



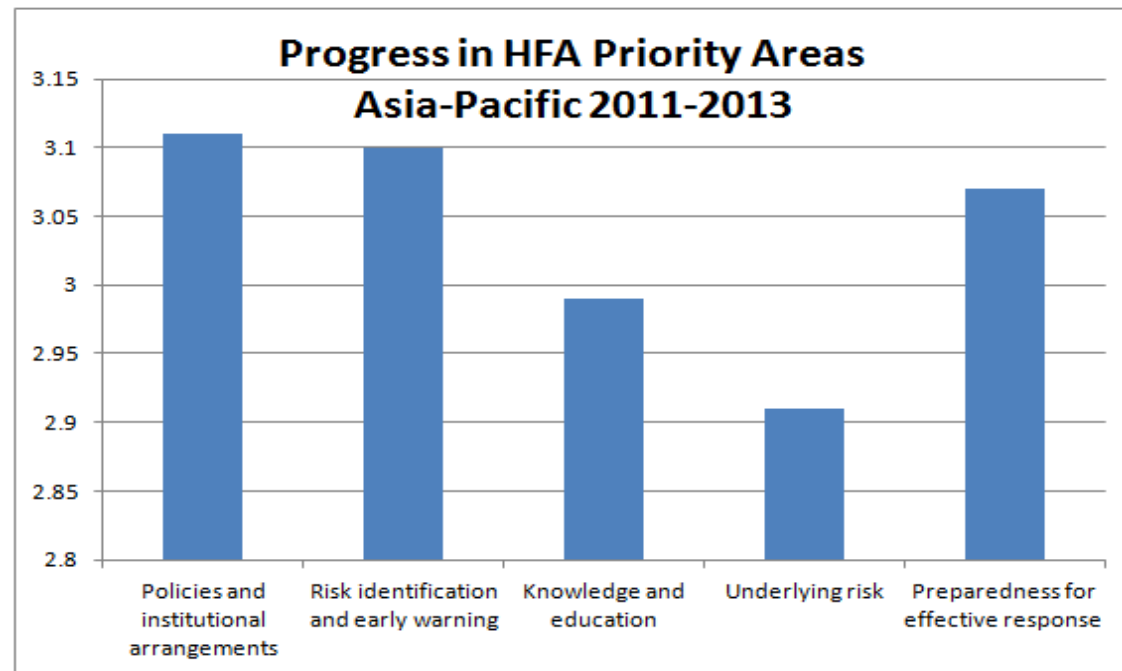
**Sendai Framework for Disaster Risk Reduction 2015-2030  
and DRR Terminologies**

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# The Hyogo Framework for Action (HFA) learning

- Progress made in disaster management but **much less in reducing risk**
- The space for addressing the **underlying causes of risk in development** under the HFA has not been filled
- Local progress drags behind
- **Risks have increased faster than they have been reduced** and the magnitude of risk is large





UNITED NATIONS  
Office for Outer Space Affairs

# How Sendai Framework addresses the learnings?





# From managing disaster to managing risk

- **Outcome:** Substantial **reduction of disaster risk and losses** in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries ...
- **Goal:** **Prevent** creation of new risk, **Reduce** existing risk and **Strengthen resilience**
- **Scope:**
  - Adds slow-onset, small-scale, biological and man-made hazards
  - Increases the scope of action in recovery, and reconstruction to Build Back Better



7 GLOBAL TARGETS

# Reduce

**Mortality/  
global population**

2020-2030 Average << 2005-2015 Average

**Affected people/  
global population**

2020-2030 Average << 2005-2015 Average

**Economic loss/  
global GDP**

2030 Ratio << 2015 Ratio

**Damage to critical infrastructure  
& disruption of basic services**

2030 Values << 2015 Values

# Increase

**Countries with national  
& local DRR strategies**

2020 Value >> 2015 Value

**International  
cooperation  
to developing countries**

2030 Value >> 2015 Value

**Availability and access  
to multi-hazard early warning  
systems & disaster risk  
information and assessments**

2030 Values >> 2015 Values





**13 GUIDING PRINCIPLES**

## **Responsibility for DRR**

- States have primary responsibility
- Shared responsibility with stakeholders

## **Engagement**

- All of society
- All state institutions
- Local government empowerment

## **Approach**

- Regard for human rights
- DRR & development relationship
- Multi-hazard & inclusive
- Local expression of risks
- Post disaster action & resolve underlying risks
- Build back better

## **Partnerships**

- International cooperation & global partnerships
- Support to developing countries





