



INTRODUCTION TO DISASTER MANAGEMENT 2016

OBJECTIVES

- Introduce main principles of disaster management
- Understand the features and indicators of emergency case
- How a disaster occurs?
- How to manage a disaster?
- How to evaluate strengths and weaknesses?



DISASTER

An unusual event caused by natural forces or human actions that results in the loss of lives and destruction of property. Disasters have severe impact on the economy and social life that exceeds the community's ability to cope with using its own resources and requires International assistance.

WHAT IS A DISASTER?

Most definitions take into account the following:

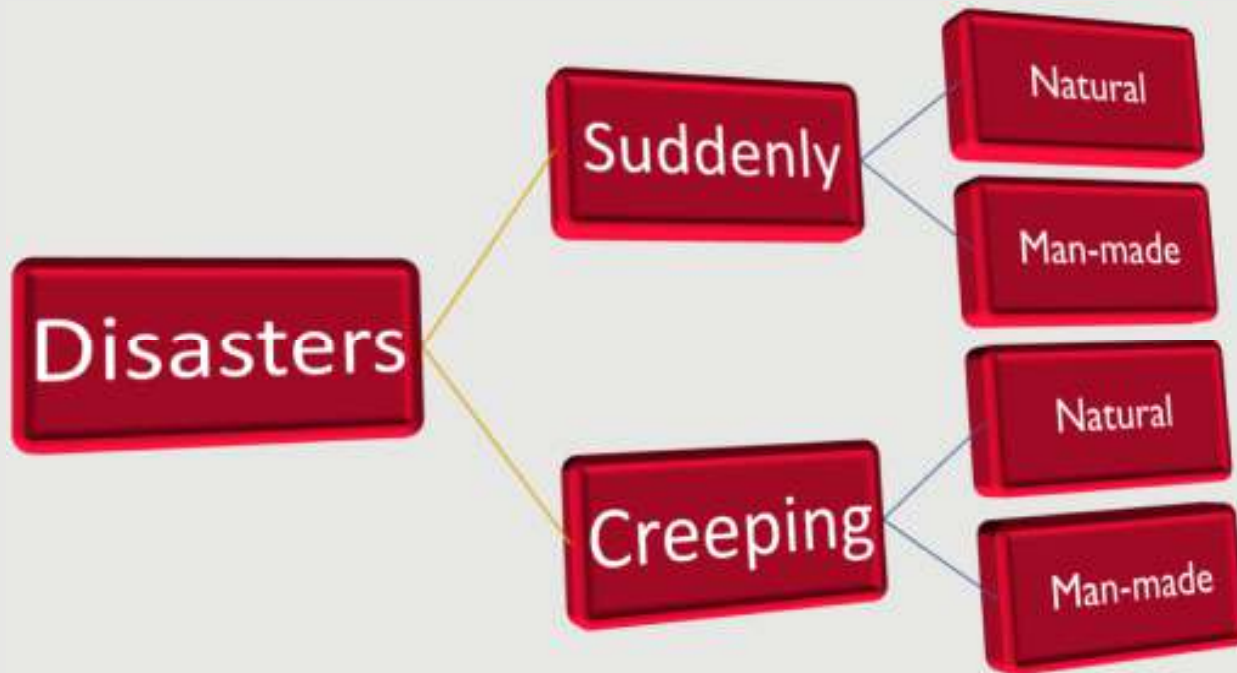
- An extraordinary event
- Usually occurs because of one of the danger sources, whether caused by nature or human action
- Seriously and substantially impact the most vulnerable groups
- Results in serious imbalance in the community functions
- Results in significant losses in human lives, materials and environment
- Exceeds the ability of an affected community to cope with using its own resources

“It is the people who matter most, and without the people we have no disaster”

TYPES OF DISASTER



TYPES OF DISASTERS AND THEIR CONSEQUENCES



TYPES OF DISASTERS

- Sudden disasters: Occur with slight or prior alarm, they seriously and immediately disrupts the functioning of humans and their activities, as well as the State economy system and community
- Disasters are divided into:
 - Natural: Such as torrents, floods, earthquakes and hurricanes
 - Man-made: Biological or Chemical events, war, riots and civil commotions at the State level

CREEPING DISASTERS

“ A situation in which the community ability to maintain the standard of living is slowly declines until it reaches a point threatening the survival of people. This situation could arise as a result of environment, social, economic or political effects.”

