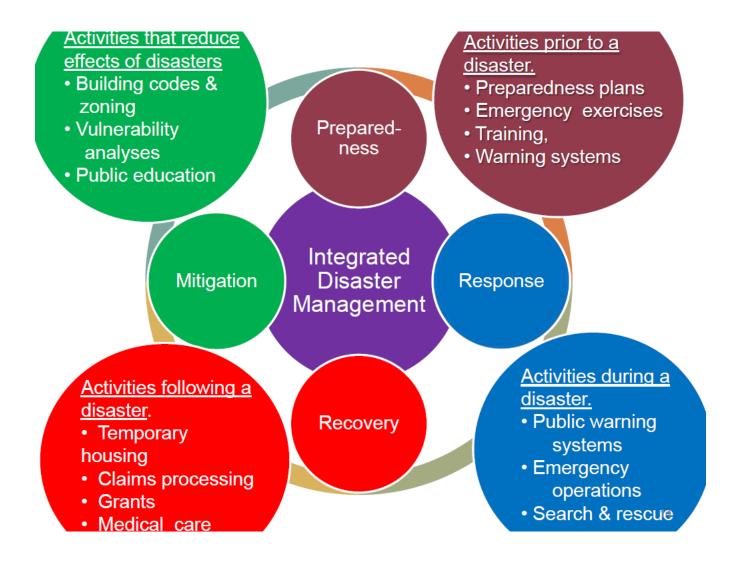
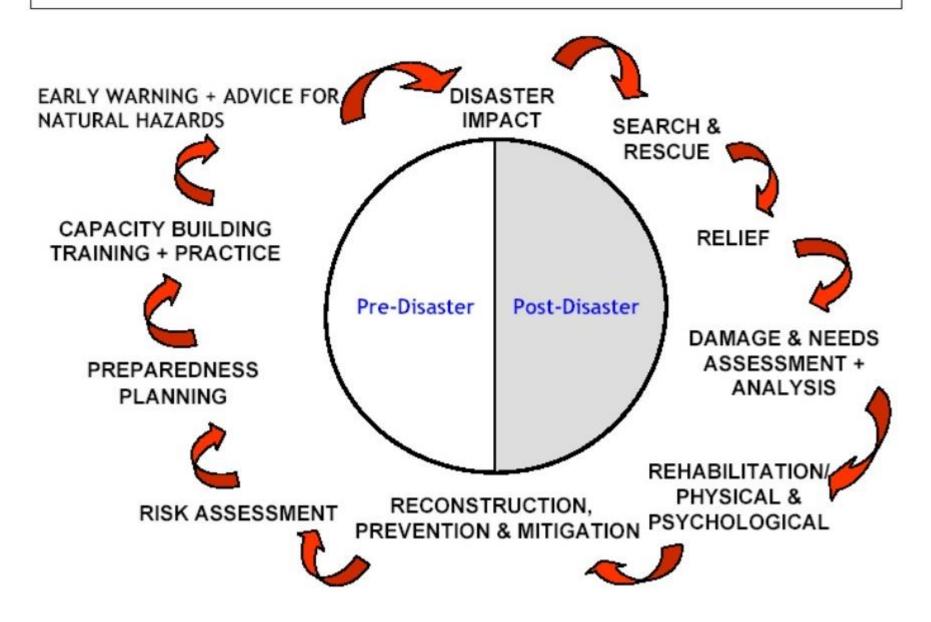
# Disaster Management

# Disaster Management

Disaster Management: Planned steps taken to the effects of a disaster



### **CONCEPT OF DISASTER RISK MANAGEMENT**



## Aims of disaster management are to:

- Reduce (avoid, if possible) the potential losses from hazards;
- Assure prompt and appropriate assistance to victims when necessary;
- Achieve rapid and durable recovery.

### PHASES IN DISASTER MANAGEMENT

Disaster situations are dynamic, always changing and demanding a change in response. Disasters can be viewed as a series of phases on a time continuum. Even though the evolving situation may appear continuous, identifying and understanding these phases helps to describe related needs and to conceptualize appropriate disaster management activities. These are:

- Pre-Disaster Phase (Prevention, Mitigation & Preparedness)
- Disaster Phase (Response, relief and recovery)
- Post-Disaster Phase (Rehabilitation, Development)

### PHASES IN DISASTER MANAGEMENT

May also be called as:

- 1. Pre-emergency phase
- 2. Impact and flight phase
- 3. Acute phase
- 4. Post emergency phase
- 5. Repatriation phase
- 6. Rehabilitation or reconstruction phase

## Prevention

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



#### **Disaster Prevention**

Prevention is defined as those activities taken to prevent a natural phenomenon or potential hazard from having harmful effects on either people or economic assets. Delayed actions drain the economy and the resources for emergency response within a region. For developing nations, prevention is perhaps the most critical components in managing disasters, however, it is clearly one of the most difficult to promote. Prevention planning is based on two issues:

- Hazard identification (identifying the actual threats facing a community) and
- Vulnerability assessment (evaluating the risk and capacity of a community to handle the consequences of the disaster).