**4 PRIORITIES FOR ACTION**

**Priority 1 Understanding disaster risk**

*Policies and practices for DRR should be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment.*

**Priority 2 Strengthening disaster risk governance to manage disaster risk**

*Disaster risk governance at the national, regional and global levels is of great importance for an effective and efficient management of disaster risk.*

**Priority 3 Investing in disaster risk reduction for resilience**

*Public and private investment in DRR are essential to enhance the economic, social, health & cultural resilience of persons, communities, countries, their assets, as well as environment*

**Priority 4 Enhancing disaster preparedness for effective response, and to “Build Back Better” in recovery, rehabilitation and reconstruction**

*Strengthened disaster preparedness for response, recovery, rehabilitation and reconstruction are critical to build back better*

National and local dimensions

Regional and global dimensions

# Learning Objective

Understanding of the basic concepts and definitions in disaster risk management



International Strategy for Disaster Reduction

## 2009 UNISDR Terminology on Disaster Risk Reduction



United Nations



# What is a hazard? What is a disaster?

## How are they different? Difference Between Vulnerability & Exposure?



UN Photo: Aftermath of tsunami in the Indian Ocean, 2004



UN Photo: Tropical Storm Jeanne floods Haiti, 2004



# Hazard

A dangerous *phenomenon, substance, human activity or condition* that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

For example, in Myanmar, *earthquake, cyclone, flood, tsunami* and *landslides* are major hazards.





# Exposure

*People, property, systems, or other elements* present in hazard zones that are thereby subject to potential losses.





# Vulnerability

The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard.

- physical
- social
- economic
- environmental factors





**Swimming is strictly prohibited**  
***- Survivors will be prosecuted***



Tadoba National Park

# Capacity

The combination of all the *strengths, attributes and resources* available within a community, society or organization that can be used to achieve agreed goals.





# Disaster

A serious disruption of the functioning of a community or a society involving *widespread human, material, economic or environmental losses and impacts*, which exceeds the ability of the affected community or society to cope using its own resources.



# Disaster Risk

The **potential disaster losses**, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period.

The combination of the probability of an event and its negative consequences.







# Prevention

The outright avoidance of adverse impacts of hazards and related disasters.

Prevention expresses the concept and intention to completely avoid potential adverse impacts through action taken in advance.





# Mitigation

The lessening or limitation of the adverse impacts of hazards and related disasters.



# Preparedness

The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to *effectively anticipate, respond to, and recover from*, the impacts of likely, imminent or current hazard events or conditions.



