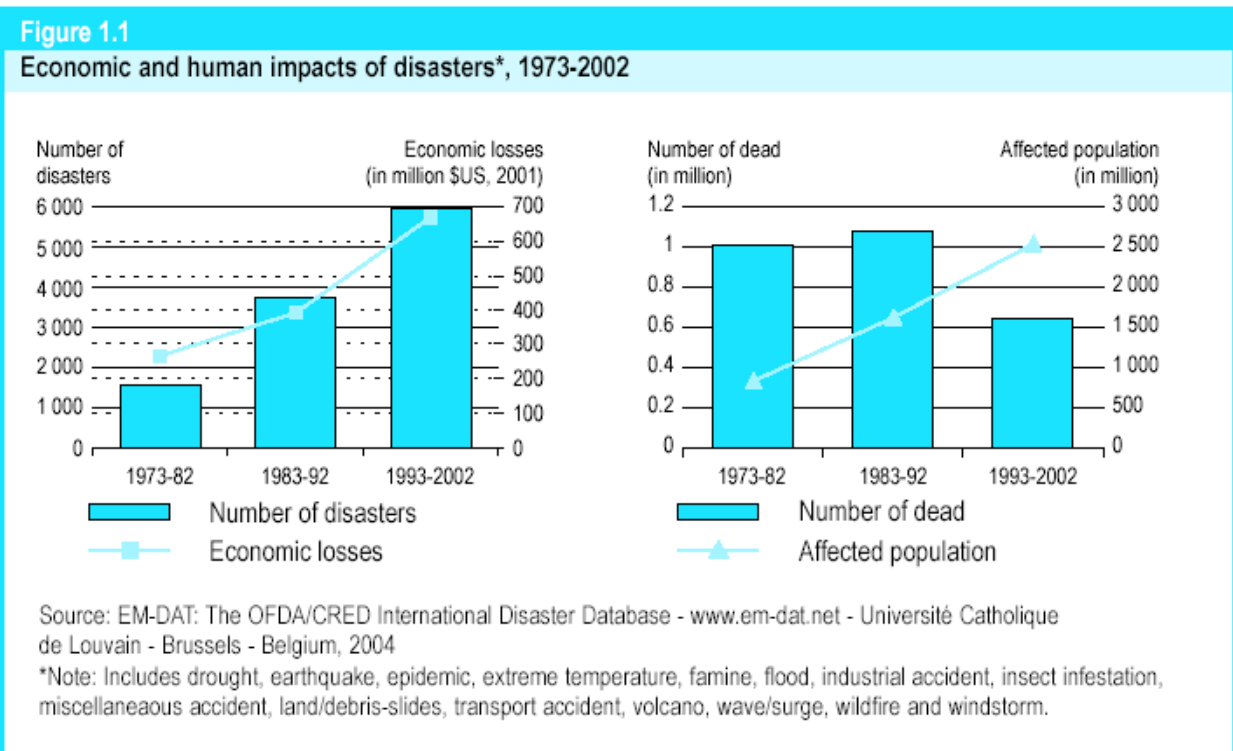
Table 3 - Top 10 disasters with highest numbers killed: 1974-2003			
Disaster type	Year(s)	Country(ies)	Number of deaths
1. Drought	1984	Ethiopia & Sudan	450,000
2. Drought	1974 – 1975	Sahel Region	325,000
3. Earthquake	July 27, 1976	China	242,000
4. Cyclone (Brendan)	April 30, 1991	Bangladesh	138,866
5. Drought	1985	Mozambique	100,000
6. Earthquake	June 1, 1990	Iran	40,000
7. Flood	December 1999	Venezuela	30,000
8. Heat wave	July-August 2003	Western Europe	29,264
9. Flood	July 1974	Bangladesh	28,700
10. Earthquake	December 26, 2003	Iran	26,796



**WS- 1.10- Understanding Disaster Trends- Brainstorming session**

What may be the underlying reasons of these disasters? What can be done to mitigate or reduce such risks?


The following illustration shows the economic and human impact of disasters between 1973 till 2002 (30 years)



**WS- 1.11- Understanding Disaster Trends- Brainstorming session**

How would you describe the emerging trends in the disaster impact? Discuss and describe the underlying causes of this trend.?




The following chart compares the disaster losses between the richest and poorest nations.

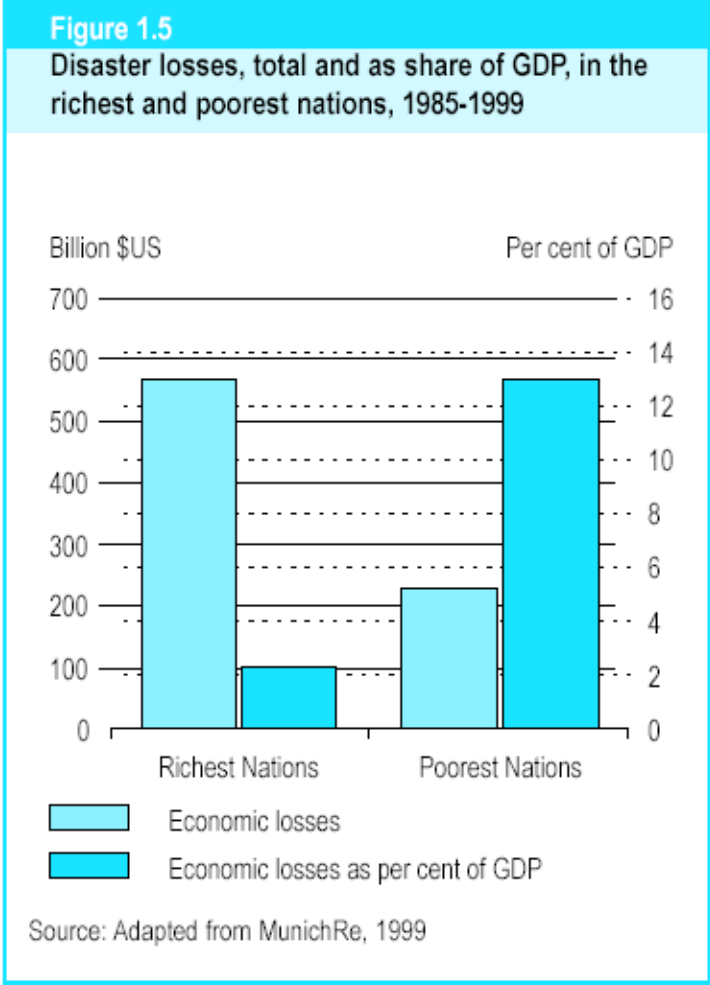


**WS – 1.12**

**Understanding  
Disaster Trends-  
Brainstorming**

**Session**

Discuss and describe the difference. What conclusions (more than one) can you draw from this illustration. How is it relevant to you? What message did you get for yourself? What will you do differently from now onwards in order to address this issue?


### 1.3 Some statistics of disasters in Sri Lanka

Over the last few decades, disaster losses in Sri Lanka have increased substantially. While the country is prone to natural floods, landslides, droughts, coastal erosion and tsunami, the country is facing two decade long humanitarian crisis. The devastation caused by the 2004 Indian Ocean tsunami has highlighted that Sri Lanka is also vulnerable to low frequency high impact events which cause extensive damages and reverse years of development gains by the country in different sectors.

The 2004 tragic tsunami has brought about a collective recognition among the Sri Lankan government, civil society organization and international agencies of the need for comprehensive disaster risk management, rather than just post disaster relief or better response mechanisms for the country. Creating the political and social will to manage disaster risk before the occurrence of a disaster event continues to be a great challenge.

The following table highlights the 10 most important disasters in Sri Lanka during past 3 decades:

	Disaster Event	Date	Number of people affected	Number of people killed
1	Flood	25/12/1969	1000000	62
2	Wind storm	24/11/1978	1005000	720
3	Drought	Sep-82	2000000	
4	Flood	Dec-83	1250000	
5	Drought	1987	2200000	
6	Drought	Aug-88	806000	
7	Flood	30/05/1989	501000	325
8	Drought	Sep-01	1000000	
9	Flood	17/05/2003	695000	235
10	Wave / Surge- tsunami	26/12/2004	1019306	35399

*Created on: Apr-30-2008. - Data version: v12.07*

*Source: "EM-DAT: The OFDA/CRED International Disaster Database*

## SESSION CBDRM1.1: LEARNING LOG and ACTION PLANNER

1	Session
	Understanding Disaster trends and impact on the communities
2	What did I think of this session?
3	What did I learn from this session?
4	What can I use from this session? Where and how could I use it?
5	How can I learn more about the topic of this session?

# SESSION-CBDRM 1.2

## Disaster Management Concepts and Terminology

### Rationale




*'Disaster is a crisis situation that far exceeds the capabilities'* - Quarentelly, 1985.

Disasters have always co-existed with civilization. However, understanding of disaster and its impact on human civilization have significantly changed over time. With technological and social advancement, human life and lifestyle has become complex. As a result there is a growing complexity in understanding disaster, its impact and the way we deal with it. It is important for the disaster management and development practitioners to begin with developing a common understanding of key terms and concepts used in disaster management field.

This session will help the learners to understand basic concepts and terminology used in the disaster management field.

### Learning Outcomes

At the end of this session participants will be able to

-  define the key terms used in disaster management
-  understand different phases of disaster management cycle
-  compare disaster management cycle with project cycle

### Content

1. *Disaster management Cycle*
2. *Disaster management Terminology – a*
3. *Disaster Terminology - common sense approach*



## WS -2.1 – Understanding Disaster Concepts & Terminology

Locate the disaster related terms from the chart below and encircle them. As soon as you locate the term/word, look for the corresponding definitions or matching statements given below and fill in the blanks to complete the statement.

L	U	X	V	A	L	U	E	Y	M	O	N	O	C	E	V	E	R	Y
I	N	S	U	R	V	I	V	A	L	I	M	P	A	C	T	A	R	T
F	P	U	L	R	E	S	C	U	E	H	E	L	P	O	R	T	A	L
E	R	U	N	I	M	P	A	C	T	E	D	E	A	N	E	R	V	E
R	E	L	E	F	A	P	P	R	O	A	C	H	O	O	T	U	C	A
E	P	A	R	M	A	N	A	G	E	M	E	N	T	M	S	N	A	R
H	A	Z	A	R	D	S	C	O	M	U	N	I	T	Y	I	F	P	E
A	R	A	B	I	C	L	I	V	E	L	I	H	O	O	D	E	A	D
B	E	D	I	S	A	S	T	E	R	I	S	K	P	R	E	M	C	E
I	D	O	L	K	R	A	Y	O	G	A	I	N	I	A	V	A	I	L
L	N	S	I	M	P	L	E	R	E	S	P	O	N	S	E	K	T	O
I	E	B	T	A	I	L	P	I	N	W	I	N	G	E	L	A	Y	V
T	S	A	Y	R	C	O	R	E	C	O	V	E	R	Y	O	R	R	E
A	S	S	E	S	O	L	E	C	Y	T	R	E	V	O	P	M	E	N
T	R	E	D	R	P	O	V	E	R	T	Y	K	A	R	M	A	C	E
I	N	D	U	C	E	D	E	V	E	L	O	P	N	E	E	D	S	E
O	M	U	H	U	M	A	N	R	E	D	C	T	I	O	N	E	E	D
N	A	T	U	R	A	L	T	Y	M	I	T	I	G	A	T	I	O	N
U	N	S	U	S	T	A	I	N	A	B	L	E	L	I	V	I	N	G
H	O	M	E	R	E	C	O	N	S	T	R	U	C	T	I	O	N	P

- ..... is defined as a serious disruption of the functioning of a community causing widespread human, material or environmental losses which exceed the ability of the affected community to cope using its own resources.
- ..... is a phenomenon or situation, which has the potential to cause disruption or damage to people, their property, services and environment/ there is a potential for an event to occur.
- Set of conditions that reduces people's ability to prepare for, withstand or respond to a hazard is termed as .....
- ..... is defined as the positive conditions or abilities which increase a community's ability to deal with hazards
- The probability that a community's structure or geographic area is to be damaged by the impact of a particular hazard is termed as.....
- An Emergency situation arises when a community is affected by a hazard impact causing a serious disruption in their survival and ..... system

7. Disaster ..... involves the actions taken following the impact of a disaster when exceptional measures are required to meet the basic needs of the survivors
8. .... involves the measures required in search and rescue of survivors to meet the basic needs for shelter, water, food and health care
9. .... is defined as the sustained efforts intended to improve or maintain the social and economic well-being of a community
10. Measures taken to avert a disaster from occurring, if possible (to impede a hazard so that it does not have any harmful effects) is known as .....
11. Measures taken prior to the impact of a disaster to minimize its effects (sometimes referred to as structural and non-structural measures) is termed as .....
12. .... : Actions taken in the aftermath of a disaster to: assist victims to repair their dwellings; re-establish essential services; revive key economic and social activities
13. .... : Permanent measures to repair or replace damaged dwellings and infrastructure and to set the economy back on course
14. .... : Measures taken in anticipation of a disaster to ensure that appropriate and effective actions are taken in the aftermath
15. .... : A status whereby a lack of resources limits the ability of an individual or household to meet basic needs. What is included in basic needs is culturally determined so that different levels of economic status may be described as conveying relative forms of .....
16. **Disaster risk** .....: The systematic development and application of policies, strategies and practices to minimise vulnerabilities, hazards and the unfolding of disaster impacts throughout a society, in the broad context of sustainable development
17. .... **Hazard**: A latent threat associated with the probable occurrence of a phenomenon of natural origin – for example, an earthquake, a volcanic eruption, a tsunami or a hurricane.
18. .... **Development**: *Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.*
19. .... **Disaster Risk** .....: A process of disaster risk management in which at risk communities are actively engaged in the identification, analysis, treatment, monitoring and evaluation of disaster risks in order to reduce their vulnerabilities and enhance their capacities.
20. .... **Management**: A complex social process through which disaster risk is

measured and evaluated, understood, reduced or predicted and controlled. It is a systematic application of management policies, procedures and practices to identify, analyze, assess, treat, monitor and evaluate risks. This involves decision making based on the examination of those risks, which includes hazard, vulnerability, and capacity of people and institutions (ADPC).

## 2.1 Disaster Management Terms

### Disaster

A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources. A disaster results from the combination of hazards, vulnerability, and insufficient resources and capacity to cope with the impact.

### Disaster

A social crisis situation occurring when a physical phenomenon of natural, socio natural or anthropogenic origin negatively impacts vulnerable populations and their livelihoods, production systems infrastructure and historical heritage, causing intense, serious and widespread disruption of the normal functioning of the affected social unit. The impacts and effects can not be overcome with the resources autonomously available to the affected society. Impacts are expressed in different forms such as the loss of life, health problems, the destruction, loss or rendering useless of the totality or part of private or collective goods and severe impacts on the environment. These negative impacts require an immediate response from the authorities and from the population in order to attend the affected and to re-establish acceptable thresholds of wellbeing and life opportunities. (A)

### Disaster Concepts

**Vulnerability** Set of conditions that reduces people's ability to prepare for, withstand or respond to a hazard

**Hazard** phenomenon or situation, which has the potential to cause disruption or damage to people, their property, services and environment / there is a potential for an event to occur

**Capacity** Positive condition or abilities which increase a community's ability to deal with hazards

**Risk** The probability that a community's structure or geographic area is to be damaged by the impact of a particular hazard

**Disaster/ Calamity** A serious disruption of the functioning of a community causing widespread human, material or environmental losses which exceed the ability of the affected community to cope using its own resources

**Development** Sustained efforts intended to improve or maintain the social and economic well-being of a community

Disaster risk = Hazard x Vulnerability

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## Hazard

A latent threat associated with the probable occurrence of a physical phenomenon of natural, socio natural or anthropogenic origin that may be expected to have adverse effects on people, production, infrastructure, goods and services. Hazards are risk factors that are external to the exposed social elements and represent the probability that a phenomenon of determined intensity will occur at a specific location and within a defined period of time. (A)

## Hazard

A potentially damaging physical event, phenomenon and/or human activity, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.