Once these issues put in order of priority, emergency managers can determine the appropriate prevention strategies.

Disaster prevention refers to measures taken to eliminate the root causes that make people vulnerable to disaster. Examples may include vaccinations to prevent infections breakouts or building dams to prevent damage from floods.

### **Disaster Mitigation**

Structural and non-structural measures undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards. <u>Structural measures</u> are any physical construction to reduce or avoid possible impacts of hazards, or the application of engineering techniques or technology to achieve hazard resistance and resilience in structures or systems.

<u>Non-structural measures</u> are measures not involving physical construction which use knowledge, practice or agreement to reduce disaster risks and impacts, in particular through policies and laws, public awareness raising, training and education.

Common <u>structural</u> measures for disaster risk reduction include dams, flood levies, ocean wave barriers, earthquake-resistant construction and evacuation shelters.

Common <u>non-structural</u> measures include building codes, land-use planning laws and their enforcement, research and assessment, information resources and public awareness programmes.

#### **Disaster Mitigation**

Mitigation and Prevention are used as synonyms. Some prefer to drop the term Mitigation and use only Prevention. The term Mitigation can be comprised in the term Prevention. Mitigation means to reduce the severity of the human and material damage caused by the disaster. Prevention is to ensure that human action or natural phenomena do not result in disaster or emergency.

<u>Primary</u> prevention is to reduce -avert- avoid the risk of the event occurring, by getting rid of the hazard or vulnerability, e.g. to avoid overcrowding, deforestation and to provide services. Healthier people in a healthy environment will be less vulnerable to most hazards. E.g. immunizing people against smallpox made them less vulnerable to the virus, and slowly eradicated the disease.

<u>Secondary</u> prevention means to recognize promptly the event and to reduce its effects, e.g. by staying alert to possible displacements of population; by being ready to provide immunisation, food, clean water, sanitation and health care to refugees. Healthier people in a healthy environment will also be more capable to overcome the emergency.

### Preparedness

Activities and measures taken in advance to ensure effective response to the impact of hazards, including the issuance of timely and effective early warnings and the temporary evacuation of people and property from threatened locations.

### **Disaster Preparedness**

Disaster preparedness is defined as a state of readiness to respond to a disaster, crisis, or any other type of emergency situation. More broadly it is stated as the leadership, training, readiness and exercise support, and technical and financial assistance to strengthen citizens, communities, state, local and tribal governments professional emergency workers as they prepare for disaster, mitigate the effects of disaster, respond to community needs after a disaster, and launch effective recovery efforts (www.fema.gov).

#### **Disaster Preparedness**

- All measures and policies taken before an event occurs that allow for prevention, mitigation, and readiness constitutes disaster preparedness. Preparedness includes designing warning systems, planning for evacuation, and reallocation, storing food and water, building temporary shelters, devising management strategies, and holding disaster drills and exercises,. Contingency planning is also included in preparedness as well as planning for post-impact response and recovery.
- The aim of disaster preparation is to be able to reduce the immediate mortality and morbidity with a better prepared, well equipped service.
- The preparation includes early warning systems for seasonal changes in climate, and risk of flood or drought, such as electronic information systems and satellites that can provide information over large regions and continents. Separate systems are needed to cater for the agricultural sector, cities and people in rural areas

### **Disaster Preparedness**

- Disaster preparedness refers to measures taken to prepare for and reduce the effects of disasters. That is, to predict and, where possible, prevent disasters, mitigate their impact on vulnerable populations, and respond to and effectively cope with their consequences.
- These are the measures that ensure the organized mobilization of personnel, funds, equipments, and supplies within a safe environment for effective relief. Disaster preparedness is building up of capacities before a disaster situation prevails in order to reduce impacts. Its measures include inter alia, availability of food reserve, emergency reserve fund, seed reserve, health facilities, warning systems, logistical infrastructure, relief manual, and shelves of projects.

- Disaster preparedness provides a platform to design effective, realistic and coordinated planning, reduces duplication of efforts and increase the overall effectiveness of National Societies, household and community members disaster preparedness and response efforts. Disaster preparedness activities embedded with risk reduction measures can prevent disaster situations and also result in saving maximum lives and livelihoods during any disaster situation, enabling the affected population to get back to normalcy within a short time period.
- Disaster preparedness is a continuous and integrated process resulting from a wide range of risk reduction activities and resources rather than from a distinct sectoral activity by itself. It requires the contributions of many different areas—ranging from training and logistics, to health care, recovery, livelihood to institutional development.