

# **DISASTER RISK MANAGEMENT**

Universita di Roma Tor Vergata  
B.A. Global Governance

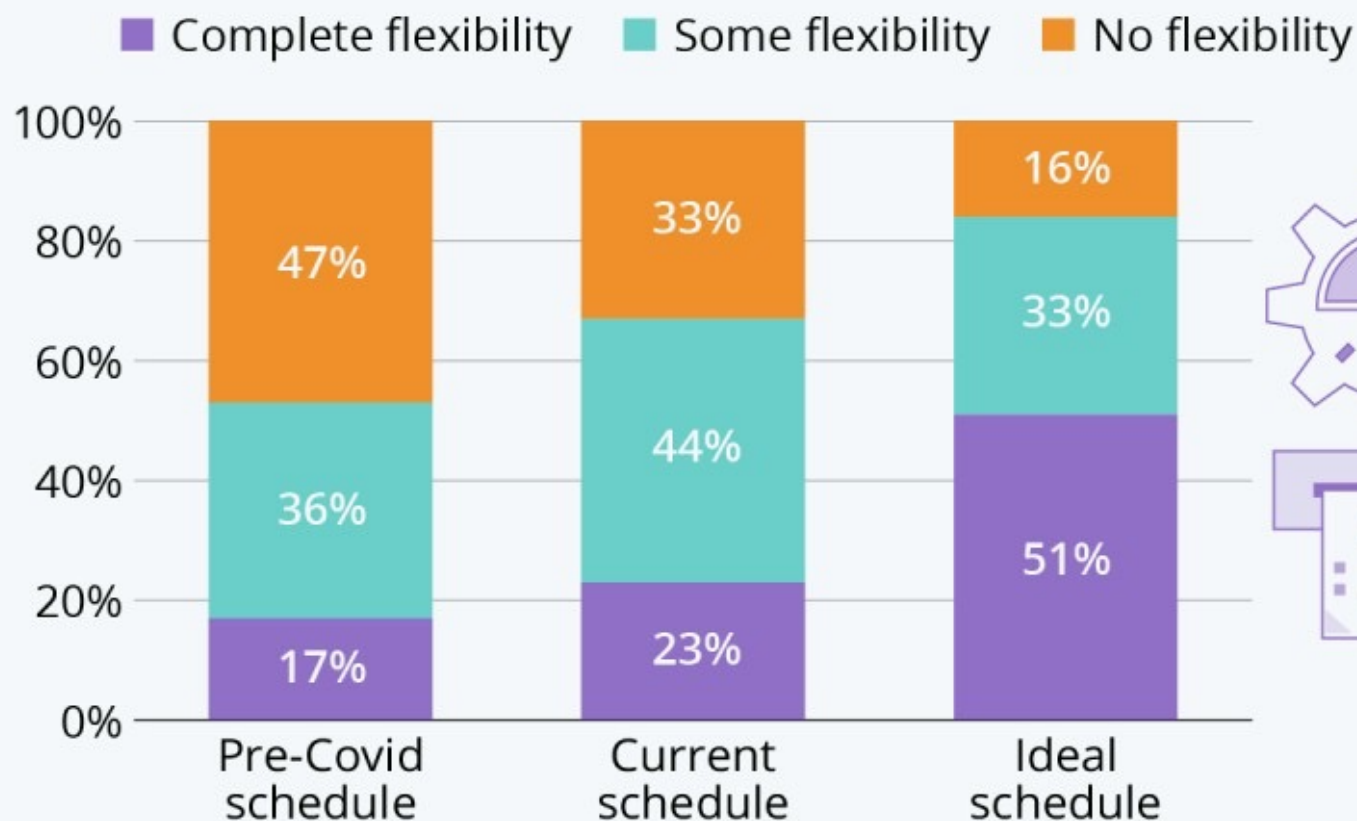
Spring 2022

Session 7 – Monday May 9, 2022

Instructor: Erdem Ergin

# Does 9 to 5 Still Work in 2022?

Share of enterprise workers by actual and preferred degree of flexibility with respect to working hours



\* Based on a survey of 3,404 enterprise workers from seven countries conducted between April 30 - May 28, 2021

