

# **The Emerging trends of Disaster Management in India**

**Issues and Challenges vis-a-vis the roles of Stakeholders**

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# What is Disaster?

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The word “Disaster” derives from the 16 th century French word ‘**DESASTRE**’.

‘**DES**’=Bad or Evil ; ‘**Astre**’= Star

Loss or Damage occurring due to some unfavourable star .

Alternative meanings –

**Cataclysm, Catastrophe, Tragedy or  
Devastation**

## Internationally accepted definition

“An occurrence arising with

- **little or no warning**
- **which causes or threatens serious disruption** of the functioning of a community or society
- **causing widespread Human, Material , Economic or Environmental losses .**
- **which is beyond the coping capacity of society**

## Hazard ?

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- A Rare or Extreme Events in the natural (or man made) environment that adversely affects human lives, properties or activities to the extent of causing a disaster is known as **Hazard**.
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## Vulnerability?

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- Degree of loss resulting from a potentially damaging phenomenon.
- The area may be called high or low vulnerable depending upon geological & geographical condition.





# Risk?

Expected losses ( Human, Properties,  
Disruption of eco- activity) due to a particular  
hazard Therefore

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**Hazard + Vulnerability = Risk**

# Disaster Management

**Continuous and Integrated process of Planning, Organizing, Coordinating and Implementing measures which are necessary for—**

- Prevention
- Mitigation
- Capacity building
- Preparedness
- Prompt Response
- Search, Evacuation, Rescue and Relief
- Rehabilitation and Reconstruction



