

# Disaster Management Class 02

29th June, 2024 at 9:30 AM

## BRIEF ABOUT THE LAST CLASS (09:04 AM)

## VULNERABILITY (09:15 AM)

### TYPES OF VULNERABILITY

- **Physical Vulnerability:**
  - This is with respect to the physical strength of the living property and environment to withstand the adverse impact of hazards.
- **Social Vulnerability:**
  - It is the **disintegration** of formal-informal social institutions or groups to collectively act during a hazard.
- **Ecological Vulnerability:**
  - Degradation of the environment adversely affects the ability to **provide ecological services**.
- **Organisational vulnerability:**
  - Formal organizations such as administrative and government fail during a hazard.
- **Educational Vulnerabilities.:**
  - Lack of educational **awareness** with respect to hazards and vulnerabilities.
  - Not knowing **do's and don'ts** during the Disaster.
- **Attitudinal Vulnerability:**
  - Low level of awareness, desire is low. and culture to get to know about do's and don'ts is low.
- **Political Vulnerability:**
  - Lack of political representation to take effective action.
- **Cultural Vulnerability:**
  - Cultural practice that makes you vulnerable during a hazardous situation.
  - Ex. celebrating near water sources during the rainy season.

### RISK (09:53 AM)

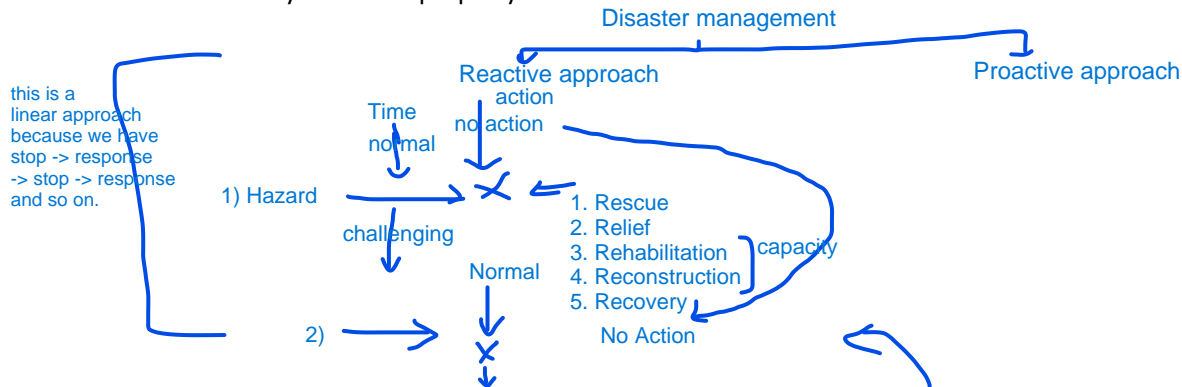
- $\text{Risk} = (\text{Hazard} * \text{Vulnerability}) / \text{Capacity}$
- As per the UNDP Global Report on **Disaster Risk Reduction (DRR)**, Risk is the probability of harm or loss of **life, property, and environment** resulting from the interaction of hazards and vulnerable conditions.
- Risk Assessment: (Low-High Hazard \* Low-High Vulnerability) / Increase-decreased capacity:
- Seeing the level of Hazard, Vulnerability, and capacity.
- Risk increased: (High Hazard \* High Vulnerability) / Low Capacity
- Risk Reduction: (Decreased Hazard \* Decreased Vulnerability) / Increased Capacity.

-> Primary and Secondary hazard and Zonation mapping are part of hazard.  
-> Find out causes of vulnerability and types of vulnerability to assess risk.  
-> Capacity building.

by understanding all the three we can understand about risk assessment.