Source: Adobe's "Future of Time" report



# Reconstruction

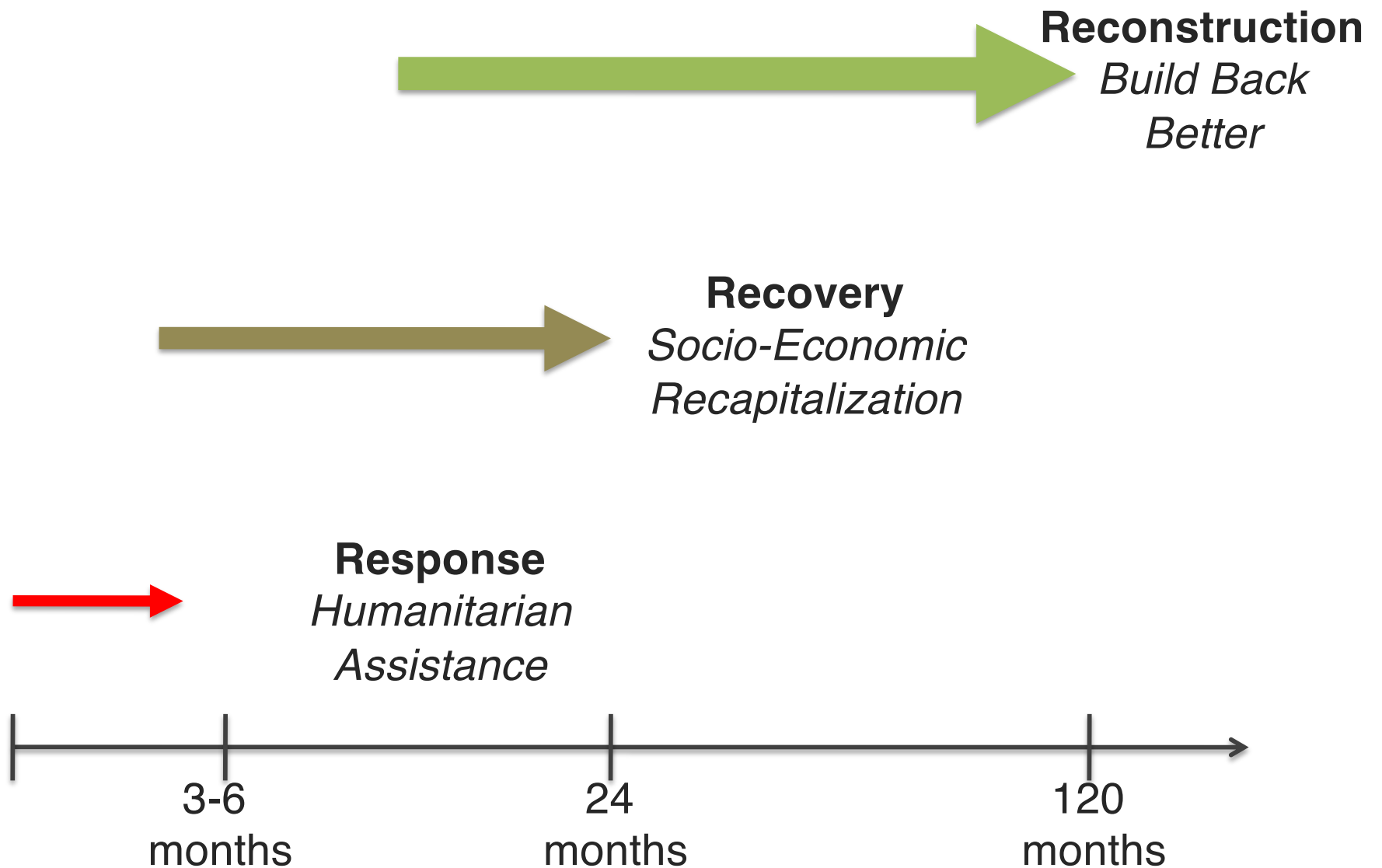
## *Given as Recovery in UNISDR*

The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors.

Comment: The recovery task of rehabilitation and reconstruction begins soon after the emergency phase has ended and should be based on pre-existing strategies and policies that facilitate clear institutional responsibilities for recovery action and enable public participation. Recovery programs, coupled with the heightened public awareness and engagement after a disaster, afford a valuable opportunity to develop and implement disaster risk reduction measures and to apply the “build back better” principle.