# DISASTER MANAGEMENT CYCLE



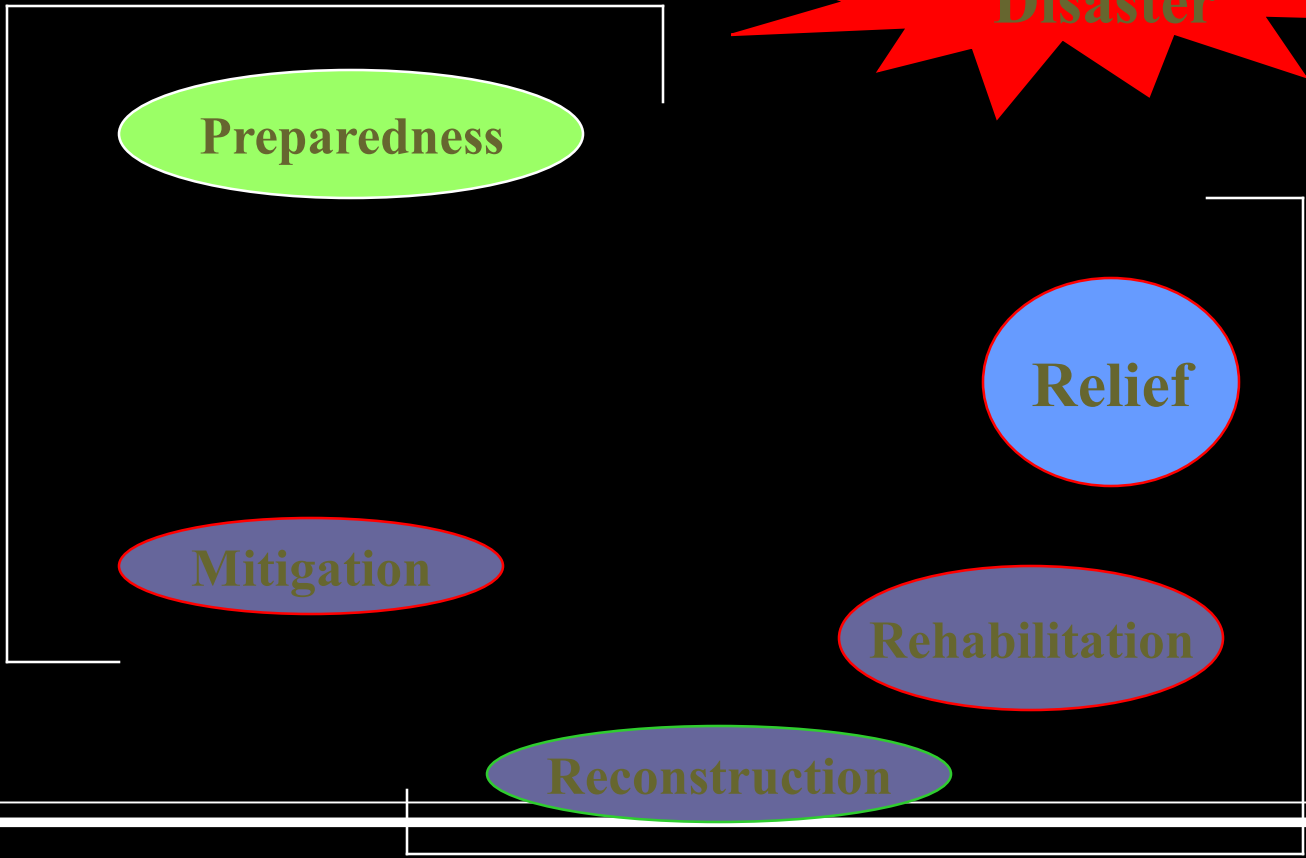
Preparedness

Mitigation

Relief

Rehabilitation

Reconstruction



# Prevention



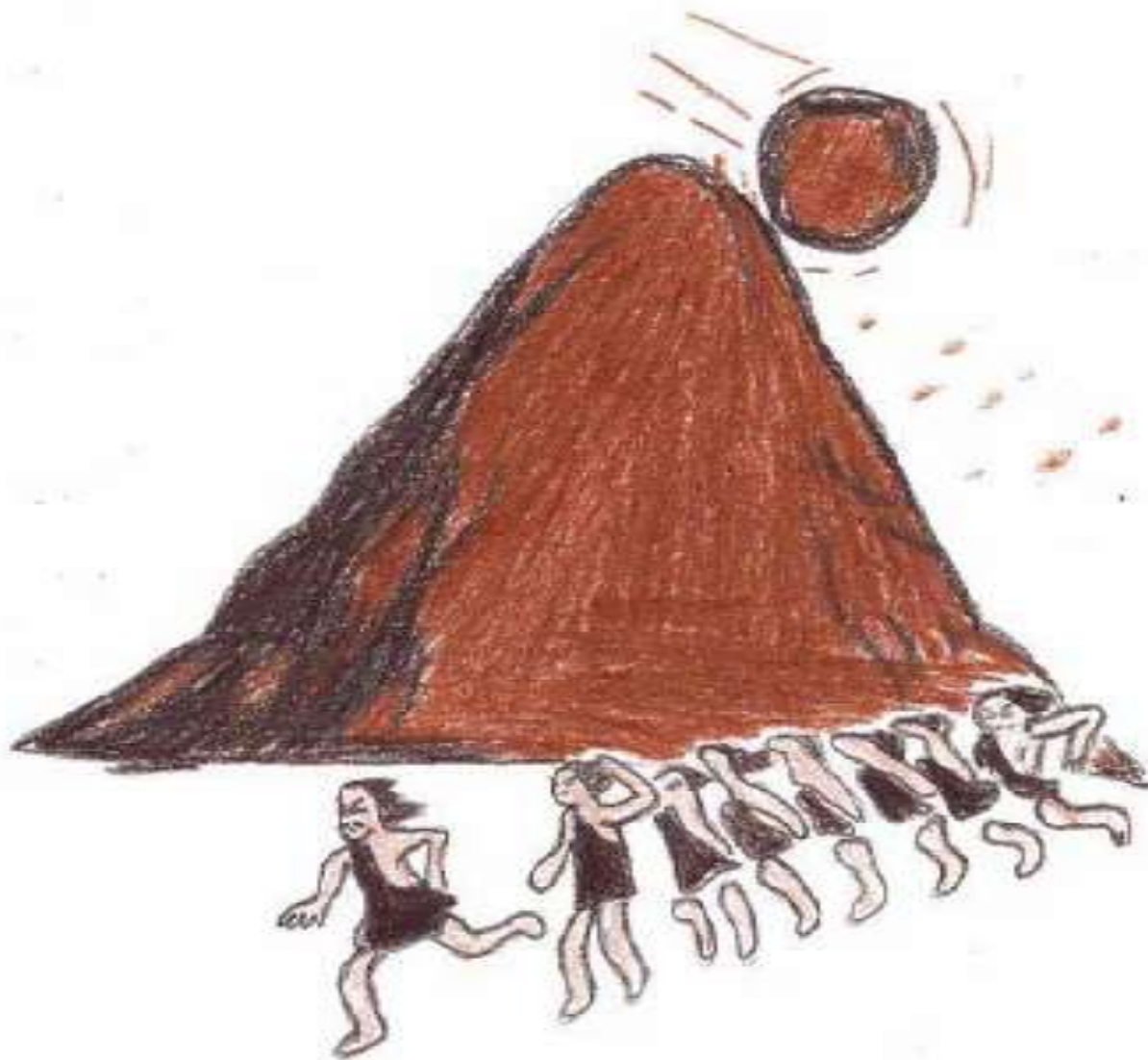
Prevention



# Preparedness

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- The State of Readiness to deal with a Threatening Disaster Situation or Disaster.