Creeping disasters are divided into two types:

- Natural: Such as drought, locust invasion and epidemics
- Man-made: Such as a small conflict or regular ethnic persecution

TYPES OF DISASTERS AND THEIR CONSEQUENCES

Effect \ Disaster	Earthquake s	Winds with or without floods	Waves and floods	Slow floods	Earth' s slide	Volcanoe s
Death	Many	little	Many	little	Many	Many
Serious injuries which require intensive remedy	Many	Medium	little	little	little	little
Increased danger from diffuse of diseases	Potential risk follows all major disasters			Increase potentiality to occur in crowded places and exhausted facilities		
Devastation of Health Services	Severe Building and equipment	Severe	Severe but domestic	Severe ,only equipment	Severe but domestic	Severe Building
Destruction of Water Resources	Severe	Light	Severe	Light	Severe but domestic	severe
Lack of food	It is possible to happen due to some economic and logistic elements		Familiar	Familiar	Unusual	Unusual
Large population displacement	Unusual Possible to occur in the urban areas that have been largely destroyed			Usual but generally limited		

VIDEO

<http://www.youtube.com/watch?v=Kt-C8WCIWrg>

<https://www.youtube.com/watch?v=Q0zD21diwU>



EMERGENCY CHARACTERISTICS

- Lack of financial and human resources
- Disorder and lack of clarity of tasks and responsibilities
- Difficulty in determining priorities
- Lack of coordination between different agencies
- Lack of information
- Lack of security
- Spread of rumors and exaggerations
- Heavy presence of mass media



EMERGENCY CASE

- Unusual event poses a real and immediate risk threatening the life of human
- Emergency may involve a clear collapse to the potentialities and abilities of a group of people or a community to resist the situation

Note: not all disasters need an emergency case

WHAT SHOULD WE DO IN EMERGENCY CASES

- Evaluate
- Respond
- Speak in behalf of the effected communities
- Distribute aids
- Supply needs
- Organize work
- Manage
- Implement
- Plan
- Deal with media
- Advocate
- Provide



HAZARD (POSSIBLE THREAT)



“A natural phenomenon or man-made, resulting in physical devastation, economical losses, and threatening human life and welfare.”

RISK

Probability of deaths, injuries, devastation of buildings, destruction of economical activities and living conditions due to a dangerous phenomenon.



VULNERABILITY (SUSCEPTIBILITY)

The extent to which an individual, community, services and geographical area are expected to be affected as a result of exposure to risk



It is an equation governed by natural, economic, social, political, technical, ideological, cultural, educational, environmental and institutional conditions

Weaknesses related to the ability of an individual or local community to coexist with specific risks at specific time

CAPACITIES

- “Resources available to individuals, families and communities to resist threats “ Sphere project
- "Competencies and resources available to individuals or communities that can be used and developed to combat and resist threats“
International Red Cross and Red Crescent movement

CONSTRICTION AND EXPANSION TEMPLATE

Drastic problems

Reactive pressures

Unsafe environment

Disaster

Risk/Threats

THE PROGRESSION OF VULNERABILITY

1 → 2 → 3

Drastic problems

Limited access to

- Power
- Structures
- Resources

Ideologies

- Political systems
- Economic systems

Reactive Pressures

Lack of

- Local institutions
- Training
- Appropriate skills
- Local investments
- Local markets
- Press freedom
- Ethical standards in public life

Macro-forces

- Rapid population change
- Rapid urbanisation
- Arms expenditure
- Debt repayment schedules
- Deforestation
- Decline in soil productivity

Unsafe Environment

Physical environment

- Dangerous locations
- Unprotected buildings and infrastructure

Local economy

- Livelihoods at risk
- Low income levels

Social relations

- Special groups at risk
- Lack of local institutions

Public actions and institutions

- Lack of disaster preparedness
- Prevalence of endemic disease

Disaster

Hazard X Vulnerability = Risk

Risk/threat

Earthquake

High winds
(cyclone/
hurricane/
typhoon)

Flooding

Volcanic eruption

Landslide

Drought

Virus and pests

HOW TO RECOGNIZE AN EMERGENCY SITUATION

Emergency situation/disaster is the outcome of the following Arithmetic operation:

$$H + V - C = R$$

Hazard + Vulnerability of Affected group - Capacity of affected group = Disaster



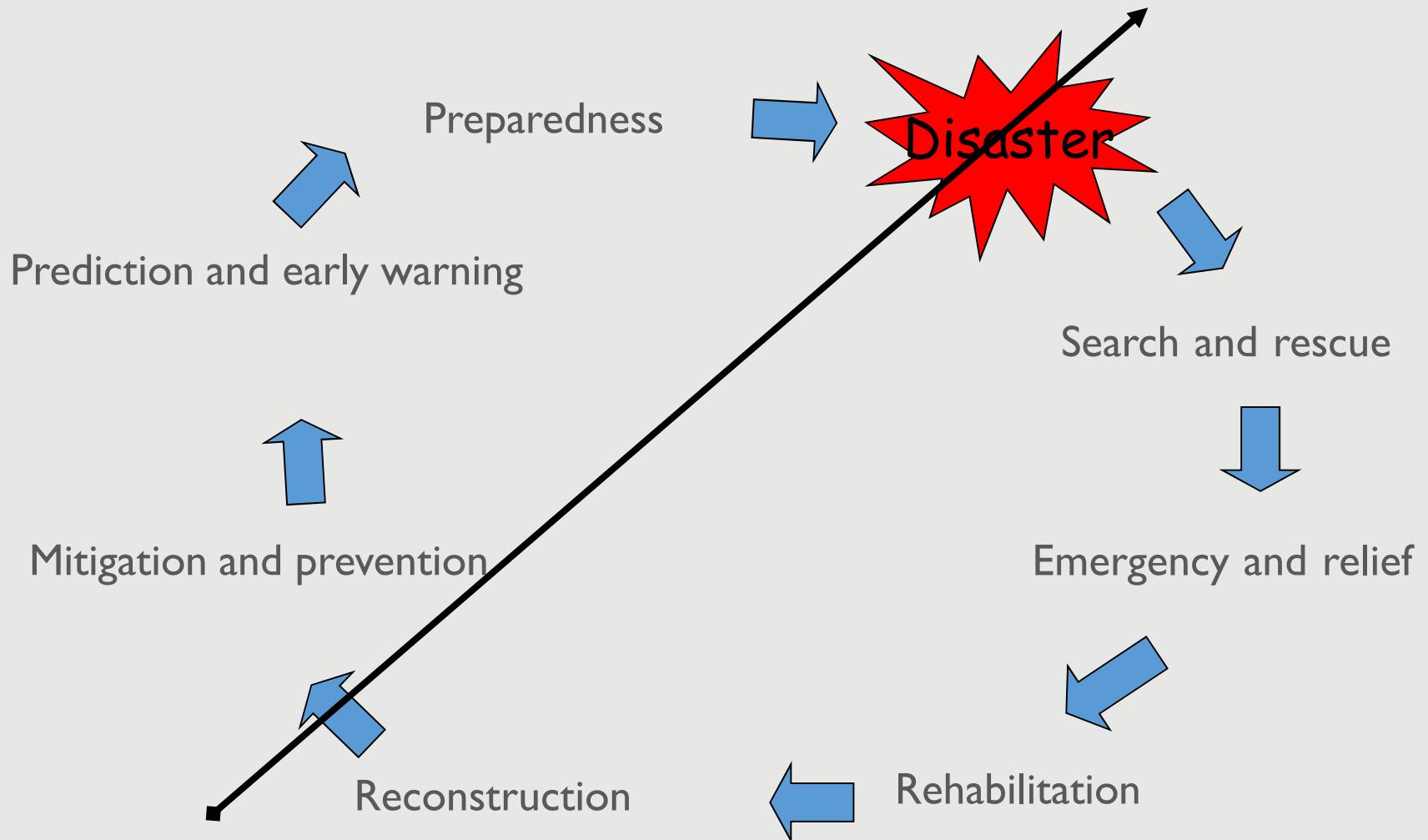
RELATIONSHIP

$$\begin{aligned} & \mathbf{Hazard} \text{ (Potential threat)} \\ & \quad + \\ & \mathbf{Vulnerability} \text{ (Vulnerability to hazards)} \\ & \quad - \\ & \mathbf{Capacity} \text{ (Latent and available)} \\ & \quad = \\ & \mathbf{Risk} \text{ (Potential Disaster)} \end{aligned}$$

EMERGENCY INDICATORS

Emergency Situation	Indicator
General Mortality Rate	< Two cases for 10,000 per day
Children Malnutrition Rate	< 10 % less than 80% of the weigh and length
Food	> 2.100 calorie per capita/per day
Quantity of water	> 10 litter per capita/per day
Quality of Water	<25% are affected with diarrhea
Residence area	> 30 meter per capita
Covered area for residence	>3.5 meter covered area per capita

CYCLE OF DISASTER MANAGEMENT



DEFINITIONS

- **Mitigation:** Measures taken prior a disaster to reduce the affect of disasters on the community and environment.
- **Preparedness:** The ability to predict the strike of a disaster or how to respond to it. Procedures assuming the occurrence of a disaster and preparing communities to respond when the disaster strikes.
- **Relief and Emergency:** Measures taken to secure the necessary needs of the people, such as food, shelter, water and medical care.
- **Rehabilitation:** An operation aims to restore the affected communities to the pre-disaster conditions.
- **Prevention:** Activities that are designed to provide permanent protection from disasters or to reduce the severity or recurrence of hazardous events and not to turn into a disaster.

THANK YOU



Iraq Governance Strengthening Program