*Source: UNISDR*

# Disaster Management



# System approach

## **RESPONSE focus is on human impact.**

Save lives and provide basic needs

Unit of analysis: individuals

Timeline: 0 to 3-6 months

## **RECOVERY focus is on socio-economic impact.**

Restore autonomy and generate revenue

Unit of analysis: the household

Timeline: early to 24 months

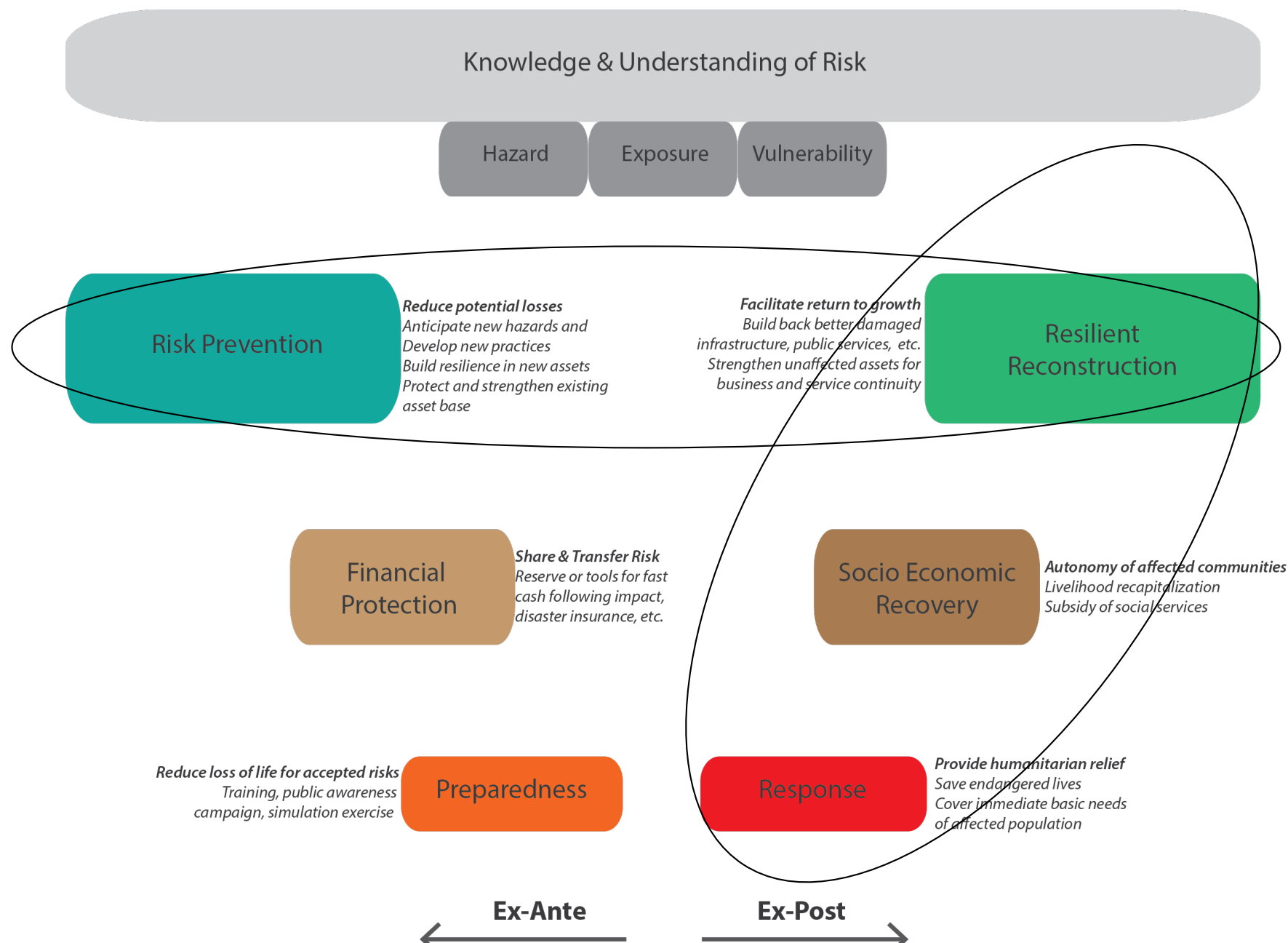
## **RECONSTRUCTION focus on buildings and infrastructure.**

Build back better and avoid creation of new risk

Unit of analysis: buildings, infrastructure

Timeline: up to 120 months

# Disaster Risk Management



# Reconstruction Components

- 1 – Development Agenda
- 2 – Impact Assessment
- 3 – Risk Reduction
- 4 – Sectoral strategies
- 5 – Regulations & policies
- 6 – Financing
- 7 – Implementation