# Preparedness

**TECHNOLOGICAL**

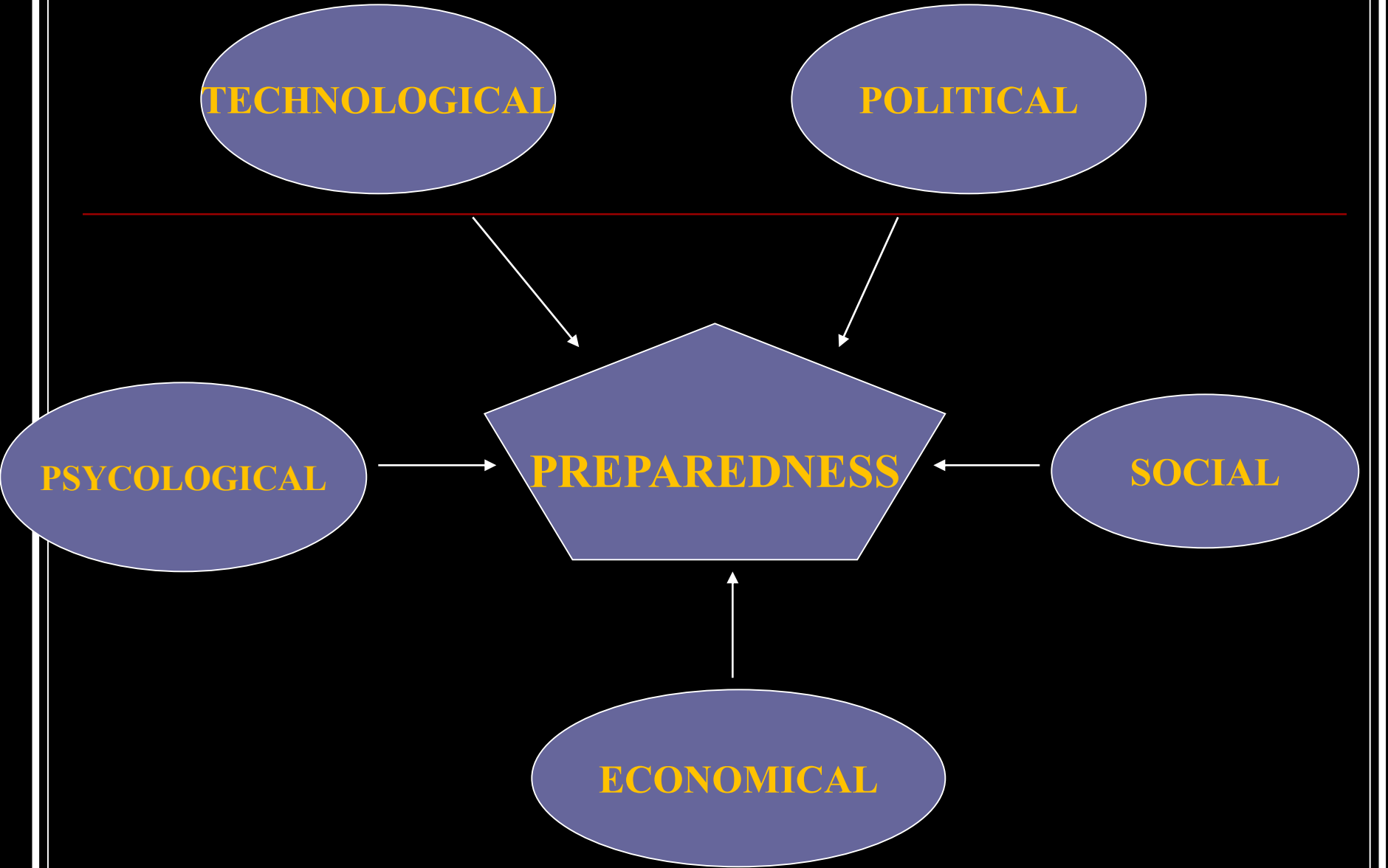
**POLITICAL**

**PSYCHOLOGICAL**

**PREPAREDNESS**

**SOCIAL**

**ECONOMICAL**



# Mitigation

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- Measures aimed at reducing the risk impacts or effects of a disaster or threatening disaster situation



# Mitigation



# Types of Disaster

Based on Origin (3 types)—

1. **Natural Disaster-**
2. **Anthropogenic ( Man Made) Disaster**
3. **Hybrid Disaster ( Combination of natural & anthropogenic)**

Based on speed of their onset(2 types)

1. **Rapid Onset Disasters-**

e.g. Earthquakes, Tsunamis, Floods, Tropical Storms, Volcanic Eruptions, Landslides etc.

2. **Slow Onset Disasters —**

e.g. Droughts, Famine, Land Degradation, Climatic Change, Desertification, Deforestation, Pest Infestation

# Types of Hazards a/c to Nature

## 1. Geological Hazards

- a) Earthquakes
- b) Tsunamis
- c) Volcanic Eruptions
- d) Landslides

## 2. Climatic Hazards

- a) Tropical Cyclones
- b) Floods
- c) Drought

## 3. Environmental Hazard

- a) Environmental Pollution
- b) Deforestation
- c) Desertification
- d) Pest Infestation

3. Epidemics (Plagues, Bird Flu, Anthrax etc).

## 4. Industrial Accident

- a) Nuclear Accidents
- b) Gas Leakage

# 1. Natural Disaster

Caused primarily due to natural phenomena.

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**Endogenetic Forces**



**Natural disaster**

**Exogenetic Forces**

These includes a phenomena called Tectonism  
eg. Earthquakes, Volcanic eruptions, Hurricane, Tornado,  
Avalanches, Floods etc.

## 2. Anthropogenic Disaster

HUMAN BEINGS

ARTIFICIAL ENV.

NATURAL ENV.



**Anthropogenic Disasters**

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**Lets make the country Disaster Resilient**

**Thanks**