ELCS 0045- DISASTER MANAGEMENT

LECTURE 2

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Disaster management

is the organized process of preparing for, responding to, and recovering from disasters in order to reduce loss of life, property damage, and environmental harm. Or

Disaster Management :" means a continuous and integrated process of planning, organizing, coordinating and implementing measures which are necessary

- Prevention of danger or threat of any disaster
- Mitigation or reduction of risk of any disaster or its severity or consequences
- Capacity-building
- Preparedness to deal with any disaster
- Prompt response to any threatening disaster situation or disaster
- Assessing the severity or magnitude of effects of any disaster; evacuation, rescue and relief

Main Goals of Disaster Management

- Protect human life
- Reduce damage to property and the environment
- Provide quick relief to affected people
- Help communities recover and rebuild
- Increase preparedness for future disasters

Types of Disaster Management

The disaster management process can be divided into two stages :

- Crisis Management and
- Risk Managemen

Crisis Management

Crisis is an abnormal situation in which, decisions has to be taken at short period of time (Ibrahim et al. 2003).

- **Crisis can be divided into two types**

(a) Community crisis which is generated by natural and technical agents, disaster and conflicts (civil war, riots and civil disturbance) and

(b) Non-community crisis, such as transport accident which does not impact the entire community.

- Crisis management involves an accurate and timely diagnosis of the criticality of the problem and dynamics of events.
- This requires knowledge, skills, courageous leadership, high level of risk taking ability.
- Successful crisis management requires motivation, sense of urgency of the matter, commitment, and creative thinking with long-term strategic vision.

b) Risk Management

- In disaster management, risk is defined as the interaction between likelihoods of hazards and consequences of hazards. It can be said that Risk=Likelihoods of Hazards*Hazard's Consequences.
- 'Likelihood' is defined as the probability and frequency of hazards and 'consequence' is understood as the impacts of hazards.

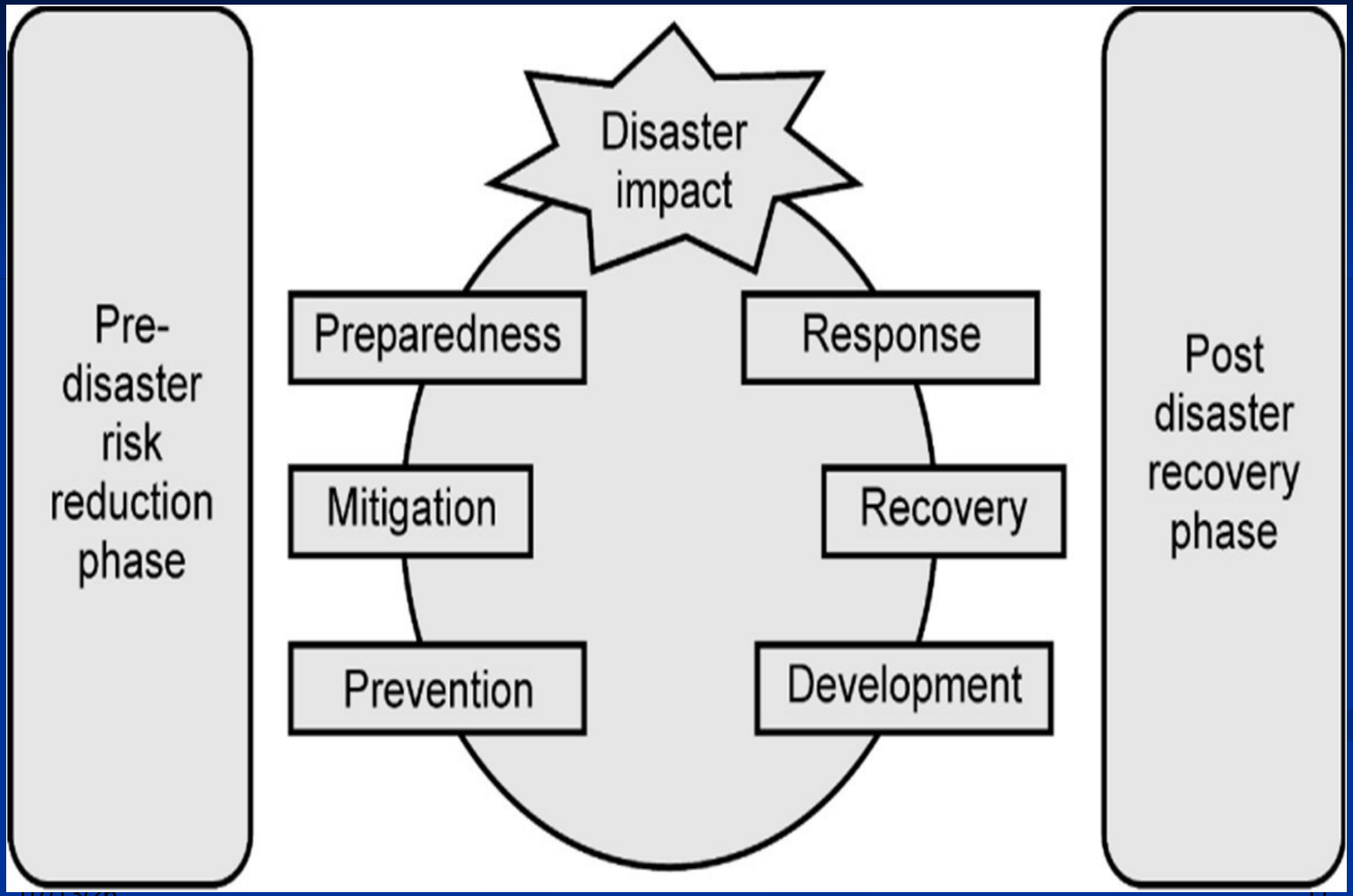
Hence, Risk (R) = Hazards (H) * Vulnerability (V)/Coping Capacity (C).