# 1 – Development Agenda



Align the reconstruction efforts with the national development and growth agenda



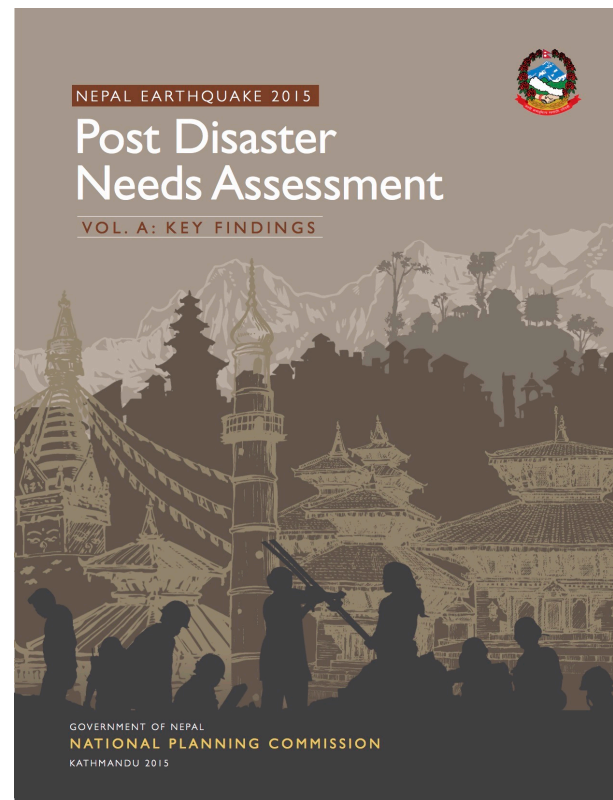
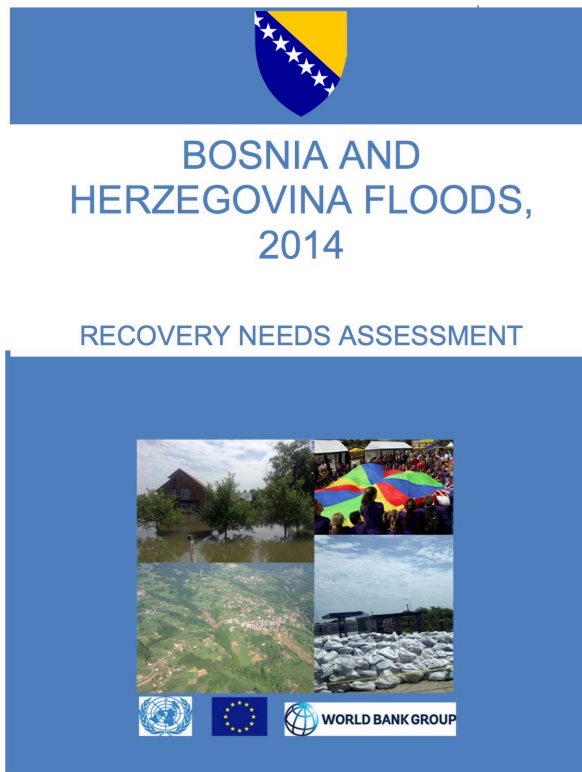


## 2 – Impact assessment

### Post Disaster Need Assessment

Large scale, multi sectoral exercise to determine recovery AND reconstruction needs

<https://www.gfdrr.org/en/post-disaster-needs-assessments>



# Damage versus Loss

The damages to infrastructure and assets are valued first in physical terms (number, extension in terms of area or surface, as applicable) and then in terms of their monetary value, expressed as the replacement costs according to the market price prevailing just before and after the disaster.