*Hazards can include latent conditions that may represent future threats and can have different origins: natural (geological, hydro meteorological and biological) and/or induced by human processes (environmental degradation and technological hazards). Hazards can be combined, sequential or combined in their origin and effects. Each hazard is characterised by its location, intensity, frequency and probability. (F)*

## Natural Hazard

A latent threat associated with the probable occurrence of a phenomenon of natural origin – for example, an earthquake, a volcanic eruption, a tsunami or a hurricane. The origins of such phenomenon may be found in the natural processes by which the Earth and the environment are transformed and changed. Natural hazards are often classified according to their origins in the biosphere, allowing the identification of geological, geomorphologic, climatologic, hydro-meteorological, oceanic and biotic threats, among others. (A)

## Hazard Analysis or Evaluation

The process by which the possible occurrence, magnitude, location and temporality of a damaging physical event is ascertained. (A)

## Hazard Analysis

Identification, studies and monitoring of any hazard to determinate its potentiality, origin, characteristics and behaviour.(F)

## Disaster Management Concepts

**Response** Actions taken following the impact of a disaster when exceptional measures are required to meet the basic needs of the survivors

**Relief** Measures required in search and rescue of survivors to meet the basic needs for shelter, water, food and health care

**Rehabilitation** Actions taken in the aftermath of a disaster to: assist victims to repair their dwellings; re-establish essential services; revive key economic and social activities

**Reconstruction** Permanent measures to repair or replace damaged dwellings and infrastructure and to set the economy back on course

**Prevention** Measures taken to avert a disaster from occurring, if possible (to impede a hazard so that it does not have any harmful effects)

**Mitigation** Measures taken prior to the impact of a disaster to minimize its effects (sometimes referred to as structural and non-structural measures)

**Preparedness** Measures taken in anticipation of a disaster to ensure that appropriate and effective actions are taken in the aftermath



### **Vulnerability**

The propensity of human beings and their livelihoods to suffer damage and loss when impacted by external physical phenomenon.

Distinct levels of human and livelihood vulnerability may be explained by the incidence of diverse processes and conditions relating, amongst others, to the presence of insecure buildings and infrastructure, limited economic resources and incomes, lack of social protection, insecure livelihoods, poverty, inadequate educational, organizational and institutional arrangements and lack of well developed social and political capital. (A)

### **Vulnerability**

The degree of loss to a given element or set of elements within the area affected by a hazard.

It is expressed on a scale of 0 (no loss) to 1 (total loss). Also, a set of conditions and processes resulting from physical, social, economic, and environmental factors, which increase the susceptibility of a community to the impact of hazards.(B)

### **Vulnerability**

The extent to which a community, structure, service, or geographic area is likely to be damaged or disrupted by the impact of a particular disaster hazard, on account of their nature, construction, and proximity to hazardous terrain or a disaster-prone area. For engineering purposes, vulnerability is a mathematical function defined as the degree of loss to a given element at risk, or set of such elements, expected to result from the impact of a disaster hazard of a given magnitude.

It is specific to a particular type of structure, and expressed on a scale of 0 (no damage) to 1 (total damage). For more general socio-economic purposes and macro-level analyses, vulnerability is a less-strictly defined concept. It incorporates considerations of both the intrinsic value of the elements concerned and their functional value in contributing to communal well-being in general and to emergency response and post-disaster recovery in particular. In many cases, it is necessary (and sufficient) to settle for a qualitative classification in terms of "high", "medium", and "low"; or explicit statements concerning the disruption likely to be suffered. (E)

### **Vulnerability**

A set of conditions and processes resulting from physical, social, economical, and environmental factors, which increase the susceptibility of a community to the impact of hazards. (F)

### **Human Vulnerability**

A human condition or process resulting from physical, social, economic and environmental factors, which determine the likelihood and scale of damage from the impact of a given hazard.(C)

### **Physical Exposure**

Elements at risk, an inventory of those people or artefacts that are exposed to a hazard.(C)

### **Vulnerability Evaluation**

The process by which the susceptibility and predisposition to damage or loss is determined when faced with the possible occurrence of a dangerous physical phenomenon. This also includes an analysis of the factors and contexts which can substantially impede or render difficult the subsequent recuperation, rehabilitation and reconstruction of the affected social unit using the resources autonomously available to it. (A)



### Capacity

A combination of all the strengths and resources available within a community or organisation that can reduce the level of risk, or the effects of a disaster.

*Capacity may include physical, institutional, social or economic means as well as skilled personal or collective attributes such as leadership and management. Capacity may also be described as capability.(F)*

### Capacity

*Positive factors, that increase the ability of people and the society they live in, to cope effectively with hazards, that increase their resilience, or that otherwise reduce their susceptibility, are considered as capacities.(F)*

### Capacity

Measures to reduce the negative consequences of risk.(B)

### Income poverty

A status whereby a lack of financial resources limits the ability of an individual or household to meet basic needs. What is included in basic needs is culturally determined so that different levels of financial status may be described as conveying relative forms of income poverty.(C)

### Disaster Risk

The probability of losses and damage which exceed the autonomous coping and response capabilities of the affected areas and populations and which lead to a serious disrupting of their routine functioning. (A)

### Risk

Risk = Hazard x f n potential worth of loss. This can be also expressed as "Probability of an event times the consequences if the event occurs" (B)

### Risk

The probability of harmful consequences, or expected loss of lives, people injured, property, livelihoods, economic activity disrupted (or environment damaged) resulting from interactions between natural or human induced hazards and vulnerable conditions. (C)

Risk is conventionally expressed by the equation:

$$\text{Risk} = \text{Hazard} \times \text{Vulnerability}$$

### Population at risk

All those persons who would be directly exposed to the consequences of failure of a structure or facility if they did not evacuate.(B)

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### Disaster Risk Management

A complex social process through which disaster risk is measured and evaluated, understood, reduced or predicted and controlled. It should be considered a dimension of sustainable development plans and actions and recognises different levels of intervention. These range from the global, integral, sectoral and macroterritorial levels through to the local, community and family levels. It also requires the existence of organizational and institutional structures which represent these levels and work as a coordinated and integrated whole. (A)

### Disaster Risk Management

The systematic management of administrative decisions, organisation, operational skills and abilities to implement policies, strategies and coping capacities of the society or individuals to lessen the impacts of natural and related environmental and technological hazards.(C)

### Disaster Risk Management

A systematic application of management policies, procedures and practices to identify, analyze, assess, treat, monitor and evaluate risks. This involves decision making based on the examination of those risks, which includes hazard, vulnerability, and capacity of people and institutions (ADPC, DMC-30, 2003).

### Disaster Risk Mitigation (Reduction)

Intervention measures aimed at reducing or decreasing existing risk. Mitigation assumes that the total elimination of existing risk is neither possible nor feasible. In other words, it is not possible to totally prevent or avoid all damage and loss. Thus, mitigation must be guided by notions of acceptable risk. Disaster risk mitigation may involve the reduction or elimination of existing primary risks (see definition below) or an acceptance of these and, through preparedness measures, including early warning and evacuation systems, seek to reduce losses and damage resulting with the occurrence of a dangerous phenomenon. (A)

### Disaster Risk Reduction

The systematic development and application of policies, strategies and practices to minimise vulnerabilities, hazards and the unfolding of disaster impacts throughout a society, in the broad context of sustainable development.(C)

### Disaster Risk Reduction (disaster reduction)

The systematic development and application of policies, strategies and practices to minimize vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) adverse impact of hazards, within the broad context of sustainable development. (F)

*The disaster risk reduction framework, as described in this review, is composed of:*

- *Risk awareness and assessment including hazard analysis and vulnerability/capacity analysis;*
- *Knowledge development including education, training, research and information;*
- *Public commitment and institutional frameworks, including organisational, policy, legislation and community action;*
- *Application of measures including environmental management, land-use and urban planning, protection of critical facilities, application of science and technology, partnership and networking, and financial instruments;*
- *Early warning systems including forecasting, dissemination of warnings, preparedness measures and reaction capacities. (F)*

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### Mitigation

Measures undertaken to limit the adverse impact of, for instance, natural hazards, environmental degradation and technological hazards.(B)

### Mitigation

Sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects.(D)

### Mitigation

Structural and non-structural measures undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards.(F)

### Preparedness

Activities and measures taken in advance to ensure effective response to hazards and their consequences.(B)

### Preparedness

Activities to ensure that people are ready for a disaster and respond to it effectively. Preparedness requires figuring out what will be done if essential services break down, developing a plan for contingencies, and practicing the plan.(D)

### Preparedness

Activities and measures taken in advance to ensure effective response to the impact of disaster, including the issuance of timely and effective early warnings and the temporary removal of people and property from a threatened location.(F)

### Prevention

Activities to provide outright avoidance of the hazards and their consequences.(B)

### Prevention

Activities to provide outright avoidance of the adverse impact of hazards and related environmental, technological and biological disasters.

*Depending on social and technical feasibility and cost/benefit considerations, investing in preventive measures is justified in areas frequently affected by disasters. In the context of public awareness and education, prevention refers to changing attitude and behaviour towards a "culture of prevention".(F)*

### Public Awareness

The processes of informing the general population, increasing their levels of consciousness about risks and how to take action to reduce their exposure to hazards. This is particularly important for public officials in fulfilling their responsibilities to save lives and property in the event of a disaster.

*Public awareness activities support a change in behaviour leading towards a culture of prevention. This involves public information, dissemination, education, radio or television broadcasts and the use of printed media, as well as, the establishment of disaster information centres and networks.(F)*

### Public Information

Information, facts and knowledge provided or learned as a result of research or study, which is public, open to the people as a whole.(F)

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### Early Warning

An announcement or declaration, emitted by previously identified and responsible institutions, organizations and individuals, which allows the provision of adequate, precise and effective information prior to the manifestation of a dangerous phenomenon. This allows emergency organisations or groups to activate pre established security procedures and the population to take specific precautions. In addition to informing the population of the hazard, early warnings are declared with the objective of permitting the population and institutions to adopt specific actions when faced with imminent danger. (A)

### Sustainable Development

Natural, economic social, cultural and institutional processes and changes that lead to an accumulative and durable increase in the quantity and quality of goods, services and resources, accompanied by social changes which tend to improve human security and quality of life. This must occur without excessive deterioration of the natural environment or a reduction in the possibilities for a similar level and type of development accessible to future generations. (A)

### 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 'needs', 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 organisation on the environment's ability to meet present and future needs.(C)

### Community-Based Disaster Risk Management (CBDRM)

A process of disaster risk management in which at risk communities are actively engaged in the identification, analysis, treatment, monitoring and evaluation of disaster risks in order to reduce their vulnerabilities and enhance their capacities. This means that the people are at the heart of decision making and implementation of disaster risk management activities. The involvement of the most vulnerable is paramount and the support of the least vulnerable is necessary. In CBDRM, local and national governments are involved and supportive (ADPC-CBDRM-11, 2003).

### Sources:

- A. *Local risk management. Ideas and notions relating to concept and practice. CEPREDENAC & UNDP. This document is based on an original contribution prepared by Omar Darío Cardona. The debates and exchanges which have led to the drawing up of this glossary were carried out between Alan Lavell, Omar Dario Cardona and Elizabeth Mansilla.*  
Source: <http://www.undp.org/bcpr/disred/english/publications/regions/lac.htm>
- B. *ICG. International Center for Geohazards (Norway) Source: <http://www.geohazards.no/>*
- C. *Reducing Disaster Risk Handbook UNDP.*

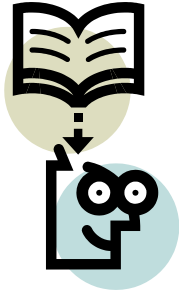
Source: <http://www.undp.org/bcpr/disred/english/publications/publications.htm>

D. FEMA, [www.fema.gov](http://www.fema.gov)

E. UNDP, DMTP, *Vulnerability and Risk Assessment*. Source: <http://www.undmtp.org/modules.htm>

F. ISDR *Living with Risk*. Source: <http://www.undp.org/bcpr/disred/english/publications/publications.htm>

For each definition the source is indicated in the bracket e.g. (A)



## 2.2 Common Sense Approach in understanding disaster risk management terminology

A term may be understood and used differently by different professional groups. Take 'vulnerability' for example. Architects and engineers have long applied it to buildings and other physical structures, but in the past 30 years it has been appropriated by social scientists, which have expanded its meaning to include socio-economic, political and institutional aspects. It is hardly surprising, therefore, that methodologies for vulnerability analysis have proliferated, based on different principles, prioritising different types of data, and using different data-gathering and analytical tools. 'Mitigation' has very different meanings in climate change and disaster management circles. In climate change, it means reducing greenhouse gas emissions, which in disaster management would be seen as 'prevention'; disaster managers use 'mitigation' in a sense that is much closer to climate change's 'adaptation'.

Terminology never stands still. It adapts to shifts in thinking, by adopting new terms or expanding old ones. For example, in the 1970s people talked about 'disaster prevention'; in the 1980s and 1990s this was superseded by 'disaster mitigation', which in turn was replaced by today's fashionable term, 'disaster risk reduction'.

However, since we cannot do away with concepts and definitions entirely, let's ask what practitioners want from them. First, they must be expressed clearly, preferably in plain language. Second, they must be relatively simple to understand and communicate. If possible, they should also reflect practitioners' own view of reality, acquired from their knowledge in the field and the communities with whom they work.

**Hence, practitioners can be guided by a few common-sense principles:**

- ☞ *Keep terms, definitions and concepts as simple as you can; it is better to over-simplify than to over-elaborate;*
- ☞ *In defining terms, look for common ground and shared understanding to ensure widespread acceptance;*
- ☞ *Use key characteristics or concrete examples where definitions are difficult to explain; and*
- ☞ *Be clear to yourself and others about what you mean when you use a term.*

Does this mean we should give up seeking consistency in our terminology? Not entirely, for it remains important. In the case of contingency planning, for example, as Richard Choularton argues in his Network Paper: 'More consistent use of terms related to contingency planning and preparedness is needed to help improve the sharing of experience, lessons and practice'. But there are dangers here, even where we avoid the over-academic approach and look for something more practical. One is that the drive towards consistency may develop into a struggle between different groups or organisations to impose their terms and meanings on everyone else. There is also the counter-risk that consensus achieved through committee will result in definitions that try to say too much in order to keep all the stakeholders happy.

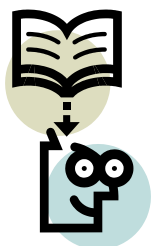
*(Extracted from: Disaster reduction terminology: a common-sense approach by John Twigg, Benfield UCL Hazard Research Centre.)*

Further reading:

*CBDRM practitioners handbook, ADPC, Bangkok  
Humanitarian Practice Network (HPN), Issue no 38*



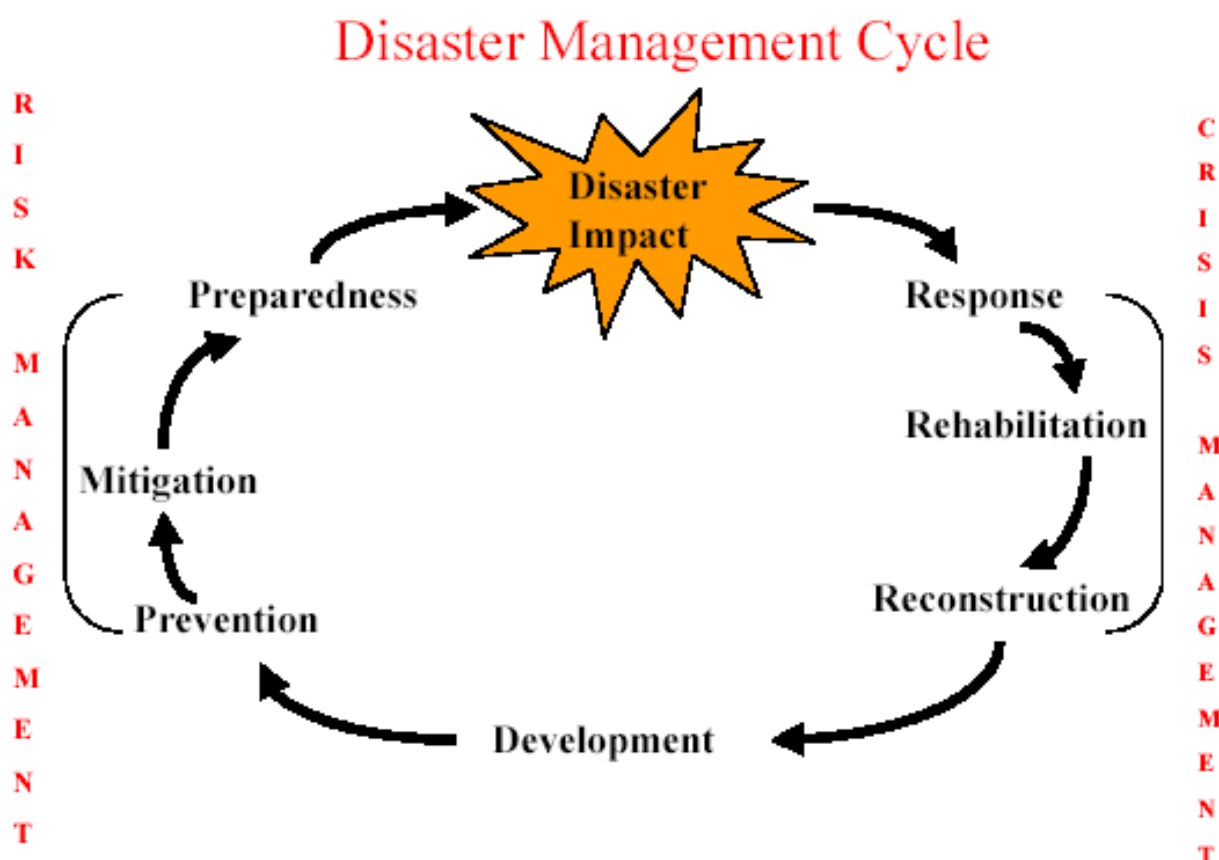
## 2.3 Disaster Management Cycle



Disaster management aims to reduce, or avoid, the potential losses from hazards, assure prompt and appropriate assistance to victims of disaster, and achieve rapid and effective recovery.