Risk Management involves ‘systematic management of administrative decisions, organization, operational skills and responsibilities to apply policies, strategies, and practices for disaster risk reduction’

Disaster management includes administrative decisions and operational activities that involve,

- Prevention
- Mitigation
- Preparedness
- Response
- Recovery
- Rehabilitation

DISASTER MANAGEMENT CYCLE



Phases of Disaster Management

There are three key phases of activity within disaster management

- **Pre - Disaster :** Before a disaster to reduce the potential for human, material or environmental losses caused by hazards and to ensure that these losses are minimized when the disaster actually strikes.
- **During Disaster :** It is to ensure that the needs and provisions of victims are met to alleviate and minimize suffering.

- **Post Disaster :** After a disaster to achieve rapid and durable recovery which does not reproduce the original vulnerable conditions.
- Traditionally people think of disaster management only in term of the emergency relief period and post disaster rehabilitation. Instead of allocated funds before an event to ensure prevention and preparedness.

Development

- Is to develop the economy, the development process is an ongoing activity. Long- term prevention/disaster reduction measures.

Examples like construction of embankments against flooding, irrigation facilities as drought proofing measures, increasing plant cover to reduce the occurrences of landslides, land use planning, construction of houses capable of withstanding the onslaught of heavy rain/wind speed and shocks of earthquakes are some of the activities that can be taken up as part of the development plan.

Response

Immediate actions taken during and after the disaster.

Examples:

- Search and rescue
- Providing medical aid
- Evacuation
- Temporary shelters

Purpose: Save lives and reduce suffering.

Recovery

Activities that restore normal life after the disaster.

Examples:

- Rebuilding houses and roads
- Restoring water and electricity
- Financial assistance
- Rehabilitation programs

Purpose: Return the community to normal conditions.

Mitigation

Actions taken to reduce the impact of disasters before they happen.

Examples

- Building flood barriers
- Earthquake-resistant buildings
- Planting trees to prevent landslides

Risk Reduction

This is the overall goal of disaster management. It involves reducing the chances and impacts of disasters through planning and safety measures.

Examples:

- Building strong infrastructure
- Public awareness campaigns
- Environmental protection

Prevention

Actions taken to stop disasters from happening or reduce their harmful effects.

Examples:

- Flood control systems
- Fire safety regulations
- Disease vaccination programs

Purpose: Avoid or minimize disaster occurrence.

Preparedness

Activities done before a disaster to ensure effective response.

Examples:

- Emergency drills
- Training rescue teams
- Storing food, water, and medicine
- Early warning systems

Purpose: Help people respond quickly and safely

- Need of Early Warning System

Early Warning for disaster reduction is a legitimate matter of public policy at the highest national levels for two main reasons :

1. The first one, clearly, is public safety, and the protection of human lives.
2. The second is the protection of the nation‘s resource base and productive assets (infrastructure and private property or investments) to ensure long term development and economic growth. Conversely, by reducing the impact of disasters, a government avoids the financial and political- burden of massive rehabilitation costs.

Channels Used for Disaster Warning

- Radio and Television
- Telephone (Fixed and Mobile)
- Short Message Service
- Satellite Radio
- Internet/Email
- GIS and Remote Sensing in Disaster Management

END OF UNIT ONE