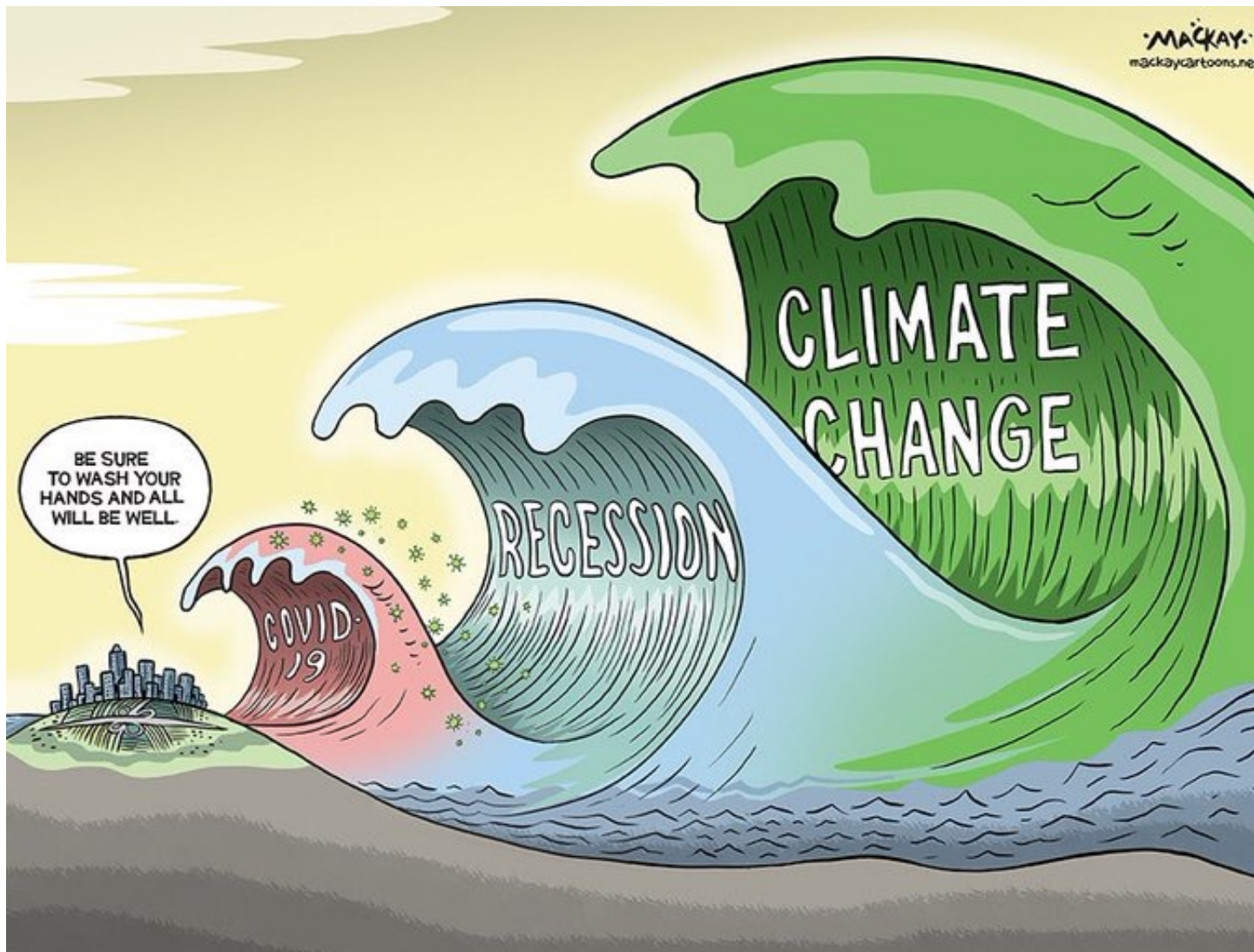
Economic losses refer to changes in economic flows arising from the disaster which continue until the achievement of full economic recovery and reconstruction -- in some cases lasting for several years.

Typical losses include:

- Decline in output in productive sectors (Agriculture, livestock, fisheries; Industry, Commerce, and services including Tourism) associated with damage to infrastructure and asset damages;
- Lower revenues associated with demand reduction due to the disaster, higher production and operational costs, including higher costs in the provision of services (education, health, water and sanitation, electricity, transport and communications), combined with an increased demand for social services by the affected population in the recovery period;
- Increased expenditure for management of new risks arising from the disaster;

### 3 – Risk Reduction

Identify future risks and include risk reduction measures in the reconstruction efforts





## 4 – Sectoral strategies

Plan to build back COMMUNITIES, not only housing and affected infrastructures



## 5 – Regulations & Policies

Revision of existing laws, codes, policies to make reconstruction possible and reduce risks





## 6 – Financing

Develop a financing strategy and mobilize the funds from public, private, bilateral and multilateral sources