The Disaster management cycle illustrates the ongoing process by which governments, businesses, and civil society plan for and reduce the impact of disasters, react during and immediately following a disaster, and take steps to recover after a disaster has occurred. Appropriate actions at all points in the cycle lead to greater preparedness, better warnings, reduced vulnerability or the prevention of disasters during the next iteration of the cycle. The complete disaster management cycle includes the shaping of public policies and plans that either modify the causes of disasters or mitigate their effects on people, property, and infrastructure.

The prevention, mitigation and preparedness phases occur as disaster management improvements are made in anticipation of a disaster event. Developmental considerations play a key role in contributing to the prevention, mitigation and preparation of a community to effectively confront a disaster. As a disaster occurs, disaster management actors, in particular humanitarian organizations, become involved in the immediate response, rehabilitation, reconstruction and long-term recovery phases.



The disaster management phases illustrated here do not always, or even generally, occur in isolation or in this precise order. Often phases of the cycle overlap and the length of each phase greatly depends on the severity of the disaster impact.

## Disaster

**Disaster Impact** brings about a crisis situation due to loss of life and livelihood. This phase is characterized by profound damage to the human society. This damage / loss may be that of human life, loss of property, loss of environment, loss of health or anything else. In this phase, the population is taken by profound shock. There is an immediate need for crisis management. Immediate response in the form of search and rescue takes place which is followed by rehabilitation and reconstruction activities.

- 📖 **Response** - Efforts to minimize the hazards created by a disaster e.g. search and rescue; emergency relief, food distribution and medical attention.
- 📖 **Rehabilitation** – Actions to assist victims to repair their dwellings; re-establish essential services; medical care, revive key economic and social activities
- 📖 **Reconstruction** - Permanent measures to repair or replace damaged dwellings and infrastructure and to set the economy back on course

## Sustainable Development

Developmental considerations contribute to all aspects of the disaster management cycle. One of the main goals of disaster management, and one of its strongest links with development, is the promotion of sustainable livelihoods and their protection and recovery during disasters and emergencies. Where this goal is achieved, people have a greater capacity to deal with disasters and their recovery is more rapid and long lasting. In a development oriented disaster management approach, the objectives are to **reduce hazards, prevent disasters, and prepare for emergencies**.

- 📖 **Prevention** - to avert a disaster from occurring, if possible (to impede a hazard so that it does not have any harmful effects) example - passing a law that prohibits building settlements in a particular disaster prone area, vaccination to prevent disease etc
- 📖 **Mitigation** - Minimizing the effects of disaster. Example: building codes and zoning; land use planning, flood protection walls, vulnerability analyses; public education.
- 📖 **Preparedness** - Planning how to respond in case of disaster impact. Examples: preparedness plans; emergency exercises / training; warning systems, contingencies planning, food and NFRI stockpiling

During this phase, the population has returned to pre-disaster standards of living. But, they recognize the need for **certain measures which may be needed to reduce the extent or impact of damage during the next similar disaster**. For example, after an earthquake which caused a lot of damages to improperly built houses, the population begins to rebuild stronger houses and buildings that give away less easily to earthquakes. Or, in the case of tsunami, to avoid housings very close to the shore and the development of a 'green belt'- a thick stretch of trees adjacent to the coast line in order to reduce the impact of the tsunami waves on the land.

Developmental considerations are strongly represented in the mitigation and preparedness phases of the disaster management cycle. Inappropriate development processes can lead to increased vulnerability to disasters and loss of preparedness for emergency situations.

Over the years, emphasis is laid on the components of '**Crisis management**'. Often these actions tend to be fire-fighting exercises for immediate short-term solutions. The concept of **Management of Risks**

is of a recent origin. **CBDRM** takes a holistic view where appropriate emphasis is given to all the stages of disaster management cycle.

## SESSION CBDRM1.2: LEARNING LOG & ACTION PLANNER

1	Session
2	What did I think of this session?
3	What did I learn from this session?
4	What can I use from this session?
5	How can I learn more about the topic of this session?

# SESSION-CBDRM1.3

## Disaster - Development Link

### Rationale

Disasters put developments at risk but at the same time it may also create development opportunities. Similarly, human development interventions can contribute to a serious reduction in disaster risk but they may also increase the vulnerability. There is always a complex relationship between disasters and development. Hence, it is important for the community based development as well as disaster risk management practitioners to understand this relationship and be able to devise the sustainable approach and serve the community better.

### Learning Outcomes

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

- 📖 Understand the conceptual relationship between disasters and development
- 📖 Discuss the concept of sustainable development in the light of emerging disaster trends
- 📖 Understand the need to integrate disaster risk reduction into development planning

### Content

1. *Defining disaster and development*
2. *Conceptual relationships between disasters and development (D &D)*
3. *Concepts of a sustainable development in the light of emerging disaster trends*
4. *Integration of disaster risk reduction into development planning- a proactive approach*

“ Communities will always face natural hazards, but today’s disasters are often generated by, or at least exacerbated by, human activities. At the most dramatic level, human activities are changing the natural balance of the earth, interfering as never before with the atmosphere, the oceans, the polar ice caps, the forest cover and the natural pillars that make our world a livable home. But we are also putting ourselves in harm’s way in less visible ways. At no time in human history have so many people lived in cities clustered around seismically active areas. Destitution and demographic pressure have led more people than ever before to live in flood plains or in areas prone to landslides. Poor land-use planning; environmental mismanagement; and a lack of regulatory mechanisms both increase the risk and exacerbate the effects of disasters.”

Kofi Annan  
2002, UN Secretary-General, Foreword to  
“Living with Risk: A global review of disaster reduction initiatives,” ISDR.

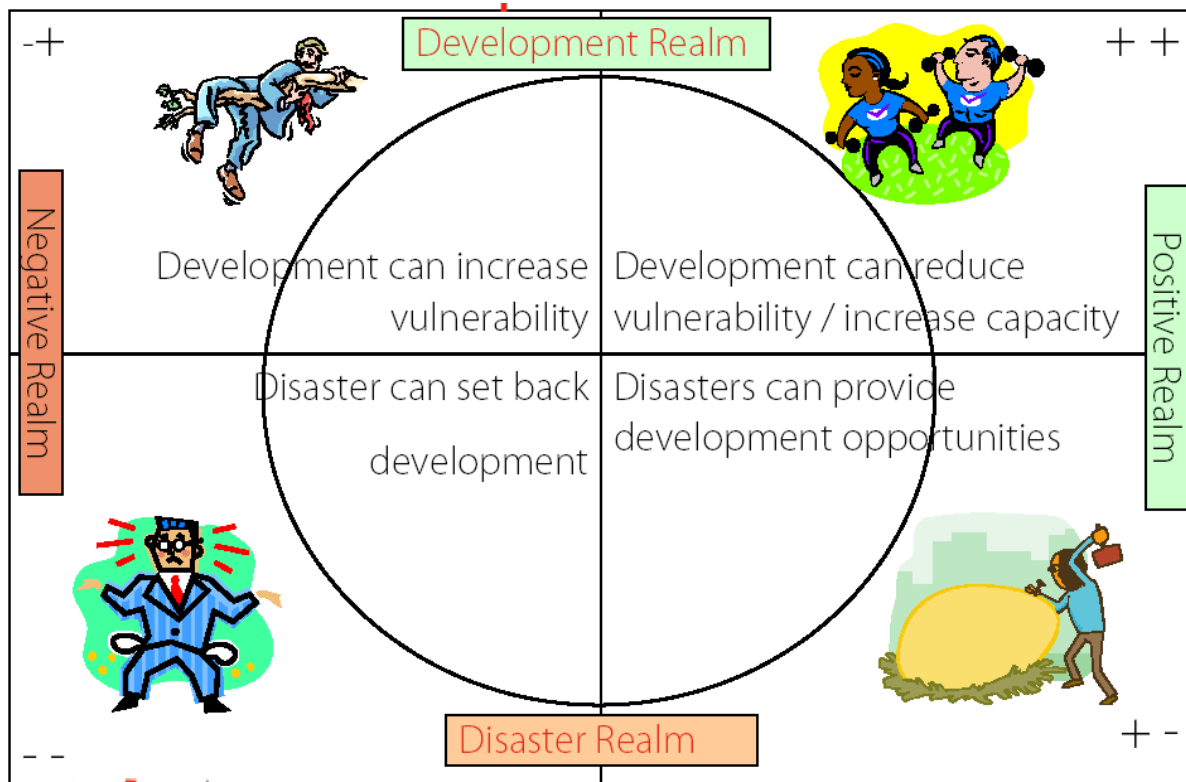
### 3.0 Disasters and Development <sup>2</sup>



For a long time the cause and effect relationship between disasters and social and economic development was ignored. At best, development planners hoped that disasters would not occur and, if they did, were most effectively handled by relief from donor countries and relief organizations. Development programs were not assessed in the context of disasters, neither from the effect of the disaster on the development program nor from the point of whether the development programs increased either the likelihood of a disaster or increased the potential damaging effects of a disaster.

Disasters were seen in the context of emergency response-not as a part of a long term development programming. When a disaster did occur, the response was directed to emergency needs and cleaning up. Communities under disaster distress were seen as unlikely places to institute development. The post-disaster environment was seen as too turbulent to promote institutional changes aimed at promoting long term development.

The relationship between disasters and development can be explained using the following figure:



The above figure explains positive and negative aspects of the disaster and development.

<sup>2</sup> Adapted from the material prepared by: R.S. Stephenson, Ph.D. for United Nations reorganization and the Disaster Management Training Programme

The four themes presented in fig. 1 may be expanded as follows:



### 3.1 Disasters set back development programming destroying years of development initiatives



Disasters can significantly impede the effectiveness of development resource allocation. The damage is done in many ways and the impacts can be as complex as the economy itself. However, a broad picture of the mechanisms of disruption can be gained by reviewing four categories of impact.

- Loss of resources
- Interruption of programs and switching of crucial resources to other, shorter-term needs
- The negative impacts on investment climates
- Disruption of the non-formal sector

For example, transports and utility systems developed under the infrastructure development programmes are destroyed by a flood. Hundreds of dams constructed for power and water supply have been damaged by the recent powerful earthquake (May 2008) in China.

 *Do you have any other examples of disasters in your own community or area that set back the development?*  
 *What were the impacts of such disasters?*



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### 3.2. Rebuilding after a disaster provides significant opportunities to initiate development programs



Disasters can provide development opportunities by creating a social and political atmosphere of acceptance to change, highlighting the general level of underdevelopment that caused the disaster and focusing international attention and aid on the disaster area.

Recent disasters such as 2004 Tsunami in Indian Ocean has many examples where several communities used the reconstruction as an opportunity to *build back better*. For the first time, people felt a need for establishing not only an Indian Ocean Tsunami early warning System but also locally managed community based early warning systems came into existence.

A self-help housing program to rebuild housing destroyed by an earthquake teaches new skills, strengthens community pride and leadership and retains development dollars that otherwise would be exported to large construction companies. In Banda Aceh (Indonesia), a need for disaster response brought two conflicting parties together leading to a peace agreement in the area.

-  ***Do you have any other examples of disasters in your own community or area that provided opportunities for development?***
-  ***What were the new development programmes and policies initiated during reconstruction ?***



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### 3.3. Development programs can increase an area's susceptibility to disasters



Inappropriate development processes can lead to increased vulnerability to disasters and loss of preparedness for emergency situation.






Water resource development in China's earthquake prone Sichuan province is a recent example of how development can make the area and people more vulnerable towards disasters. We have witnessed the cracks, ruptures in the large dams in the area due to a powerful earthquake (May 2008) making millions of people living downstream vulnerable to flooding.

A major increase in livestock development may lead to over grazing, which contributes to desertification and increases vulnerability to famine.

Economic opportunities created in the cities may attract rural people settle in unorganized settlements in the hazardous sites of the suburban areas. If not handled properly, they may increase vulnerability of the area by blocking natural drainage and river flow leading to a flooding.

Environmental degradation, technological failures or accidents and imbalance of pre-existing natural or social systems due to the unsustainable development planning are some other factors that make communities more vulnerable.

-  ***Do you have any other examples of development practices in your own community or area that increased vulnerability?***
-  ***What were the new threats or potential disasters created by such development practices?***
-  ***Who became more vulnerable towards these threats, potential disasters?***



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**3.4. Development programs can be designed to decrease the susceptibility to disasters and their negative consequences.**






Development initiatives that use the community capacity building and sustainable livelihoods approach may contribute towards decreasing the susceptibility to disasters. Recovery of such communities is rapid and durable.

Housing projects constructed under appropriate building codes designed to withstand high winds result in less destruction during the next tropical storm.

Mitigation is most effective as part of a medium- to long-term development program which incorporates hazard-reduction measures into regular investment projects. Under these conditions risks can be assessed analytically. The cost effectiveness of specific emergency preparedness measures and hazard reduction activities can be assessed. There is a wide range of options for incorporating mitigation measures into regular development programs.

Development programs can also reduce vulnerability through strengthening of urban utility systems, institution building and capacitating of local authorities.

-  ***Do you have any other examples of development practices in your own community or area that are designed to decrease the vulnerability or susceptibility to disasters?***
-  ***How were these development initiatives designed?***
-  ***What role did different players play in this process?***



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### 3.5 Understanding a Sustainable development



*Sustainable Development is the one 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 "needs", 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 on the environment's ability to meet present and the future needs.*




(Brundtland Commission, 1987).


Development requires institutional and structural transformations of societies to speed up economic growth, reduce levels of inequality and eradicate absolute poverty. Over time, the effects of disasters can seriously degrade a country's long-term potential for sustained development and cause governments to substantially modify their economic development priorities and programs.

At the same time, disasters often provide opportunities for development. They can improve the atmosphere in favor of change and create a rationale to establish development programs such as job training, housing construction and land reform.

However, poor management of the relief and rehabilitation responses may have severe negative implications for development for years to come, and may even increase vulnerability to future hazards.

*Therefore, disaster risk reduction must be an integral part of a sustainable development. Socio-cultural development, political stability and decorum, economic growth and ecosystem protection are the keys to a sustainable development, which all relate to disaster risk reduction.*

-  **What is your (organizational) core business?**
-  **How is it related to disaster risk management? If not, why do you think your business is not related to disaster risk management?**
-  **What role can you (your organization) play to manage disaster risk and contribute to sustainable development?**



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### 3.5 Linking Disaster and Development in our context

#### Note from Modalities and guidelines for Sri Lanka



In preparing this guideline we strongly believe that benchmarking for CBDRM should reflect attempts at horizontal mainstreaming in to other development objectives- infrastructure, livelihood and poverty reduction. Developing accurate/ definite indicators is not the goal of this chapter, but rather to give broad **indications** of the recommended direction and a view of the ideal situation so that implementing agencies have a framework within which to develop their own strategies, specific objectives and key indicators.

Benchmarking the broader changes in policy and practice of disaster management vis-à-vis the level of 'mainstreaming' of disaster- development links and the community role in risk reduction proves to be challenging. We present below a broad list of bottom-up indicators to asses the level of disaster integration and community-led management of the rural development process;

#### At community/ village level

1. Communities have incorporated disaster risk reduction (preparedness and mitigation) plans developed through different projects in to their own poverty reduction strategy/ development programme
2. This community development plan has been accepted and endorsed by the village development council (**Jana Sabha**)
3. **Jana Sabha** actively engaged in monitoring process

#### At divisional/ local governance level

1. Divisional development plans include the community plans (for poverty and risk reduction)
2. Local authorities have a separate budget allocation for disaster risk reduction activities in their development plans and have a dedicated official to liaison (funding and promoting) CBDRM activities in their area of jurisdiction
3. A development project monitoring mechanism has been established with community representation

#### Any new ideas for discussion?



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## SESSION CBDRM1.3: LEARNING LOG & ACTION PLANNER

1	Session
2	What did I think of this session?
3	What did I learn from this session?
4	What can I use from this session?
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# SESSION-CBDRM1.4

## Disaster Management – A Paradigm Shift




### Rationale

Having established a deep connection between a disaster impact and development approaches and how one influences another, it is a time for the disaster management and development practitioners to look into the possibilities of bringing these two so called different disciplines together with the overarching aim of creating a safe and sustainable world. In order this to happen, practitioners should have a very good understanding of disasters, the causes, origin, impact on the communities, the way it was managed and also lessons learnt from the past.