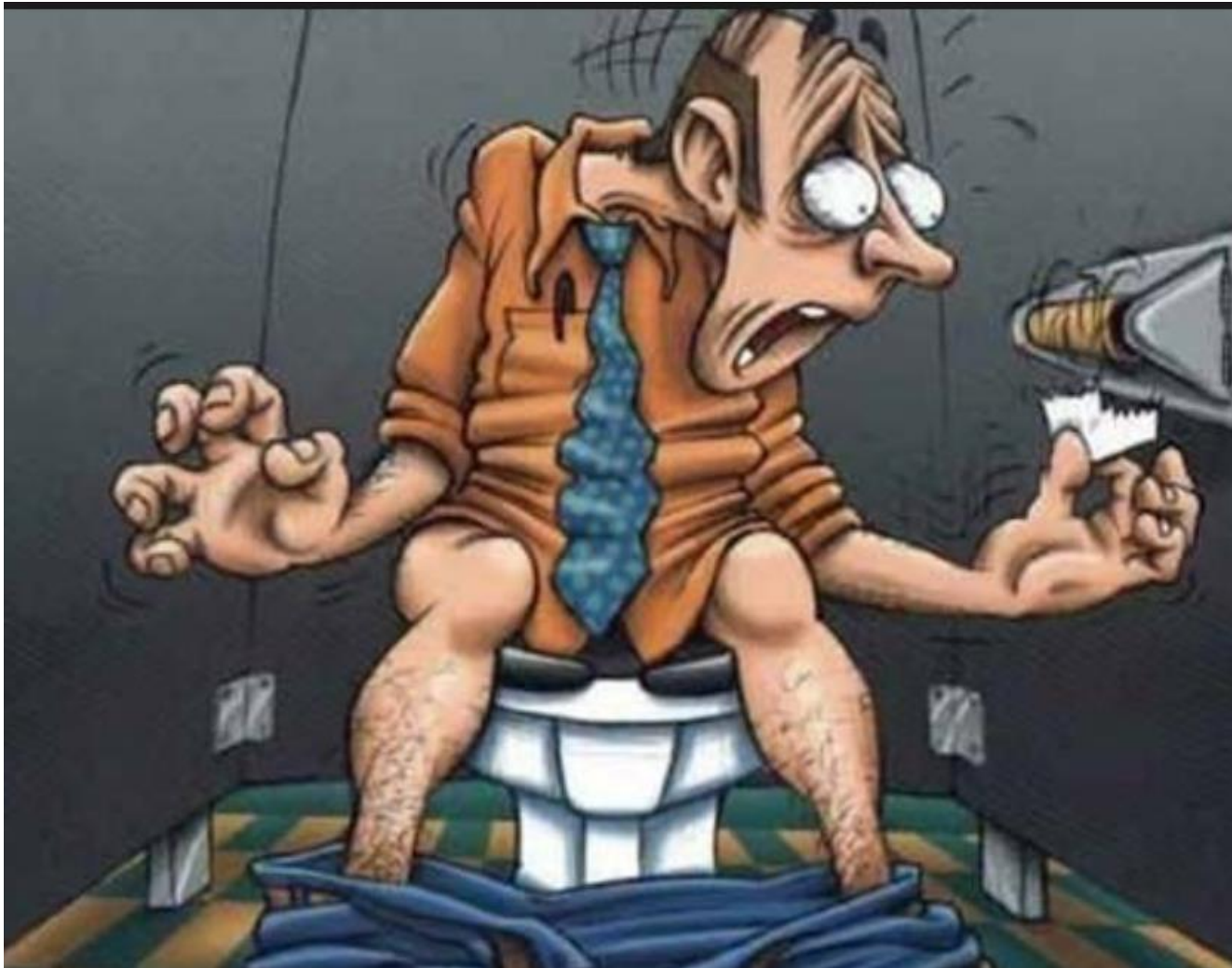
Preparedness is based on

- a sound analysis of disaster risks
- good linkages with early warning systems,

Includes such activities as

- contingency planning
- the stockpiling of equipment and supplies, coordination, evacuation and public information, and
- associated training and field exercises.





**Lack of preparedness is often embarrassing**

# Response

The provision of emergency services and public assistance during or immediately after a disaster in order *to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs* of the people affected.





# Recovery

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

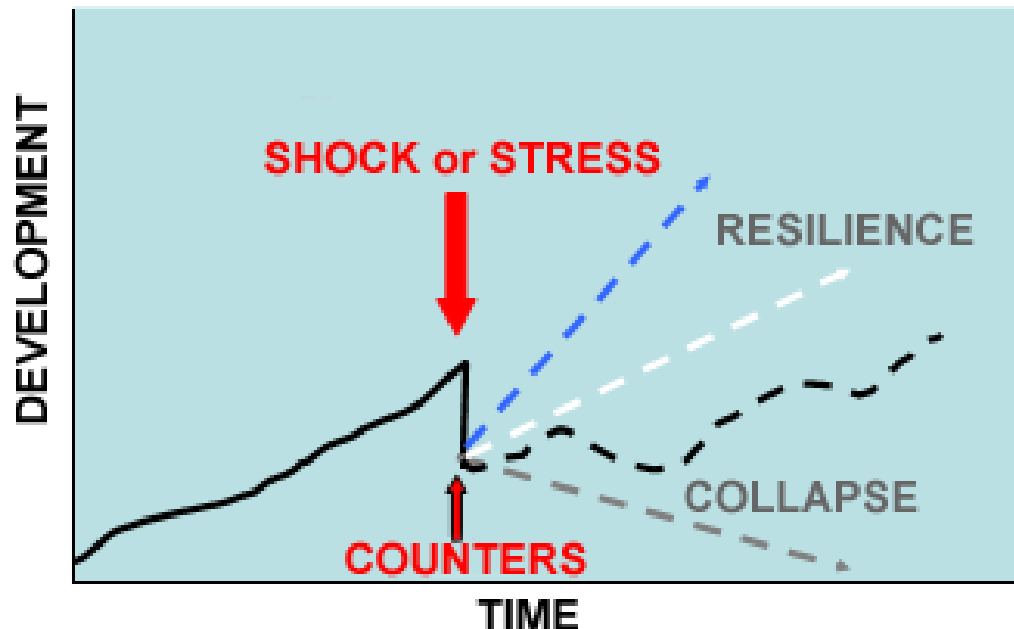


## **Build back better**

The use of the recovery, rehabilitation and reconstruction phases after a disaster to increase the resilience of nations and communities

# Resilience

The ability of a system, community or society exposed to hazards *to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner*, including through the preservation and restoration of its essential basic structures and functions.