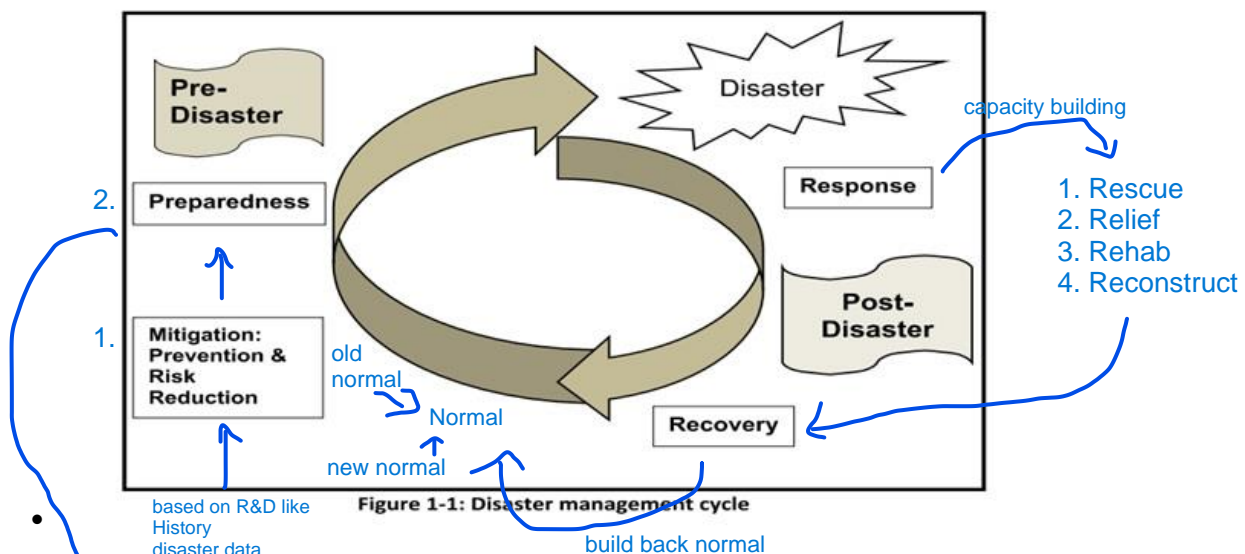
## DISASTER (10:08 AM)

- Internationally, As per **UNDRR** definition of Disaster, A serious disruption of the functioning of a community or a society at any scale due to risk events (interacting with conditions of exposure, Vulnerability, and capacity) leading to one or more of the following: Human, material, economic and environmental losses, and impact.
- The word originated from two words Dis-Start i.e., Bad start.
- As per the NDMA Act, 2005, a Disaster is a **catastrophe or grave occurrence** beyond coping capacity due to **hazards** (Natural or man-made) due to negligence or accident causing **loss and damage** to and community as well as property and environment.



## APPROACH TO DISASTER MANAGEMENT (10:42 AM)

- Reactive approach:**
- (Please refer to the diagram from the class)
- It is the traditional approach to DM which was about taking action after the hazard and mainly included Rescue, Relief, Rehab, Reconstruction, and recovery
- so as to bring back life to normal (as it was before the hazard) at best).
- Hence, after the urgent part of rescue and relief the rest of the part is **capacity recovery** and coming back to normal.
- Reasons for reactive approach:** (generally this reactive approach is adopted by poor countries.)
- 1. Lack of understanding of hazard and its cycle.
- 2. Lack of Understanding of vulnerability and risks.
- 3. Lack of resources.
- 4. Lack of awareness, education and attitude, **culture of safety.**
- Proactive approach: (11:21 AM)**
- (Please refer to the diagram from the class).



Preparedness include:

- > Awareness
- > Early warning
- > Do's and Don'ts
- > Mock drills

This is a **cyclical approach** and hence **continuous approach**

- According to UNDRR, DM is simply defined as the organizing and planning (R&D) and application of measurements for preparing, responding, and recovering from disaster.
- DM as per <sup>DM Act</sup> 2005 and NPDM 2009 is defined as an **integrated continuous process** where the pre-disaster part involves organized planning (r&d) and application for
- a. Prevent and mitigate.
- b. Prepare and hence capacity built, and for the post-disaster part prompt response of evacuation, relief, and disaster <sup>assessment</sup> ~~assignment~~ for better recovery through rehab and reconstruction.
- **Disaster Risk Management (12:10 PM)** (Imp.) <sup>new disaster risk</sup>
- As per UNDRR, It is the application of DRR policies to prevent then reduce existing risk and manage residual risk leading to strengthening the resilience of the life, property, and environment and reducing losses and damages.

**TOPIC FOR NEXT CLASS: INTERNATIONAL AND NATIONAL DEVELOPMENT  
IN TERMS OF STRUCTURE**