This session discusses how the understanding and treatment of disaster management changed over a period of time. It describes a paradigm shift in disaster management approaches from an emergency response model to risk reduction and community based sustainable development model.

### Learning Outcomes

At the end of this session learners will be able:

-  Discuss the evolution of disaster management approaches
-  Understand shift from scientific and technical approach to Social science approach to DM
-  See a need to move towards a holistic sustainable development approach to DM

### Content

1. Disaster management approach – an evolving process
2. Scientific and technical approach to DM
3. Social science approach to DM
4. Holistic Approach to DM – towards a sustainable development
5. Disaster Crunch Model and Emergence of CBDRM approach

*Not even windstorm, earth-tremor, or rush of water is a catastrophe. A catastrophe is known by its works; that is, to say, by the occurrence of disaster. So long as the ship rides out the storm, so long as the city resists the earth-shocks, so long as the levees hold, there is no disaster. It is the collapse of the cultural protections that constitutes the disaster proper. (Carr 1932:211)*

## 4.1 Disaster Management – An Evolving Process



The approach to disaster management depends on how we understand the disaster. Over the period of time the understanding of disaster and its impact has been understood differently and therefore, the treatment of disaster impact varied from time to time.

### A. Conventional / Dominant Approach

#### 1. Fatalistic Approach

Traditionally, the term natural hazards such as earthquake, typhoon, flood, tsunami are used interchangeably with natural disasters. Disaster was seen as an isolated event and sometimes “an act of God” which requires an emergency response. Disasters were viewed as one-off events and responded to by governments and relief agencies without taking into account the social and economic implications and causes of these events.

#### 2. Natural Science Approach

With significant advancement in our understanding of the natural processes that underlie the hazardous events, a more technocratic paradigm came into existence. The attempts were made to understand and respond to the disasters from the natural science perspective which focussed on understanding natural hazardous processes and predict them to minimize the loss. This approach believed that the “only way to deal with disasters was by public policy application of geophysical and reconstruction knowledge”. These approaches looked at disasters as exceptional events, not related to the ongoing social and developmental processes.

#### 3. Applied Science Approach

Later on applied scientists observed that the magnitude of the disaster was more closely related to the damage and losses sustained than to the natural event in itself thus putting an emphasis on **preparedness measures**, such as stockpiling of relief goods, preparedness plans, and a growing role for relief agencies. This “contingency planning” approach certainly improved the efficiency of relief agencies but left a lot to be desired in terms of appropriateness and effectiveness of relief.

### B. Alternative/ Progressive Approach

The traditional way of understanding and responding to the disaster impact has proved to be ineffective and disaster impact continued to be on rise. Therefore, a progressive school of thoughts emerged during 1970s which engaged anthropologists, sociologists and development workers to understand the disaster from social science perspective.

#### 4. Social Science Approach

This perspective looked at disaster as a part and parcel of the normal development of societies. Disasters are no longer viewed as extreme events created entirely by natural forces but as unresolved problems of development. It explained that disasters are characteristic not of the hazards, but of particular socio-economic and political structures and processes at the societal, national and global level. This approach focuses on how hazard are socially perceived and conceived. This approach takes a position that, while hazards are natural disasters are not.

It is now recognized that risks (physical, social, and economic) unmanaged (or mismanaged) for a long time lead to occurrence of disasters. This evolution of approaches from relief and response to risk management has begun to influence the way disaster management programs are now being planned and financed. There are initiatives aimed at reducing social and economic vulnerability and investing in long-term mitigation activities.

## 5. Holistic Approach

When it was evident that neither technocratic approach which mainly deals with the hazards and mitigation nor the social science approach which focuses on the socio-political factors can alone address the complex nature of the disaster risks, a holistic approach emerged. The holistic approach considers hazards as well as vulnerabilities and capacities of people and societies in the understanding of disaster and risks scenarios. The holistic approach, therefore, combines the technical and scientific view points with attention to social, economic and political factors for disaster reduction planning.

This new approach in understanding of the disaster has facilitated the shift to a sustainable development paradigm that focuses on risk reduction and quick recovery when the disaster occurs.

## 6. Evolution of Community-Based Disaster Risk Management- CBDRM

The role of community in the sustainable development was recognized long ago. With the evolution of a holistic approach in disaster management, there is a growing consensus among the development and disaster experts to make risk reduction as an integral part of development planning. Thus, the central role of communities in disaster management has become obvious. This has led to an introduction of community based disaster risk management (CBDRM) as a risk reduction program designed primarily by and for the people in disaster-prone areas.

Disaster mitigation using government and institutional interventions alone is insufficient because they pay little attention to addressing the community dynamics, perceptions, or priorities. At the same time, local communities are often either unaware of these formal disaster management interventions or they find the interventions inappropriate due to the lack of recognition of community's vulnerabilities and capacities, or they lack the external resources or technical support to supplement their own initiatives and capacity. CBDRM is proactive disaster management, focusing on reduction of disaster risks, can have a significant contribution to the goals of protecting vulnerable communities, their lives, assets and livelihoods.

This approach is based on the belief that communities are knowledgeable about the disasters happening in their environment and are able to anticipate them in some cases. They may not be scientific but the richness of experience and indigenous knowledge is a resource to be recognized.

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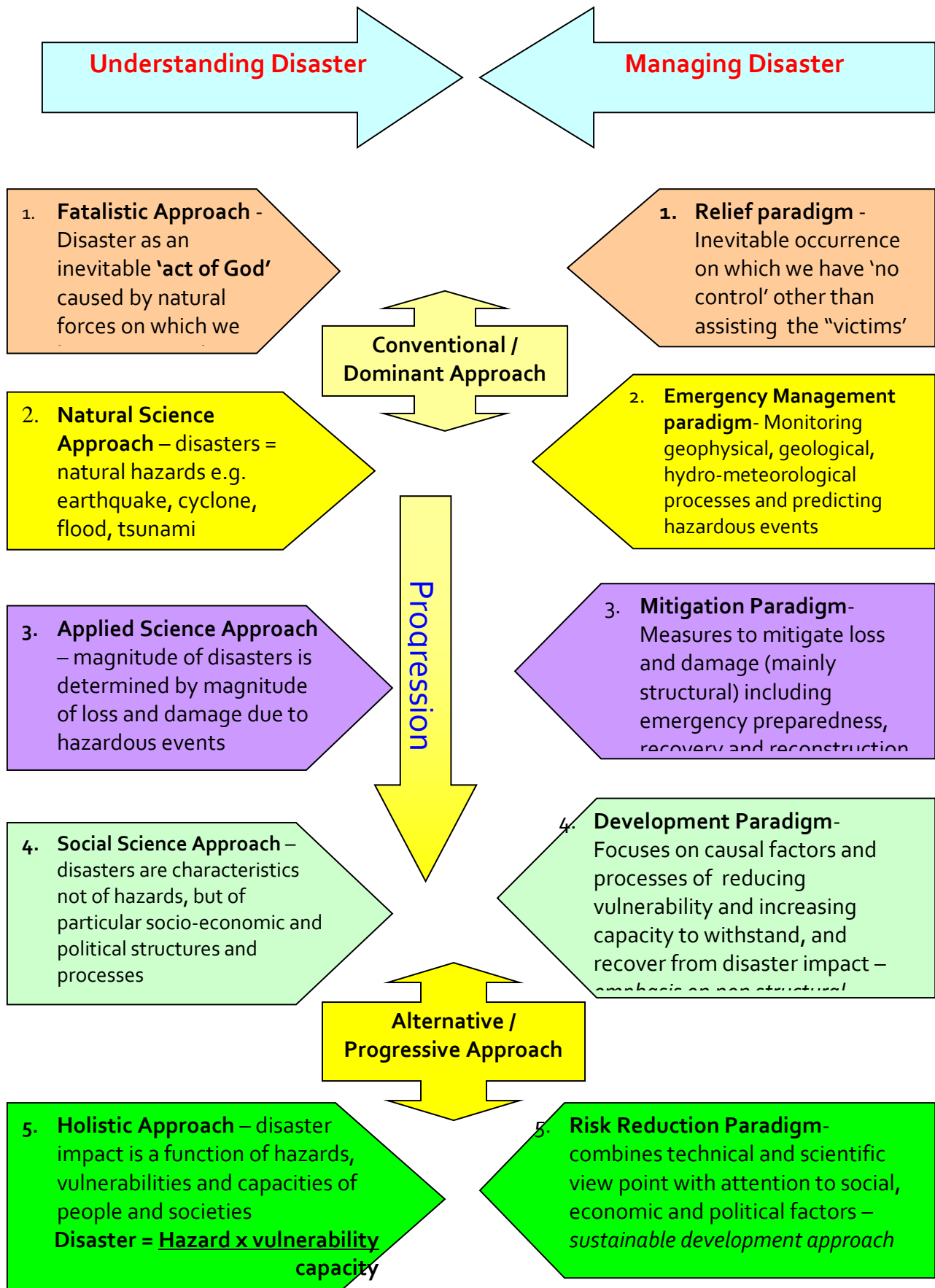
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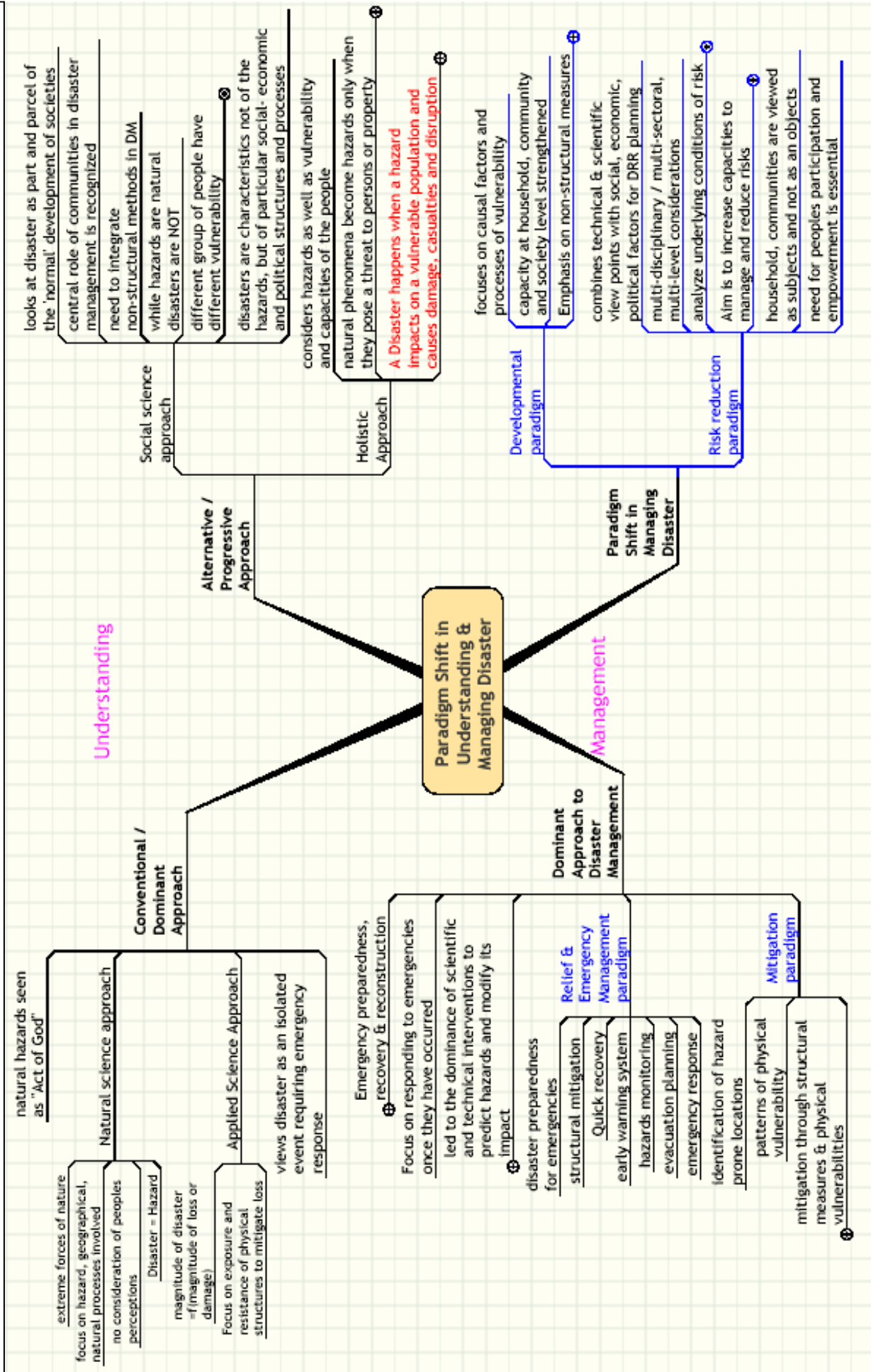
## Paradigm Shift in Understanding & Managing Disaster



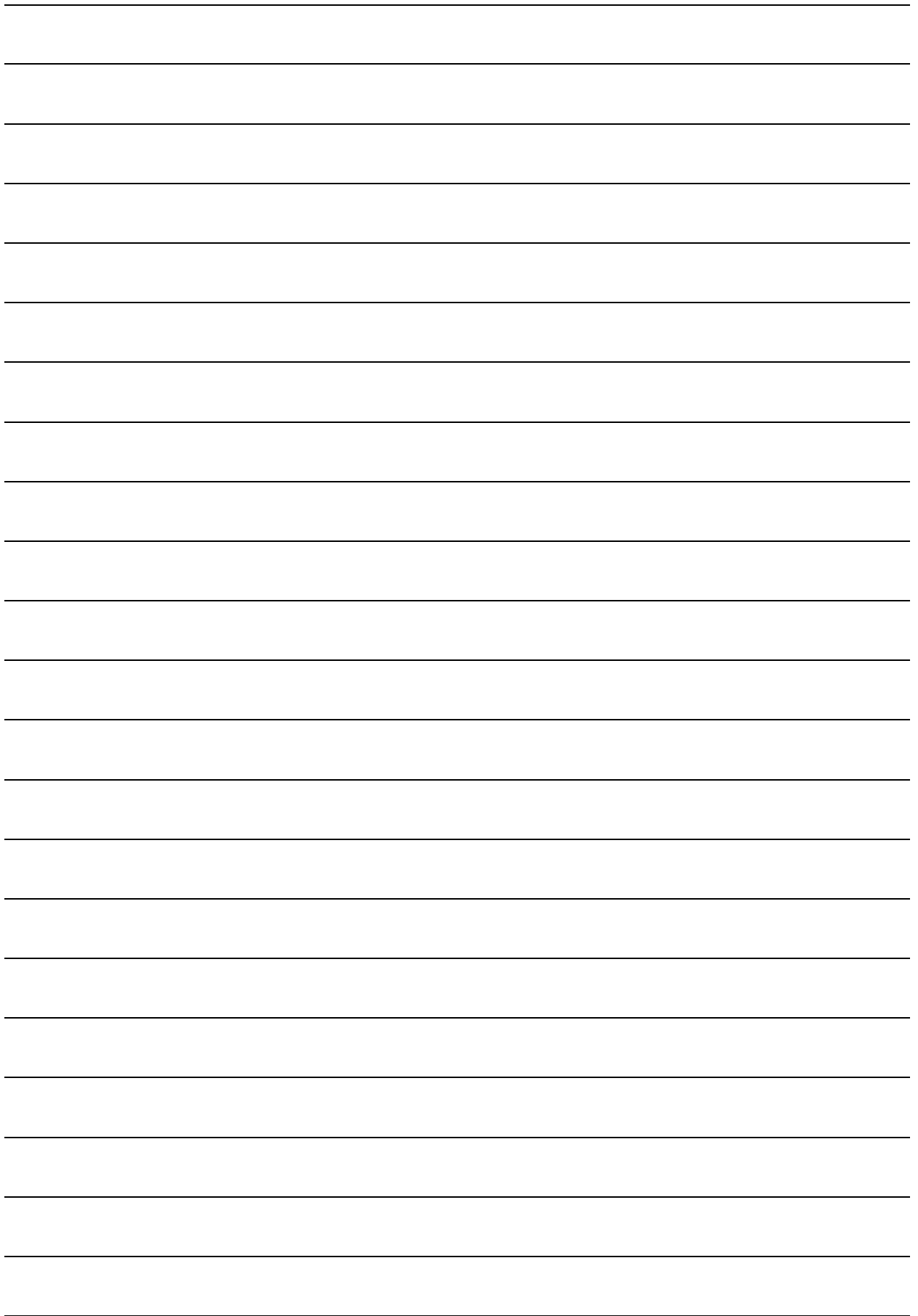




# WS-4.1 – Discuss the following mind map among the group members







## A. Understanding Disaster – Conventional vs Progressive Approach

Conventional/ Dominant Approach	Alternative/ Progressive Approach
<ol style="list-style-type: none"> <li>1. Disasters/conflicts viewed as an isolated events or obstructions in the normal path of development.</li> <li>2. Disasters from natural science perspective equate to natural hazards e.g. earthquake, cyclones, tsunami, flood</li> <li>3. Linkages with conditions in society during normal times less analyzed.</li> <li>4. People affected by disaster impact are helpless victims</li> <li>5. Providing emergency response aid is the responsibility of disaster management institutions or the government</li> </ol>	<ol style="list-style-type: none"> <li>1. Disasters/conflicts are part of the normal process of development</li> <li>2. It is not only hazards that cause disaster but the political and social environment context which determines community's vulnerability or the capacity to withstand the hazard impact</li> <li>3. Disasters are unresolved problems arising from the very processes of development. Analyzing linkages with society during normal times is fundamental for understanding disasters / conflicts. Relationships / structures within society determine why certain groups of people are more vulnerable to disasters than others.</li> <li>4. People affected by disaster impact are the first responders and active actors in rebuilding their live and livelihood</li> <li>5. Risk management is everybody's responsibility.</li> </ol>

