Responding to Natural Disasters
Disaster vs. Hazard

**Natural Disaster** = Serious disruption of a society, widespread human, material and environmental losses, caused by natural phenomenon and societal vulnerability.

**Natural Hazard** = Rare or extreme natural event (e.g. storm, earthquake) that can potentially harm human life, property or activity.
Example of Risks, Vulnerabilities and Risk Reduction

In an urban area prone to flooding,

1) **some houses**
   1. have been constructed away from low-lying areas close to the river bank
   2. are made of concrete blocks
   3. have basements or are on raised foundations

2) **other houses**
   1. are made of cheaper materials
   2. do not have basements and are not on raised foundations
   3. have been erected in or very near a dry river bed
Discussion Questions

1. What are the elements at risk?

2. What are the vulnerabilities in this situation?

3. What can be done to reduce the risk due to flooding?
Causal Factors

- Poverty
- Population density
- Marginal living conditions
- Rapid urbanization
- Substandard construction practices
- Environmental degradation
- Lack of information, awareness, preparedness
Disasters and Development

Development realm:
- Development can increase vulnerability
- Development can reduce vulnerability

Disaster realm:
- Disasters can set back development
- Disasters can provide development opportunities

Relation:
- Negative relationship
- Positive relationship
Impact of Disasters on Development

- Loss and diversion of resources; Interruption of programmes
- Negative impact on investment
- Disruption of non-formal sector
- Political destabilization
- Attention focused on short-term relief
- Damage to transport and utility systems
Jobs in urban settings attract population growth which may lead to living situations on vulnerable hillsides, floodplains, sub-standard housing.

Housing and reconstruction projects leading to deforestation.

Dam projects leading to population displacement.
Disasters Provide Development Opportunities

- Serve as catalyst for implementing mitigation projects
- May create political and economic atmosphere for rapid change in land-reform, improving housing stock, create new jobs and skills, modernize economic base.
- Self-help housing teaching new skills and labour-intensive reconstruction, self-help housing
Sustainable development approach

Housing projects adhering to disaster-resistant building codes

Rural development can decrease massive population exodus to urban areas
What Is Disaster Response?

Measures taken to ensure survival of maximum possible number of victims and re-establish self-sufficiency and essential services ASAP

- Warning and Evacuation
- Search and Rescue
- Damage Assessment
- Emergency Relief (food, emergency health, shelter, etc.)
- Communication and coordination among the actors
What Is Disaster Preparedness?

Measures taken to prepare for and reduce the effects of disasters

- Continuous and integrated process

Objectives

1. Increase the efficiency, effectiveness and impact of disaster response mechanisms at the community, national and Federation level.

2. Strengthen community-based disaster preparedness.
Disaster Preparedness Activities

- Hazard, risk and vulnerability assessments
- Response mechanisms and strategies
- Preparedness plans
- Coordination
- Information management
- Early warning systems
- Resource mobilisation
- Public education, training and rehearsals
- Community-based disaster preparedness
Disaster Mitigation

**Elements at risk**
- Everything in flood-plain
- Earthen or soluble structures
- Buried services and utilities
- Food stores
- Crops and livestock

**Mitigation strategies**
- Land use control
- Engineering of structures
- Flood control structures
- Reforestation projects (watershed management)
Disaster Mitigation

Elements at risk

- Residents of densely spaced, weak buildings
- Unreinforced concrete and masonry structures
- Tall buildings
- Roads and other infrastructure

Earthquakes

Mitigation strategies

- Engineering of seismically resistant structures
- Control of land use in seismic areas
- Insurance
What Is Disaster Reconstruction?

Measures that enable affected populations to resume normal, viable lives and livelihood and repair physical damage, economy

- Restoration of infrastructure: roads, communication networks and other utilities
- Rebuilding of homes, businesses
- Restoration and support of longer-term economic activities and processes
- Longer-term development oriented towards mitigating future disasters
Responding to Natural Disasters

ILO Response to Natural Disasters

- What role can ILO and its constituents play in pre-disaster preparedness and mitigation activities?
- What role can ILO and its constituents play in short-term response?
- What role can ILO and its constituents play in longer-term recovery and reconstruction efforts after natural disaster?
ILO Response to The Gujarat (India) Earthquake
The Social Impact

- 18,000 dead, 170,000 injured, most in Kutch district
- Disability, trauma, homelessness, loss of productivity and earnings
- The earthquake has affected rich and poor alike, but poor and vulnerable groups have less resources to manage the reconstruction. Long-term consequences of deaths and disability particularly affect widows, orphans, the elderly.
- Apart from shelter, the most urgent need is to re-establish livelihoods for the poor, in particular handicraft artisans, salt farmers, and cattle owners.
Strong social capital

1. A wealthy business community with networks in other parts of India and abroad
2. A strong NGO community, that has collaborated well with the Government in the relief phase

Important to keep the momentum generated during the rescue and relief phase

1. Continued involvement and collaboration between government and NGOs
2. Scaling up and building capacity at the local level
Some Obstacles

• The humanitarian assistance community does not often recognize that a major and immediate impact is the loss of employment and income-earning opportunities and related social and economic distress for significant sections of the population hit by the disaster.

• ILO’s capacity to contribute right from the start, to relief, reconstruction and development is still not widely known to the humanitarian agencies.
Community Involvement in the Reconstruction Effort: Why?

- Participation reduces trauma
- Solutions are more culturally and socially acceptable
- People are suspicious of outside agencies
- Increased transparency and accountability
- Employment opportunities
- Access to utilisation of services
- Equity
The ILO has put together a package of interrelated measures to address the crisis, focusing not only on recovery and reconstruction, but also on the return to development.

The objective is:

- To provide a quick response based on an assessment of the situation
- To concentrate on what the people immediately need
ILO Package

The package includes:

- A model programme for social and economic reconstruction for 10 villages in Kutch District, funded by the ILO and implemented by SEWA

- Further measures to promote labour-intensive reconstruction, including linking with major programmes for reconstruction

- A study of the response of the corporate sector to the relief and rehabilitation needs

- Studies of the impact of the earthquake (coming after successive years of drought in the region) on employment, poverty, migration, insecurity and coping mechanisms
Responding to Natural Disasters

Employment at the Heart and the Start

- Setting up Cottage Industry Training and Production Centres for Women
- Setting up temporary child care centres
- Skills development
- Organizing crash training course to meet the immediate needs for shelter reconstruction
- Capacity-building of local partners in dealing with disasters, livelihood and reconstruction of housing and community infrastructures
- Setting up of community fodder bank and community fund