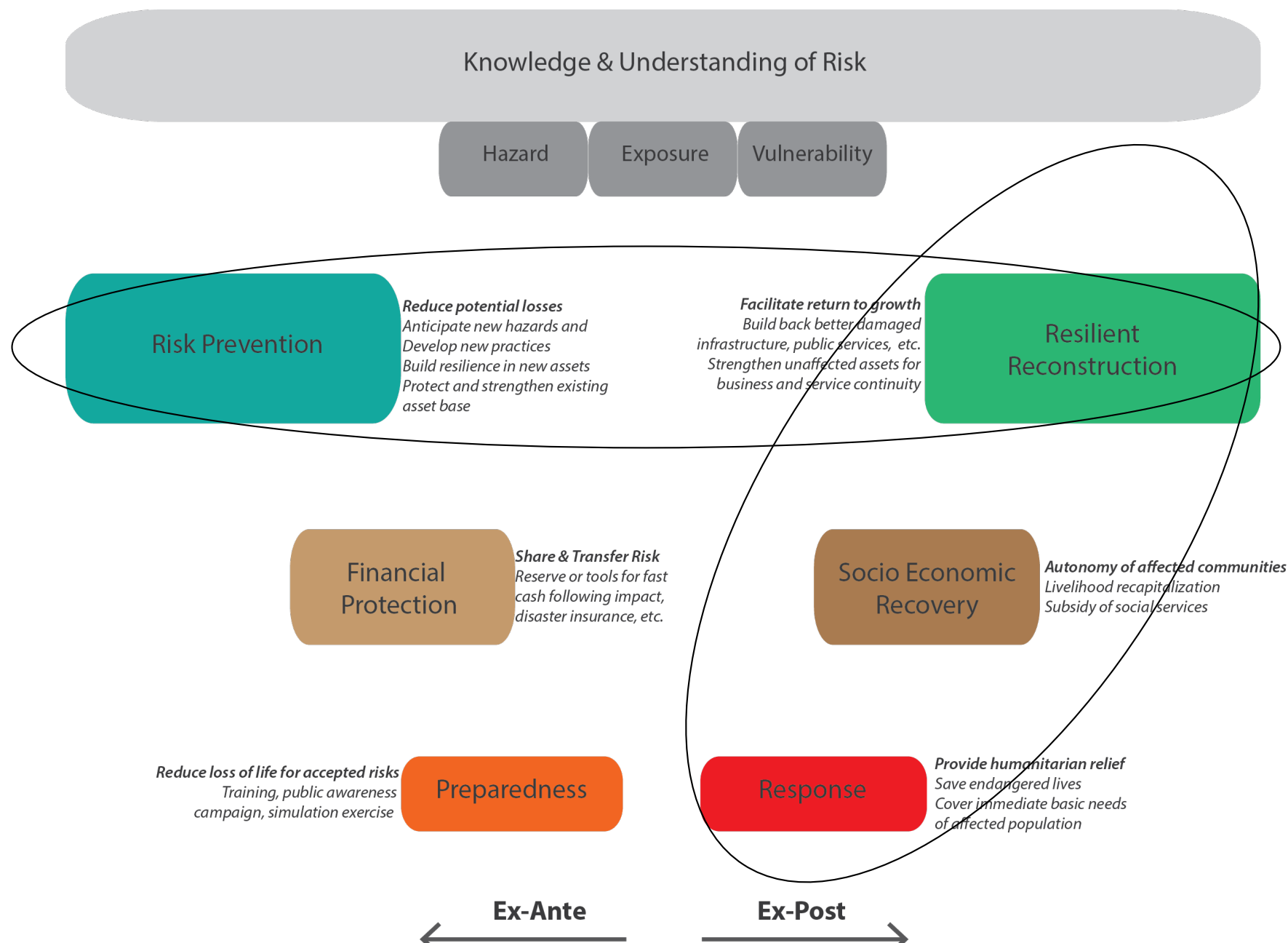


# 7 – Implementation

Rebuild.



# Disaster Risk Management





# **Group Exercise – Impact assessment**

**Work in pair or in group**

**Imagine your cell phone got crushed under a car.**

## **1- Estimate the damage (in Euro)**

Discuss how you will estimate the damage  
Discount any potential insurance payment

## **2- Estimate the loss (in Euro)**

Identify 3 core functions of cell phone  
Estimate duration of interruption for EACH function  
Estimate monetary value of function  
Can you think of other ways to estimate loss

# **DISASTER RISK MANAGEMENT**

Universita di Roma Tor Vergata  
B.A. Global Governance

Spring 2022

Session 7 – Monday May 9, 2022

Instructor: Erdem Ergin