## B. Managing Disaster – Conventional vs Progressive Approaches

Conventional/ Dominant Approach	Alternative/ Progressive Approach
<ol style="list-style-type: none"> <li>6. Technical /Law and Order solutions dominant.</li> <li>7. Implementing agencies less accountable and their processes less transparent to people.</li> <li>8. Interventions are made after the event occurs.</li> <li>9. The objective of intervention is to return to the situation before the event.</li> <li>10. Centralized institutions dominate in the intervention strategies. Tendency to be top-</li> </ol>	<ol style="list-style-type: none"> <li>6. Emphases on solution that change relationships/ structures and attitudes in society that make people vulnerable.</li> <li>7. Ensuring accountability and transparency emphasized in implementation.</li> <li>8. Mitigation of disasters/conflict as fundamental aim.</li> <li>9. Disasters/conflicts viewed as opportunities for social transformation.</li> <li>10. Decentralized institutions dominate in the</li> </ol>

<p>down and inflexible in method. Less participation of people, who are treated as "victims?"</p>	<p>intervention strategies. Participation of people paramount in intervention strategies; people treated as "partners" in development. Builds on people's capacities to protect themselves against hazards.</p>
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## 4.2 Disaster Crunch Model



Before we discuss about how to address the disaster impact, we need to understand how it occurs. Understanding the underlying causes is extremely important if we are to address them properly.

People's *exposure* to hazards makes them *susceptible* to hazard impacts and therefore vulnerable to disaster risk. This vulnerability of a community is deeply rooted into their social, cultural, economic, political, psychological and environmental processes and practices.

The Disaster Crunch Model proceeds from the premise that a disaster happens when, and only when, a hazard impacts on a vulnerable community or people.

A hazard is the **Trigger Event**, which sets off the disaster. It could be an earthquake, volcanic eruption, landslide or civil conflict.



The **Unsafe Conditions** are the vulnerable context where people and property are exposed to risk of disaster. These make the community vulnerable to a particular hazard.

**WS-4.1- Identify at least 2 hazards in and around your own community and list corresponding unsafe conditions (as many as possible) that make community vulnerable.**

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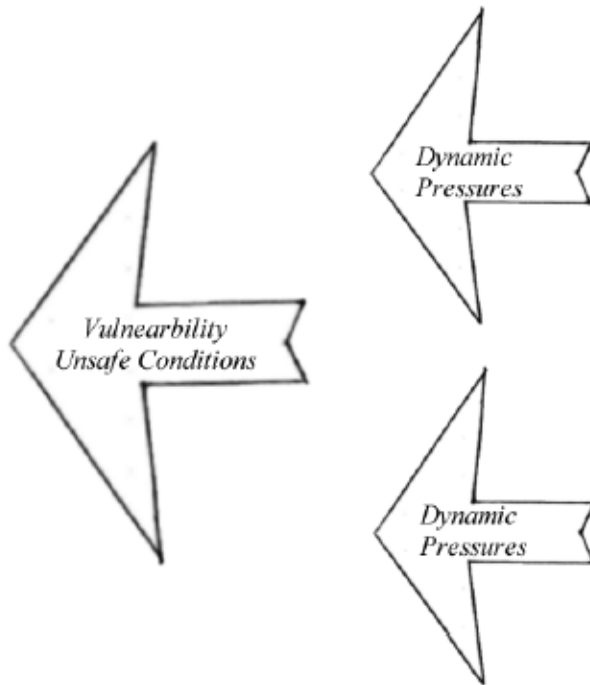
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**Dynamic Pressures** within the society are the immediate causes of the unsafe conditions. They are processes and activities that have 'translated' the effects of root causes into unsafe conditions. These pressures answer the question of HOW unsafe or dangerous conditions have arisen.

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## Dynamic Pressures

**\*Lack of:**

- local institutions: health care, social services
- markets, financial institutions, and investment
- press freedom
- education and training
- appropriate skills and technology
- ethical standards in public life

**\*Macro Forces:**

- population expansion
- urbanization
- arms expenditure
- debt repayment
- deforestation

**WS-4.2- Discuss and find out how these unsafe conditions arose in your community? What are the immediate causes of these unsafe conditions?**

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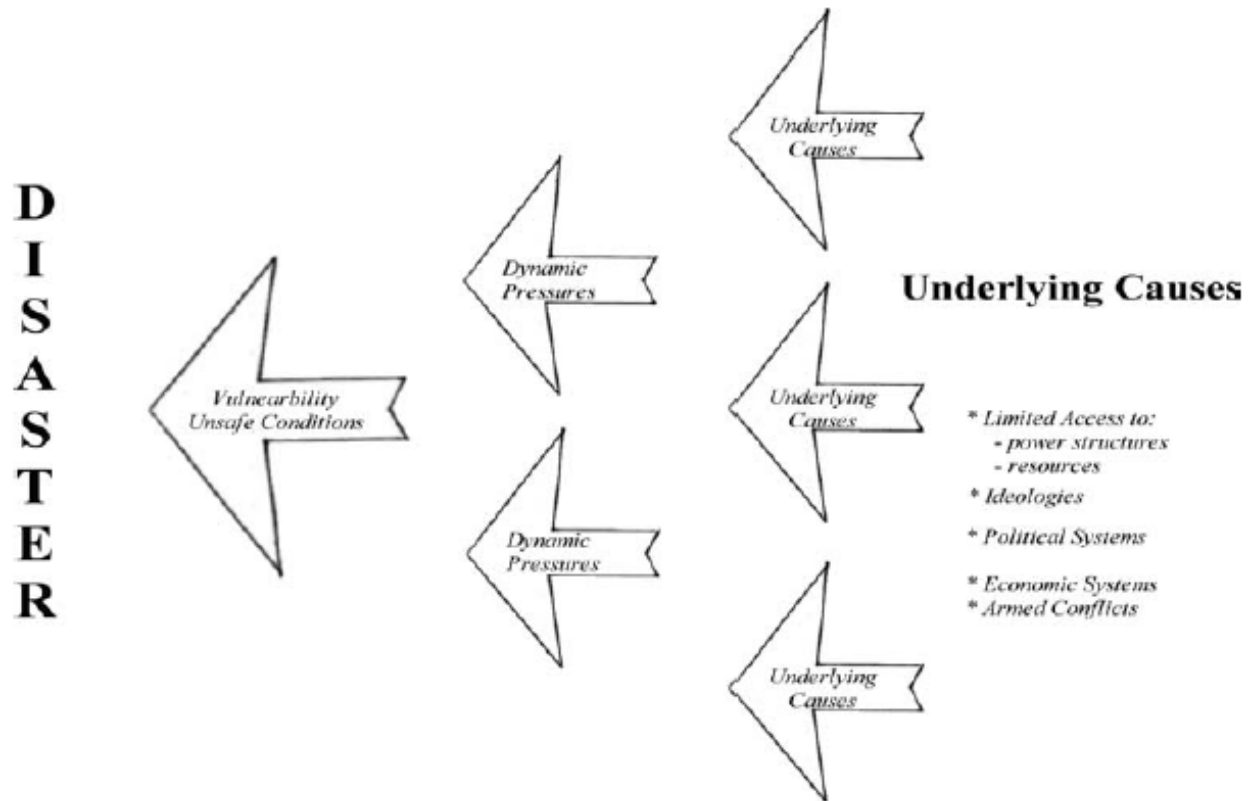
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Beneath the dynamic pressures are **underlying causes** which cause communities or sections of it to be unsafe and vulnerable. These are fundamentals and ideologies on which the society is built.



*WS-4.3- What are the root causes of the dynamic pressure (immediate causes) you have identified above (WS-4.2)? Are they related to community's fundamental values, beliefs and political or economic systems?*

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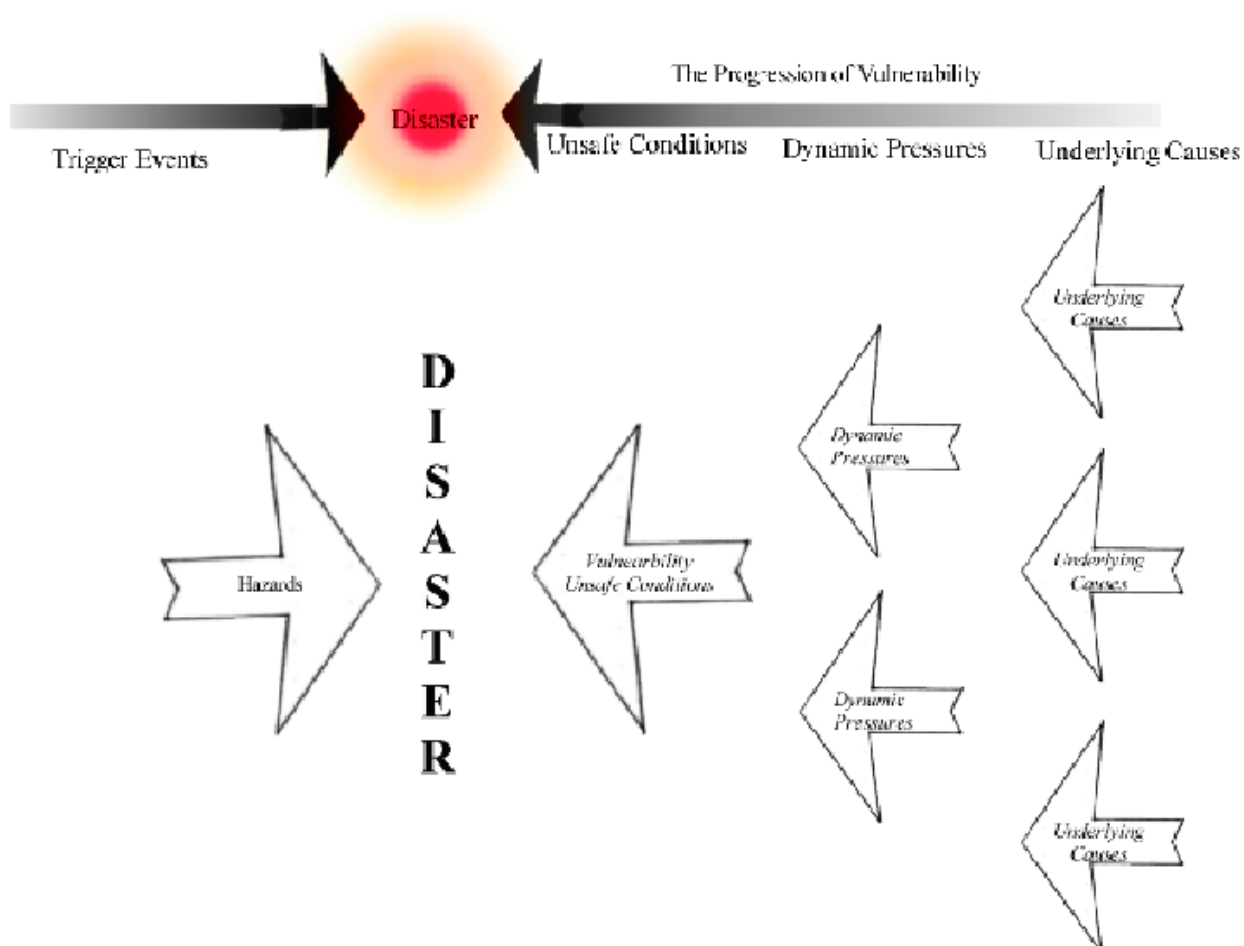


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**Vulnerability** is not a situation that just happens. Most often, it has developed as a progression from *Underlying Conditions*, to *Dynamic Pressures*, to *Unsafe Conditions*. These underlying or root causes answer the question WHY dangerous or unsafe conditions persist.



If the fundamental causes of disaster risk are not addressed, then the **disaster situation** will soon repeat itself. This understanding of cause and effect phenomena demands for an approach that focuses on disaster risk reduction and sustainable development which deals with the roots causes of the vulnerability and builds community capacity.

This draws our attention to a **community based disaster risk management approach** which aims at empowering communities to integrate risk reduction into development planning and contributes towards a sustainable development.

**Further reading:**

1. **Towards Total Disaster Risk Management Approach** - Emmanuel M. de Guzman Consultant, Asian Disaster Reduction Center and United Nations Office for the Coordination of Humanitarian Affairs- Asian Disaster Response Unit
2. **Paradigm Shift in Disaster Management** – CBDM Reference Manual – ADPC, Thailand
3. **Disaster Crunch Model** – CBDM 10 Reference Manual – ADPC, Thailand







## SESSION CBDRM1.4: LEARNING LOG & ACTION PLANNER

1	Session
2	What did I think of this session?
3	What did I learn from this session?
4	What can I use from this session?
5	How can I learn more about the topic of this session?

# SESSION-CBDRM1.5




## Introduction to CBDRM Approach:

### Rationale

It is now well established that a sustainable development and disaster risk reduction are essential preconditions for each other. Disasters severely hamper the progress and achievements of sustainable development while, at the same time, physical infrastructure we are constructing may itself constitute a source of risk in the event of future disasters. For an example, the majority of victims are killed by their own collapsing houses in the case of earthquake. From the perspectives of environmental degradation, human intervention, and security aspects, disaster management is a pressing issue for all of us and should be undertaken on a comprehensive basis. The experience shows that top down approach to disaster management has not been very effective. Ideas and examples should come from the communities and should feed in to the national policies and plans. The communities at risk need to get engaged in all of its phases: prevention, mitigation, preparedness, response and recovery.

### Learning Outcomes

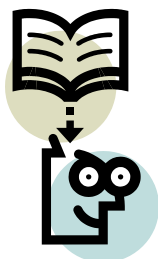
At the end of this session learners will be able:

-  Understand the important aspects of CBDRM as a people centered process
-  Differentiate between conventional "top down" and community based approach in disaster risk management
-  Understand the benefits, challenges and applications of CBDRM approach

### Content

1. Understanding community in disaster risk management context
2. Defining CBDRM
3. Conventional vs CBDRM approach
4. Fundamental principles of CBDRM
5. Key features of CBDRM
6. Benefit and challenges in CBDRM

## 5.1 Understanding the Term "Community"



Community is a term that has a wide range of usage, which includes the following:

Community can be defined geographically: such as a cluster of households, a small village, or a neighborhood in a town. Community can be defined by shared experience, such as particular interest groups, ethnic groups, professional groups, language groups, particular hazard-exposed groups, etc. Community can be defined by sector, such as the farmers, fisher folk, business sector, etc. Community can be used to refer to groupings that are both affected by and can assist in the mitigation of hazards and reduction of vulnerabilities.

A common concept of community is that a community is harmonious, having a harmony of interest and aspirations, and bound by common values and objectives. This definition implies that a community is homogeneous. In reality, a community can be socially differentiated and diverse. Gender, class, caste, wealth, age, ethnicity, religion, language, and other aspects divide and crosscut the community. Beliefs, interests, and values of community members may conflict. Therefore a community need not be homogenous.

For our purpose in Community-Based Disaster Risk Management (CBDRM), a community can be taken as a group that may share one or more things in common such as living in the same environment, similar disaster risk exposure, or having been affected by a disaster. Common problems, concerns and hopes regarding disaster risks may also be shared. However, people living in a community have different vulnerabilities and capacities, for example men and women. Some may be more vulnerable or more capable than others.

For this training series and in the context of community based initiative in disaster risk reduction, post disaster relief, reconstruction and community based development; the following simple definition is used:

### Community Defined

A community is a group of people living in a geographically defined area with social and psychological ties among themselves and common concerns and hopes regarding disaster risks.

This definition takes into account two important components:

1. An emphasis on place where people live (defined by its boundaries even if it is artificial)
2. A Focus on social and psychological ties that constitutes a community. Social ties: kinship, friendship, joint participation in community wide activities, some form of economic exchange etc. Psychological ties: feeling of attachment, identity, sense of belonging to a place, sense of commitment, respect and obligation towards fellow occupants of that



## 5.2 Disasters and Communities



Disaster risk is on the rise throughout the world. Over the past two to three decades, the economic losses and the number of people who have been affected by natural disasters have increased more rapidly than both economic and population growth. The physical, social and economic losses caused by these disasters are particularly harsh for developing countries since they have a long-range effect in the development process. The impacts of the disasters are deeply related with the socio economic conditions, tradition, culture, and climate of the communities.

It is accepted that governments have the prime responsibility for managing disasters and for taking into consideration the roles played by different players. In the past, top-down and command-and-control approaches were oftentimes used to manage the consequences of disasters. In this approach, decisions come from higher authorities based on their perception on the needs. The communities serve as mere “victims” or receiver of aid. In practice though, this approach was proven to be ineffective. It fails to meet the appropriate and vital humanitarian needs. Moreover, it increases requirements for unnecessary external resources and creates general dissatisfaction over performance despite exceptional management measures employed. This is due to the fact that the community, as the primary stakeholder and recipient of the direct impact of disasters, was not given the chance to participate in the process of decision-making and implementation of activities.

On the other hand, communities if left alone have limited resources to fully cope with disasters. In many developing and underdeveloped countries, those who suffer the most are the poor, who, in the first place have limited survival resources and do not enjoy adequate infrastructure and access to social services.

A critical element of sustainable disaster risk management is communities’ participation in these activities. The most common elements of community involvement are partnership, participation, empowerment and ownership by the local people. The emphasis of disaster risk management efforts should focus on communities and the people who live in them. Unless the disaster risk management efforts are sustainable at individual and community level, it is difficult to reduce the losses and scale of the tragedy. There needs to be an opportunity where people can be involved from the initial programming stage of disaster management activities.

Through these community–based activities, people should be able to participate along side government officials and experts group as the direct stakeholders of these activities. While people should own the problems, consequences and challenges of any mitigation and/or preparedness initiative, it is necessary to take people’s involvement further, into policy and strategy. This process induces sense of ownership to the people which results in their continuous engagement and long term commitment to these activities. Involvement of communities is important in both pre-disaster mitigation and post disaster response and recovery process.

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## 5.3 Conventional vs CBDRM Approach



### Conventional Approach/ Dominant Approach

The conventional/dominant approach takes as its starting point the assumption that disasters are characteristics of natural hazards. The perception is that disasters are irrevocably caused by the impact of natural hazards on people and their activities. Disaster is perceived as an accident; as an unforeseen consequence of unpredictable and uncertain natural forces; as an inevitable occurrence; as emergency events on which we have no control.

Disaster research focuses on the hazards and attempts to predict their magnitude and occurrence through the sciences such as seismology and meteorology. Disaster response focuses on interventions to provide assistance to victims and affected population in their emergency needs and later in their recovery.

Communities are considered 'victims' and 'beneficiaries' of assistance by 'outside experts'.

### Progressive Approach / CBDRM Approach

The alternative/progressive perspective looks at disasters as part and parcel of the 'normal' development of societies, as unresolved problems of development. The central role of communities in disaster management is recognised.

It recognizes that different groups of people have different vulnerability. The magnitude of a disaster is related to this differential vulnerability and the severity of a natural hazard depends upon who you are, and what society you belong at the time of the disaster. It explains that disasters are characteristics not of the hazards, but of particular socio-economic and political structures and processes at the national and global levels. Studies conducted show that groups who often suffer from disasters do not have access to resources and basic services and vulnerable conditions are prevalent in developing countries than in developed countries.

This approach therefore, considers hazards as well as vulnerabilities and capacities of people and societies in the understanding of disaster and risks scenarios. Natural phenomena become hazards only when they pose a threat to persons or property. Natural hazards only result in a disaster if they coincide with vulnerable conditions.

Based on the understanding of disaster and its origin, two distinct school of thoughts evolved in managing disaster impact. The traditional / top down approach focussed on emergency response and crisis management as the only solution. During past few decades, there has been a growing realization that the conventional approach is ineffective. This has led to the development of an alternative approach to the disaster management which is takes a proactive approach and focuses on disaster risk reduction strategies.

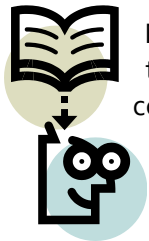
## Conventional vs CBDRM Approach

Conventional /Dominant Approach		CBDRM Approach
People affected by disasters are helpless victims	<b>Perceived role of people &amp; NGOs/Gov institutions</b>	People affected by disasters are active actors in rebuilding their lives and livelihood.
Victims are passive recipients of external aid.		People capacities are used and built on through their active participation.
NGO/GO experts & decision makers		NGOs/GO as facilitators to empower community
Damage and needs assessment are rapidly done by external experts.	<b>Needs assessment &amp; Decision making</b>	Damage, needs and capacity assessment are done with people's participation considering gender, culture, children and age.
Donors (outsiders) decide on what the affected families and community needs.		Community members participate in decision – making to prioritize needs and risk reduction measures.
Focus on physical and material aid and technical solutions.	<b>Assistance Focus</b>	Assistance includes material aid, and organizational / motivational aspects to address root causes of vulnerabilities.
Focus on individual households		Focus on individual, family, community preparedness and strengthening its organization.
Providing aid is the responsibility of the Disaster management institution.	<b>Responsibility</b>	Disaster risk management is everybody's responsibility. Disaster agencies have supportive role.
The aim of disaster management is to reduce the immediate suffering and meet emergency needs, and to bring things back to normal.	<b>Aim of Disaster Management</b>	The aim is to reduce long – term vulnerabilities and to increase people's capacities to better cope with disasters. Building a safe, disaster resilient and developed community
Hazard centered	<b>Management approach</b>	People centered
Specialist led process		Community led process
Focus on response, preparedness and physical mitigation measures		Focus on reducing socio-economic vulnerability, increasing capacities
Reactive response		Proactive prevention
Top down management		Bottom up management supported by top

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## 5.4 Defining Community Based Disaster Risk Management (CBDRM)



Most of disaster response can be characterized as command and control structure one that is top down and with logistic centre approach. Because of this, we observe, lack of community participation that results into failures in meeting the appropriate and vital humanitarian needs, unnecessary increase in requirement for external resources, and general dissatisfaction over performance despite the use of exceptional management measures.

Over the past two decades it has become apparent that top-down approaches fail to address the needs of vulnerable communities, often ignoring local capacities and resources. The top-down approach can increase vulnerabilities and undermine the quality of life, security and resiliency.

Recognizing these limitations, the Community Based Disaster Risk Management (CBDRM) approach promotes a bottom-up approach working in harmony with the top - down approach, to address the challenges and difficulties. To be effective, local communities must be supported into analyzing their hazardous conditions, their vulnerabilities and capacities as they see themselves. The CBDRM approach emphasizes the active involvement of communities in all phases of risk management.

In case of disasters, the people at the community level have more to lose because they are the ones directly hit by disasters, whether major or minor. They are the first ones to become vulnerable to the effects of such hazardous events. On the other hand, they have the most to gain if they can reduce the impact of disasters on their community. This concept gave rise to the idea of community-based disaster risk management where communities are put at the center.

Through the CBDRM, the people's capacity to respond to emergencies is increased by providing them with more access and control over resources and basic social services. Using a community-based approach to managing disasters risks certainly has its advantages. Through CBDRM, it is hoped that communities will be strengthened to enable them undertake any development initiatives including disaster preparedness and mitigation. The CBDRM approach provides opportunities for the local community to evaluate their own situation based on their own experiences initially. Under this approach, the local community not only becomes part of creating plans and decisions, but also becomes a major player in its implementation.

Although the community is given greater roles in the decision-making and implementation processes, CBDRM does not ignore the importance of scientific and objective risk assessment and planning. The CBDRM approach acknowledges that as many stakeholders as needed should be involved in the process.

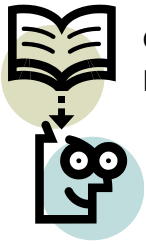
The end goal of CBDRM should be achieving capacities and transferring of resources into the community so that they would assume the biggest responsibility in disaster risk reduction and therefore sustainable development of their own community.

## Community Based Disaster Risk Management (CBDRM)

A process of disaster risk management in which at risk communities are actively engaged in the identification, analysis, treatment, monitoring and evaluation of disaster risks in order to reduce their vulnerabilities and enhance their capacities. This means that the people are at the heart of decision making and implementation of disaster risk management activities. The involvement of the most vulnerable is paramount and the support of the least vulnerable is necessary. In CBDRM, local and national governments are involved and supportive

*(ADPC-CBDRM-11, 2003).*

## 5.5 Why do we use CBDRM?



Community involvement is essential in the disaster risk management and development process because of the following practical considerations:

- Nobody can understand local opportunities and constraints better than the local communities themselves who therefore need to be involved in the identification and resolution of disaster risks and local vulnerability issues.
- Nobody is more interested in understanding local affairs than the community whose survival and well-being is at stake. Therefore the information should be generated in a manner and language that is understood by the community.
- There is growing evidence to show that most top-down disaster risk management and response programs fail to address specific local needs of vulnerable communities, ignore the potential of local resources and capacities, and may in some cases even increase people's vulnerability.

As a result, a broad consensus has been reached among disaster risk management practitioners to put more emphasis on community-based disaster risk management programs. This means the vulnerable people themselves will be involved in planning and implementing disaster risk management measures along with local, provincial, and national entities through partnership.

### Why do we use CBDRM?

- **Effective**- communities responsible for their own projects
- **Efficient**- communities mobilize their own resources & avoid dependency
- **Equitable**- members equally participate & enjoy benefits
- **Enduring**- communities learn skills & knowledge

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## 5.6 Basic Principles of CBDRM



CBDRM is built upon following basic principles:

- I. **Social Justice & Equality to address the root causes of vulnerabilities:** CBDRM combines the technical and scientific view point with social, economic and political factors for disaster risk reduction and transforms the structures that generate inequality and underdevelopment. Working towards a fairer society that respects civil and human rights and challenges oppression with the aim of reducing vulnerability due to social pressures.
- II. **Builds upon Community's knowledge and experience:** Any efforts to reduce disaster risks should build upon a community's knowledge and experience about hazards, vulnerabilities and disaster risk reduction. It will also be essential to recognize the importance of local customs, culture and materials while developing and implementing risk reduction programs. This principle is derived from the notion that no body can understand local opportunities and constraints better than the local communities themselves who therefore need to be involved in the identification and resolution of disaster vulnerability issues.
- III. **Sustainable Development Approach:** CBDRM recognizes the need for community action and strongly advocates for an integration of disaster risk reduction in all development practices. CBDRM focuses on the causal factors processes of vulnerability. It aims in strengthening capacity to absorb losses and recover from the disaster at household, community, societal and national levels.
- IV. **Community Empowerment:** CBDRM aims at empowering communities to develop their independence and autonomy whilst making and maintaining links to the wider society. It ensures that activities are sustainable (they will last after external support has ended). Enhanced community capacity to meet the future needs and sense of ownership among its members are essential for the long term sustainability of any DRR activities.
- V. **Participation:** Everyone has the right to fully participate in the decision-making processes that affect their lives. People can not be forced to "participate" but should be given the opportunity where possible. This is the basic human right and fundamental principle of democracy. It follows a participatory approach where as many of the decisions are made by local communities themselves (not external agency or their agents) on the basis of shared responsibility. In other words, a "bottom-up" rather than a "top-down" approach. In CBDRM the people are at the heart of decision making and implementation of disaster risk management activities. The involvement of the most vulnerable is paramount and the support of the least vulnerable is necessary. In CBDRM, local and national governments are involved and supportive.
- VI. **Gender & Age sensitivity:** It is gender and age sensitive process. Women are normally disadvantaged compared to men in our society. Similarly children voices are rarely heard

during planning process. Agencies involved must recognize this imbalance and ensure that it supports initiatives which, whenever possible, will reduce such inequality.

- VII. **Holistic:** CBDRM approach recognizes that the needs and vulnerabilities of different people in the community are different. CBDRM also recognizes the link between unsustainable development activities and disaster risks. While emphasis may be placed on one or other sectors during the implementation phase, a through analysis and research is carried out for wide range of the community vulnerabilities. People and their lives can not be dealt with one or few sector specific interventions. It requires a holistic thinking to deal with real issues of a real community.
  
- VIII. **Inclusive & caring for marginalized** - Participation of all community members is overriding principle in any community based approaches. Since less advantaged and marginalised groups in the community are more vulnerable to disaster risks, a special attention must be paid to them while planning.
  
- IX. **Coordination and cooperation amongst stakeholders:** CBDRM demand for a high level of coordination and cooperation among all the stakeholders e.g. among Government departments, national, regional and local development planners, NGOs, donors, business communities, development practitioners, academic institutions and vulnerable groups.
  
- X. **Accountability towards People:** CBDRM promotes and advocates for accountability towards the affected people first. The communities and its members and especially the vulnerable people are the primary stakeholders and owners of the process. Therefore, CBDRM practitioners and workers must understand that they are responsible and accountable towards the people first and then to their own agencies and other stakeholders.

CBDRM aims at achieving disaster risk reduction, sustainable development and poverty reduction, people empowerment and equity. CBDRM is envisioned as an integral component of sustainable development, since it helps in avoiding the negative impacts of disasters on development.

(ADPC 2004).

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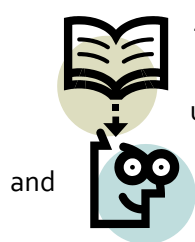
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## 5.7 Key Features of the CBDRM Approach



The aim of CBDRM is to reduce vulnerabilities and to strengthen peoples' capacity to cope with the disaster risks they face. The direct involvement of the community in undertaking local level risk reduction measures is a must which means that the community takes responsibility for all stages of the program including both planning and implementation.

Experiences in the implementation of CBDRM point to the following essential features:

### 1. Centrality of the role of community in disaster risk management

The focus of attention in disaster risk management is the local community. The CBDRM approach recognizes that the local people are capable of initiating and sustaining their own development. Responsibility for change rests with those living in the local community.

### 2. Disaster risk reduction through community empowerment is the aim

The main strategy is to enhance capacities and resources of most vulnerable groups and to reduce their vulnerability in order to avoid the occurrence of disasters in future. This can be best achieved by empowering communities to be in charge of their own lives rather than treating them as vulnerable people in a constant need of support.

### 3. Recognition of the link between disaster risk management and the development process

CBDRM should lead to general improvement in people's quality of life and the natural environment. The approach assumes that addressing the root causes of disasters, e.g. poverty, discrimination and marginalization, poor governance and bad political and economic management would contribute towards the overall improvement in the quality of life and environment.

### 4. Community is the key resource in disaster risk management

The community is the key actor as well as the primary beneficiary of the disaster risk management process. Although external agencies may top up the resources, majority of the human and material resources must come from the community itself.

### 5. Application of multi-sectoral, multi-disciplinary and multi-level approaches

CBDRM brings together the many local community and even national stakeholders for disaster risk management to expand its resource base. A holistic approach to look into the multiple hazards, different vulnerabilities, capacities at different level is the key to the success of CBDRM approach.

### 6. CBDRM as an evolving and dynamic framework.



Lessons learned from practice continue to build into the theory of CBDRM. The sharing of experiences, methodologies and tools by communities and CBDRM practitioners continues to enrich practice.

**7. CBDRM recognizes that different people have different perceptions of risk**

Specifically, men and women who may have different understanding and experience in coping with risk also may have a different perception of risk and therefore may have different views on how to reduce the risks. It is important to recognize these differences.

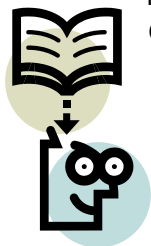
**8. Various community members and groups in the community have different vulnerabilities and capacities**

Different individuals, families and groups in the community have different vulnerabilities and capacities. These are determined by age, gender, class/caste, economic status, occupation (sources of livelihoods), ethnicity, language, religion, political affiliation and physical location.





## 5.8 Challenges in Implementing CBDRM



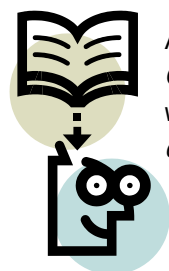
Following are some of the main challenges that agencies face when implementing CBDRM:

1. **Participation of Poor and most disadvantaged:** engaging the poor is often a far more difficult task than engaging the more powerful stakeholder groups. It is fairly easy to demonstrate to government officials for instance why their participation in a particular initiative would be valuable. It is not the same for the poor and therefore different techniques are required to achieve one's aim.
2. **Resistance to change:** for participatory techniques to work effectively, the implementing agency must itself be prepared to change and learn to accept change. The main changes are:
  - ☞ **Loss of power.** The agency should be prepared to accept a loss of power;
  - ☞ **Learn to listen.** The agency should be prepared to listen actively and not pay lip service.
  - ☞ **Loss of control.** The agency should be prepared to cede control to the community so that they own the project or initiative.
3. **Ownership issue:** Many NGOs find it difficult to work with anyone other than the community organizations they helped create. They often failed to see important connections between issues that they are dealing with and issues that other organizations are dealing with. Many agencies hesitate to share community information with other agencies. This tendency leads to either duplication of the efforts or maintaining the need gaps. CBDRM approach, therefore strongly advises to provide the ownership of the information to the community itself so that the community is free to share this with anyone interested in participating in community's programme. All the risk assessment reports, action plans and projects documents must be made available to the community so that any agency participating in community based programmes have access to this information.
4. **Different Interest and Agenda:** Due to the competitive nature of the work, many NGOs have been forced to become professional and specialized in particular sectors. Accessing funds from the development agencies and banks requires recruitment of young and well trained specialists by NGOs. As a result these specialized agencies enter into the community with specific agenda and well designed sector specific projects. This creates an interesting shift from the originally perceived role of NGOs to focus on 'working with the community that is experiencing problems' to 'working on problems experienced by communities'. This situation undermines the purpose of the community based approaches.

### Why Community Participation fails?

- Unfair distribution of work or benefits
- A highly individualistic society where there is little or no sense of community
- The feeling that the government or NGOs should provide everything
- Agency treatment of community members- if treated as helpless they are more likely act as if they are
- Agency's imposition of its own agenda

## 5.9 CBDRM Framework- Disaster Release Model<sup>3</sup>



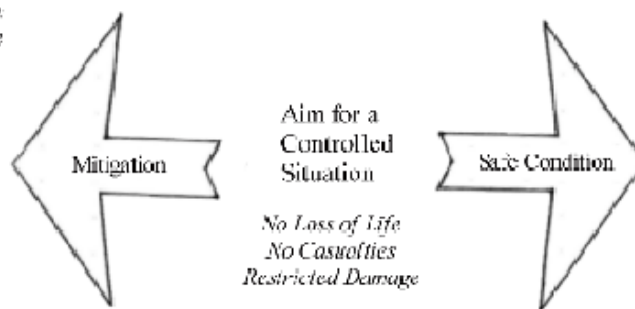
A framework which can be useful for community-based disaster management is "Disaster Crunch Model" (Blaikie et al, 1994) It is a pressure and release model which shows that *vulnerability (pressure)* which is rooted in socio-economic and political processes has to be *addressed (released)* for disaster risk reduction.

In the same way that the Disaster Crunch Model helps us to understand how vulnerability is built up, the Disaster Release Model helps us to understand how the risk of disasters can be reduced.

The first stage is to examine the disaster event itself. Natural phenomena cannot be prevented but their risk of their getting out of control and causing damage and loss of life can be reduced. Measures can be undertaken to modify or reduce the hazards. Example, to reduce the risk of river flooding, protective dikes or bunds can be built and the system of river control can be linked to flood warning systems.

### Measures to Reduce Certain Hazards

- \*Early Warning System
- \*Wind Breaks to Protect Homes
- \*Irrigation in drought effects
- \*Flood Control



### Achieve Safe Conditions

- \*Protected Environment
  - safe location for buildings
  - hazard-resistant buildings and infrastructure
- \*Resilient Local Economy
  - established livelihoods
  - increase low incomes

If *Unsafe Conditions* are to be turned into *Safe Conditions*, then it is necessary to adopt activities, which will lessen the Dynamic Pressures. For example, mitigation measures may be to provide incentives to encourage the community to strengthen their homes, to vacate particularly dangerous house locations and/or build new houses in a safe manner to resist local hazards.

*WS-5.1- What would you suggest that your community does to reduce the dynamic pressures and achieve safe conditions?*

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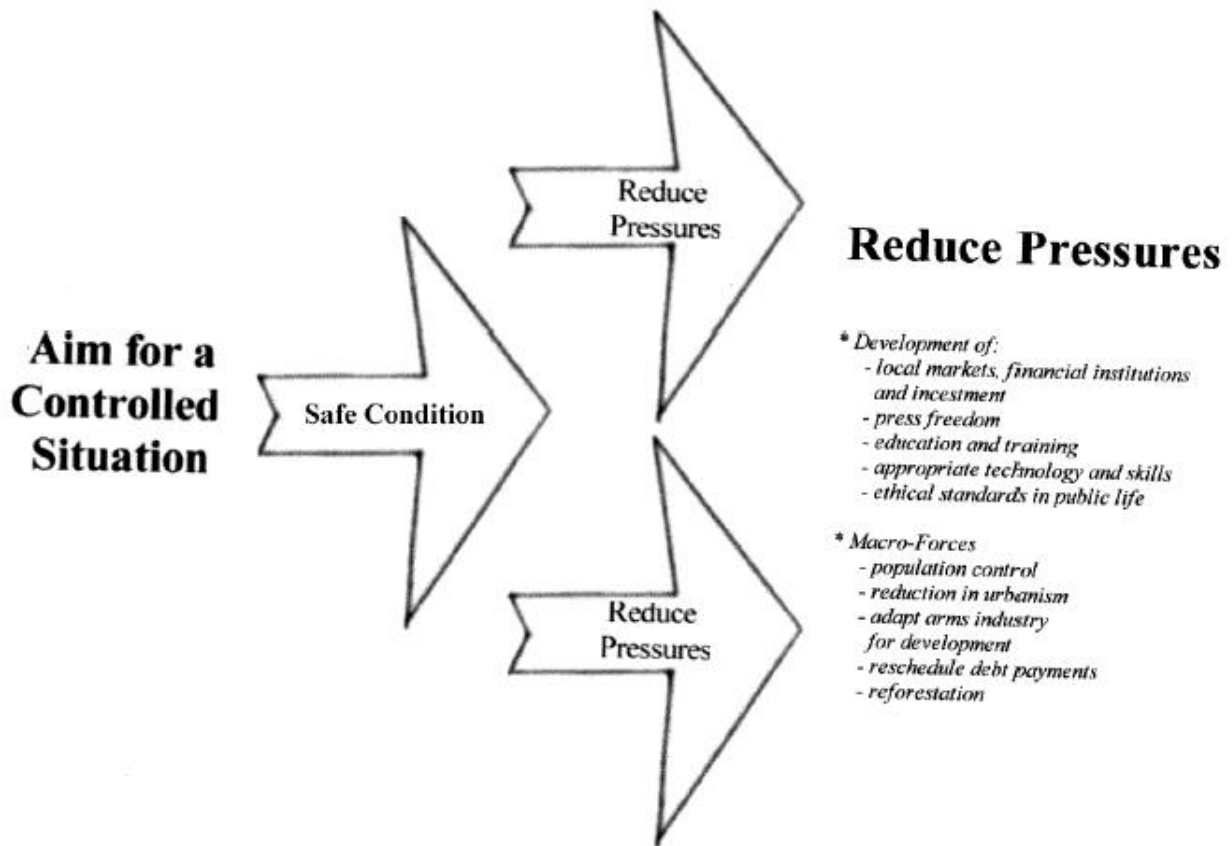
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<sup>3</sup> Sources: Blaikie, P. and T. Cannon, I. Davis and B. Wisner. 1994. At Risk: natural hazards, people's vulnerability and disasters. Routledge, London.

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The next step is to **Reduce Pressures** that directly or indirectly contribute to the growth of vulnerability. Some development activities can be undertaken to significantly reduce lives lost or property damaged in future disasters such as:

- Introduction of disaster preparedness plans
- Building or strengthening of local institutions
- Education of local builders and craftsmen
- Initiation of income generating activities
- Family planning advice



*WS-5.2- What would you suggest that your community does to reduce the dynamic pressures and achieve safe conditions?*

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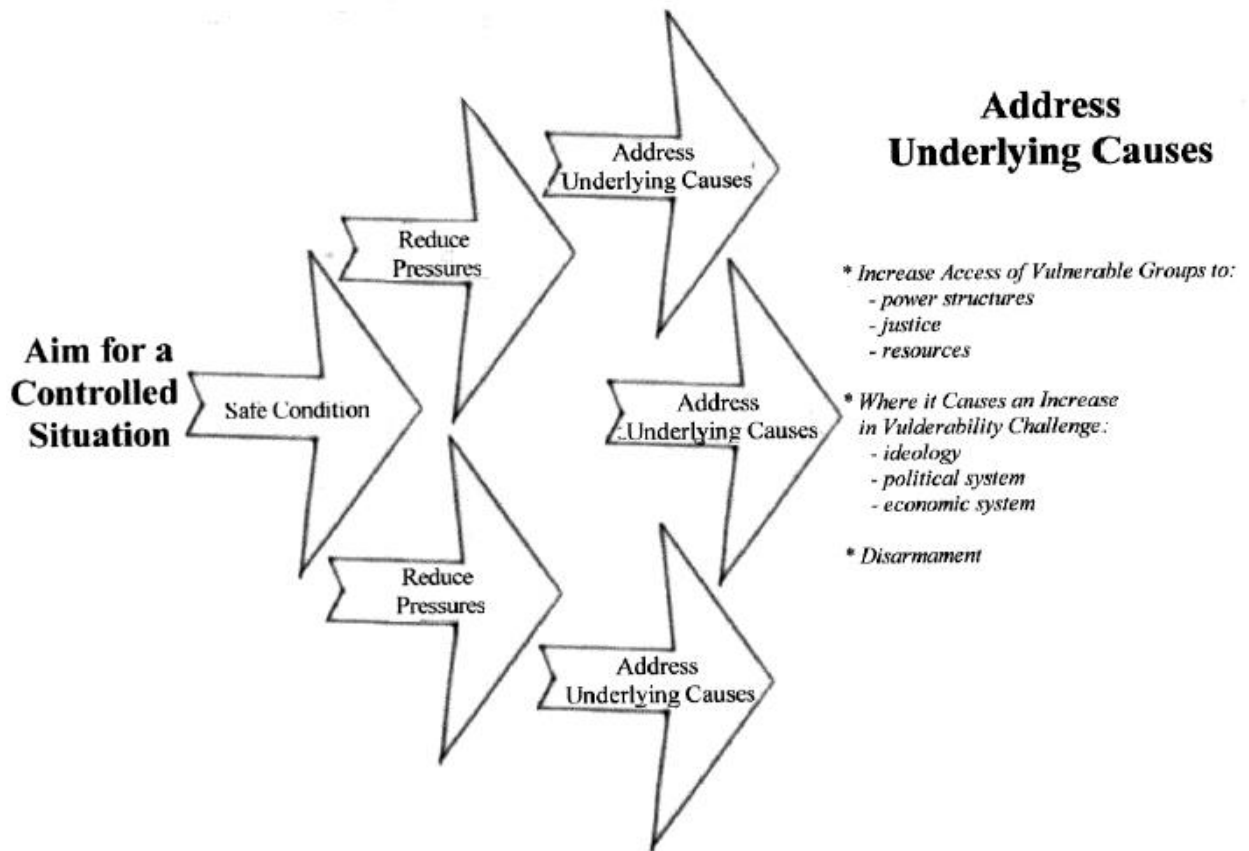
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The next stage is to address *underlying causes* with positive action. Addressing underlying causes means empowering communities and addressing the most pressing needs first.



*WS-5.3- What positive development actions would you suggest in your community to address the underlying causes of vulnerability?*

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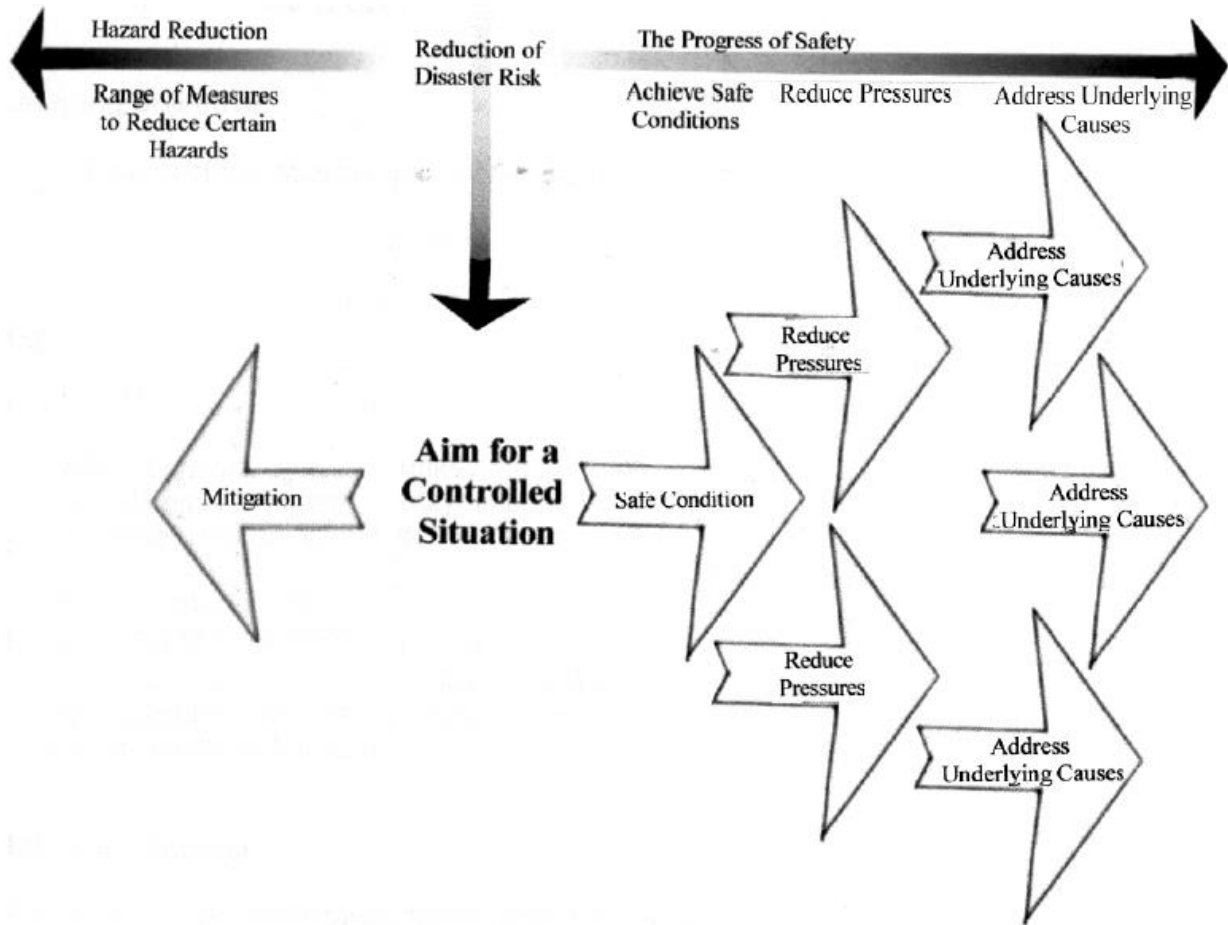
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The aim of CBDRM is to reduce the disaster risk and achieve the controlled situation. This can be achieved only when the root causes of community's vulnerability is identified and addressed while also taking necessary measures to reduce hazards wherever possible.



This is possible only when the community members themselves take charge of assessing disaster risks and address them. CBDRM strongly advocates to integrate disaster risk reduction measures into community development plans to ensure institutionalization of the approach and hence sustainability.

*WS-5.5- How would you summarise the CBDRM approach using "Disaster Crunch-Release Model"?*

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## SESSION CBDRM1.5: LEARNING LOG

1	Session
2	What did I think of this session?
3	What did I learn from this session?
4	What can I use from this session?
5	How can I learn more about the topic of this session?

# SESSION-CBDRM1.6




## CBDRM PROCESS

### Rationale

Community Based Disaster Risk Management (CBDRM) is a process, which leads to a locally appropriate and locally "owned" strategy for disaster risk reduction. In the CBDRM Process, a thorough assessment of the community's hazard exposure and analysis of their vulnerabilities as well as capacities is the basis for activities, projects and programs to reduce disaster risks. CBDRM is a multi-sectoral, multi-disciplinary and multi-level process which requires an active participation of all the stakeholders at community, districts, provincial and national level. Managing these wide range of stakeholders and coordinating multi-sectoral efforts at multiple levels is a challenge for CBDRM practitioners. One important aspect in the CBDRM process is that the long term sustainable development should be kept in mind and the outcomes should lead to communities resilient for long term sustainability. It is therefore, essential for the community practitioners to understand the steps and processes involved in the CBDRM.

### Learning Outcomes

At the end of this session participants will be able to

-  Understand the process involved in community based disaster risk management and similarities with development planning
-  Relate the project cycle and its relationship with CBDRM process
-  Explain the important steps in the CBDRM

### Content

1. *Introduction to CBDRM process*
2. *Project cycle and CBDRM process*
3. *Phases and steps in CBDRM*
4. *Stakeholders in CBDRM process*
5. *Understanding a community- the first step of CBDRM*

## 6.1 Community Based Disaster Risk Management Stages



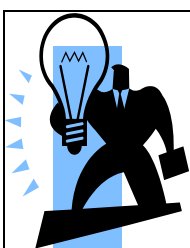
As defined above, CBDRM is a process of disaster risk management in which at risk communities (people) are actively engaged in the identification, analysis, treatment, monitoring and evaluation of disaster risks in order to reduce their vulnerabilities and enhance capacities. This means the people are at the heart of decision making and implementation of disaster risk management activities.

In the CBDRM Process, a thorough assessment of the community's hazard exposure and analysis of their vulnerabilities as well as capacities is the basis for activities, projects and programs to reduce disaster risks. The community should be involved in the process of assessment, planning and implementation. This approach will guarantee that the community's real needs and resources are considered. There is more likelihood that problems will be addressed with appropriate interventions, through this process.

It is a process of strengthening and mobilizing community to act together to reduce their vulnerability to disaster risks and move towards prosperity and the sustainable development. In this sense there is little difference in the way a community based disaster or development programme work. In fact, CBDRM approach looks towards integrating disaster risk management into the community based sustainable development. This means, it follows the same process of that is followed in sustainable community based development which recognises the risk reduction as an integral part of the development.

CBDRM process facilitated by an external agency can take place in the following simplified developmental stages. Each stage grows out of the preceding stage and leads to further action.

- Stage 1: Preparations at organizational and community level
- Stage 2: Community based Risk Assessment/ Participatory Research
- Stage 3: Community Organizational Development and Capacity Building
- Stage 4: Community based Shared Visioning & Risk reduction Planning
- Stage 5: Project Implementation/Monitoring progress
- Stage 6: Networking & Expansion / Sustaining/Reinforcing/ Celebrations



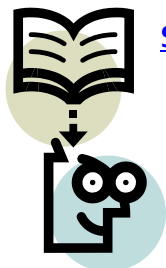
### WS – 6.1 -Time for Group Reflection

Use the flash cards to discuss within your group, CBDRM stages and steps. Design a CBDRM cycle by placing the appropriate steps within each of the CBDRM stages described above in order of their happening (as much as possible).






## 6.2 Key Steps in CBDRM



### Stage 1: Preparations at Organizational and Community Level

1. Building Rapport & Getting clearance - to build rapport with the local authorities, community leaders & other stakeholders and thus pave the way for future partnership in community activities. The facilitating agency at this stage introduces its aims and objectives to the community members and all other stakeholder, obtains clearance and authorization from the government authorities & establish rapport with the local leaders, community groups, local government authorities and all other stakeholders.
2. Establishing and Training Team – to identify, recruit and train the CBDRM team in community mobilization techniques is essential to enable them to facilitate community based initiatives in disaster risk management and sustainable development. The team members may have expertise in disaster risk management but not everyone is potentially a community mobilizer. This requires a motivation and passion to work with poor communities. Therefore, becoming a community worker should be a self selection process as much as possible. Once we have a team with motivation and passion, they will require some new skills and tools to become effective community mobilizers. Therefore, good community mobilization training along with a basic understanding of disaster and development concept is the key to the success of any community based initiative.
3. Community Profiling, Sensitization and Awareness Raising - to begin understanding the community and it's socio-economic processes, vulnerabilities and capacities, to encourage the community members to take action for addressing community wide issue (s) by raising interest of the people; to make community members and all the stakeholders aware of an issue and possible actions and outcomes without raising unnecessary expectations and minimize speculations and wrong assumptions. This is a very important stage in which the future success or failure will depend. No participation and therefore a success can be guaranteed unless most of the community members and other stakeholders are consulted and made aware of the issues at this stage. One of the outcomes of this stage is a "Community Profile" which will form a basis of future actions in the community.
4. Unity organizing & Identifying Internal Mobilizers - to understand and appreciate the heterogeneous nature of the community and differences between various factions within it and in this context, bring the whole community together for a common cause. This is a concerted effort to make all people understand and respect each others, irrespective of religion, class, clan, gender, ability, wealth, ethnicity, language, or age. At this stage, unity is sought among the various stakeholders and interest group within and outside community. Some of the community groups or individual volunteers may be identified at this stage.

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## Stage 2: Community Based Risk Assessment/Participatory Research

5. *Finding the facts / data collection* – to take an inventory of hazards, understanding vulnerabilities of different segment of the population within the community and also find out about capacities, assets/resources, influence and power of the community and it's stakeholders in relation to the disaster risks and sustainable development. Participatory assessment tools such as PRA, CPA, PVCA may be used to ensure an affective and active participation of the common people and especially of those who are vulnerable.
6. *Analyzing the data-* to find the underlying causes of community's problems and vulnerability. Physical, social, economical, political vulnerabilities and corresponding capacities in relation with all potential hazards are analysed. Social and scientific methods are used to understand the relations among hazards, vulnerability and disaster risk and development opportunities.
7. *Synthesizing & Articulating Information* – to establish a common understanding of the problem and its underlying causes among the community members and all the stakeholders. Articulating a problem and possible solutions in the most common terms & prioritizing the actions all in a participatory way is the outcome of this stage.
8. *Preparing a Community Profile/ Research Report* – to organize the information in such a form that can be used by community and it's stakeholders for the purpose of risk reduction and development planning. It is essential that the report is owned by the community and not by the facilitating agency although the later may use the document to design their own contributions and support in the community. This report should be made available to all the major stakeholders so that they can also use this to plan their support and contribution in the community.

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### Stage 3: Community Organizational Development and Capacity Building

9. Identifying and Organizing CBDRM teams – to identify existing community groups and CBOs and seek their participation in a comprehensive Community based initiative. Form new groups only if there are no existing groups working in disaster or community development field. At this stage, unity is organized among different groups and roles are clarified.
10. Organizing Community Management Committee (s) - to provide strategic direction, liaise with the regional and national stakeholders and coordinate the CBDRM and development initiatives of different groups and agencies in the community. This committee acts as a multifunctional body which is supported by disaster management sub-committees. Village or municipal councils may take this responsibility in many cases.
11. Guiding Principles and Standard Operating Procedures (SOPs) for CBDRM organizations – to provide operating guidelines to community based groups, CBOs and other management committees. Public accountability, transparency, humanitarian principles and code of conduct are some of the fundamental principles which must be part of the organizational bi-laws.
12. Management training- in order to make a community based initiative a success, it is not sufficient just to allow or even stimulate marginalized community to participate in democratic and developmental decision making and actions; it is also necessary for that community to have the capacity to participate. Community management training is designed to increase that capacity among community members and especially among marginalized groups. This is one of the key distinctions between orthodox social animation or community development interventions and new community mobilization approach. This ensures a readiness of a community for any development initiatives.

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## Stage 4: Community Based Shared Visioning & Risk Reduction Planning

"If you do not know where you are going, then any road will do."

- Lewis Carroll, the author of *Alice in Wonderland*

13. Participatory Visioning & Strategic Planning – to enable community members including disadvantaged and marginalized groups to visualize, articulate and plan the actions that affect their own future. Building upon the participatory research findings, the community members prioritize and decide on the strategic directions at this stage. This is done by the community members through a collective visioning and planning exercise where they together develop a long term vision of their safe and sustainable community.
  14. Risk Reduction into Action Planning – one of the products of the participatory visioning and strategic planning is a Community Action Plan (CAP). This is the community plan of actions that describes how the community is now, how it wants to be by the end of the chosen period and how it intends to get from where it is now to where it wants to be. This translates community's collective vision into a reality by planning specific actions and identifying resources to implement them. It is at this stage that the CBDRM team must ensure that the risk reduction measures are fully integrated into this community action plan (CAP).
  15. Designing a Community Project – to transform the community vision of a safer and sustainable community into the reality. A project may be an investment in (1) awareness raising campaign in disaster risk or an issue e.g. child abuse, HIV; (2) constructing or rehabilitating an old defunct facility, (3) repairing and maintaining a facility, (4) setting up a new organization to carry out specified actions, (5) availing micro finance to the vulnerable community members, (6) improving the habits and behaviour of community members (*eg hygiene*), (7) creating and promulgating new laws, regulations and guidelines, or (8) modifying existing ones. In order to make it a successful, it must be designed properly. If the community does not have enough resources of its own, the project can be converted into a proposal for external funding.
  16. Negotiation & Project Approval –once the project is designed and proposal is submitted to the community executive committee or an external funding agency, negotiations take place to discuss and understand the expectations of each other. Negotiations continue till every one's expectations are met. Negotiations can be within community members, between community sub committee and community executive committee, community and the funding agency or among the various stakeholders.
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## Stage 5: Project Implementation & progress Monitoring

17. Implementation of Risk Reduction Projects – project implementation means following a project plan, monitoring progress, proactively identifying obstacles and taking actions to remove them with the aim of bringing about a desirable change by transforming project plans into actions. Community members are able to see the results and thus enthusiasm among them increases. Community mobilization becomes more visible at this stage.
18. Project progress monitoring, evaluating & reporting- to see where we are going if we want to stay on track and achieve our objectives. Monitoring is the regular observation, recording, analyzing and reporting of activities and the difference it is making in the lives of people for which the action is designed and implemented. Different people work on the project in different ways and at different times, but the whole community (*and donors*) must know what is going on overall. A regular community reporting is essential to maintain the trust and interest of the people in the initiative.

## Stage 6: Networking & Expansion / Sustaining/Reinforcing/ Celebrations

19. Build the Networks, Share and Celebrate the Success - to share the successes with the surrounding communities and at the regional level. The networks have to be built with surrounding communities, at regional, national and global level in order to obtain support for the community initiatives in disaster risk reduction.

The celebration adds public recognition, support, validation and legitimacy to the whole developmental process, not just the project. It is also a good venue for raising awareness among the stakeholders, networking with like minded institutions, improving transparency, and making the community project a more high profile activity.

20. Evaluate/ Sharpen the Saw & Move on to next- conduct ongoing evaluation of effectiveness an initiative in bringing about a positive change in the lives and livelihoods of the people especially the marginalized group who are vulnerable to the disaster risks. Record what went well and what went wrong during the project period. Reflect on the entire process through a community wide participatory process. Consult the experts whenever necessary. Learn from the mistakes so that they are not repeated.

You are better prepared this time. So move on to the next community based initiative while also linking them to district, regional and national level programmes. Keep the momentum in order to ensure a visible positive impact on the lives and livelihood of the disaster affected population and community prosperity.

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## 6.3 Actors in CBDRM



There are multiple stakeholders and actors in the community-based disaster risk management process. The CBDRM actors can be divided into two broad categories, the Insiders and the Outsiders. The term Insiders refer to those individuals, organizations and stakeholders who are located within the community. Outsiders refer to those sectors and agencies which are located outside of the community and want to reduce community vulnerability and enhance its capacities for disaster risk management.

Amongst the Insiders, the community disaster risk management organization (CDRMO) or community Management Committee (CMC) is the focal point to ensure the management of disaster risks. The CDRMO /CMC with the help of its members and sub-committees facilitates the implementation of disaster risk reduction measures. Aside from the CDRMO/CMC every individual, family, organization, business and public service within a community has a role to play in reducing disaster risks, as all of them would be affected by disasters. The implementation of multiple actions is essential for effective disaster risk management. The CDRMO/CMC should mobilize men, women, farmers, fishers, laborers, youths and other people with special needs to implement the multitude of actions. In order to establish working relations, the CDRMO/CMC should recognize differing perceptions, interests and methodologies and facilitate a broad consensus on targets, strategies and methodologies among the multiple stakeholders in the community.

The Outsiders include the government departments and agencies, NGOs, UN, private sector and other outside agencies. Their role is to support the community's efforts in reducing their vulnerabilities and enhancing capacities for the longer-term. They can do this through providing technical, material, financial and political support. The outside agencies may initiate the process as part of their agenda or the community may contact them in order to receive support. The abundant financial resources, technical expertise and political clout of outside agencies can put them in a dominant position vis a vis the community, so they might be inclined to push forward their agenda at the cost of community priorities. However, exertion of control by outside agencies over community decision-making process can harm community capacity. Thus, Outsider agencies must be extremely careful and sensitive to community capacity building.

## 6.4 Outcomes of the CBDRM Process

The CBDRM process should lead to progressive improvements in public safety and community disaster resilience. It should contribute to equitable and sustainable community development in the long term.

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## 6.5 Understanding the Community – Community Profiling



In conventional emergency management, communities are viewed in spatial terms: groups of people living in the same area or close to the same risks. This overlooks other significant dimensions of 'community' which are to do with common interests, values, activities and structures. The SPEEC (Socio, Political, Cultural, Economic and Ecological) understanding of community provides analytical view to understand the communities.

Community is not a homogenous entity. There will be differences in wealth, social status, political affiliations, cultural practices and labour activity between people living in the same area. From a hazards perspective, the spatial dimension is an essential element in identifying communities at risk. But the vulnerability of individuals and families will differ from each other based on their socioeconomic differentiations and other factors.

It is therefore essential not only to identify vulnerable groups but also to understand the diverse factors that contribute to their vulnerability. As a starting point in understanding community, a basic profile of a target community is prepared exploring the following factors and their influence on the people in defining their vulnerability and capacity to deal with the disaster risks and move forward towards a sustainable development.

Name of the Village (Area)	Geographical Location	Names of the group members
<b>Social</b>	Population, (Male, Female, Children), Total number of households, Different groups of community (e.g. Caste), The relationship of these groups (e.g. Gender), Education status, Health care facilities, other infrastructure.	
<b>Political</b>	Decision making processes in community, who are the influential members in decision making, who is excluded? why	
<b>Economic</b>	Livelihood resources and Activities. Micro to Macro linkages of these activities. (e.g. Market, Labour)	
<b>Cultural</b>	Festivals, Food habits, different ways of transferring knowledge, sharing joy etc.	
<b>Ecological</b>	Environment and human interference.	

Source : Characteristics of a Disaster-resilient Community A Guidance Note – John Twigg

Communities do not exist in isolation. The level of a community's resilience is also influenced by capacities outside the community, in particular by emergency management services but also by other social and administrative services, public infrastructure and a web of socio-economic and political linkages with the wider world.





## SESSION CBDRM1.6: LEARNING LOG & ACTION PLANNER

1	Session
2	What did I think of this session?
3	What did I learn from this session?
4	What can I use from this session?
5	How can I learn more about the topic of this session?



## References:

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5. Living with Risk- focus on Disaster Risk reduction; International Strategy for Disaster Risk reduction ([www.unisdr.org](http://www.unisdr.org) )
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Source:<http://www.undp.org/bcpr/disred/english/publications/publications.htm>
9. *Vulnerability and Risk Assessment, UNDP, DMTP, Source: <http://www.undmtp.org/modules.htm>*
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## **CBDRM<sub>1</sub>: LEARNERS ACTION PLAN**

*Thinking back over the course and your part in it, consider your responses to the following:*

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**1. What have I learnt from this course?**

**2. What will I do differently as a result?**

**3. How will I make the changes, and by when?**

**4. What resources & support (resources, management commitment, equipment, extra skills etc.) will you need to complete the implementation?**

5. What will make it difficult?

6. How will I overcome these difficulties?

7. How will I know that the changes have been effective?

## Workshop Assessment Form

NAME OF WORKSHOP:                      CBDRM1- Intro to CBDRM

DATE: \_\_\_\_\_

*All participants are asked to provide comments on the quality of the workshop so that improvements can be made. Please indicate your level of satisfaction by ticking the boxes or by writing your views.*

S. N.	Assessment Criteria	Very good	Good	Satisfied	Poor	Very Poor
1	Achievement of course aims and objectives					
2	Relevance of workshop to your job					
3	Quality of sessions delivery					
4	Use of training aids/ visual aids					
5	Use of participatory learning methods					
6	Quality of course material / hand outs					
7	Support from the trainers during the workshop					
8	Training room facilities/ venue					
9	Refreshment / Food					
10	Pre workshop communications					
11	Did it meet your learning needs in this topic?					

Would you recommend this course to your colleagues?	Yes	No
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What actions are you planning to take as a result of this workshop?

<p>What was the most valuable aspect of the workshop for you?</p>	<p>What was the least valuable aspect of the workshop for you?</p>
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This workshop could be improved by.....

Please suggest topics for further workshops or learning support that you or your organization may need:

NAME: \_\_\_\_\_

We may contact you within 4-6 weeks as part of our internal evaluation process. If you would prefer not to be contacted, please tick this box.

*Thank you very much.*