Bhutan



## **Disaster Risk Reduction**

Disaster risk reduction is aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development.

## **Disaster Risk Management**

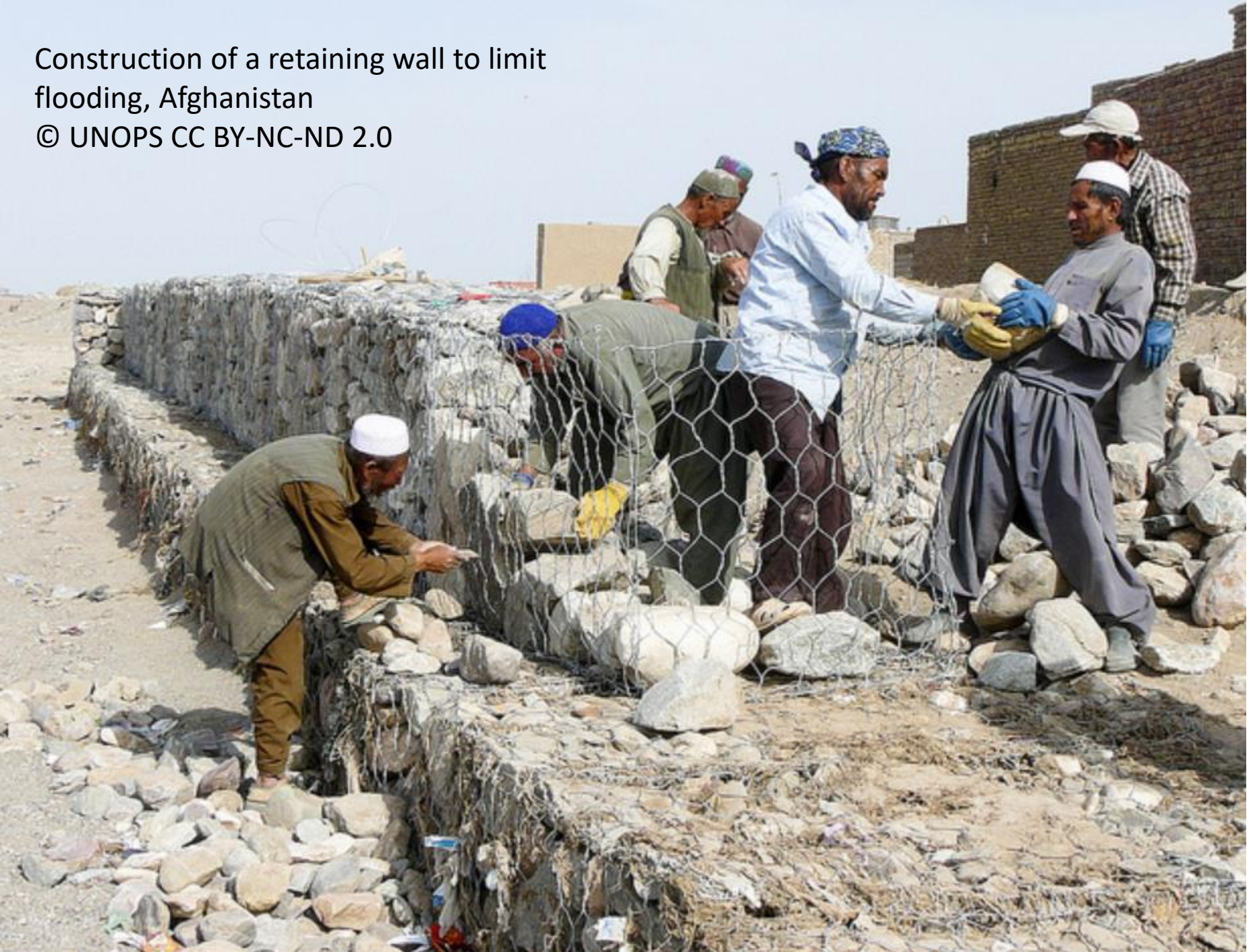
Disaster risk management is the application of disaster risk reduction policies and strategies to prevent new disaster risk, reduce existing disaster risk and manage residual risk, contributing to the strengthening of resilience and reduction of disaster losses.

**DRM can be thought of as the implementation of DRR**



Construction of a retaining wall to limit  
flooding, Afghanistan

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# Community Based Disaster Risk Reduction (CBDRR)

A process in which at-risk *communities are actively engaged in the identification, analysis, treatment, monitoring and evaluation of disaster risks* in order to reduce their vulnerabilities and enhance their capacities.

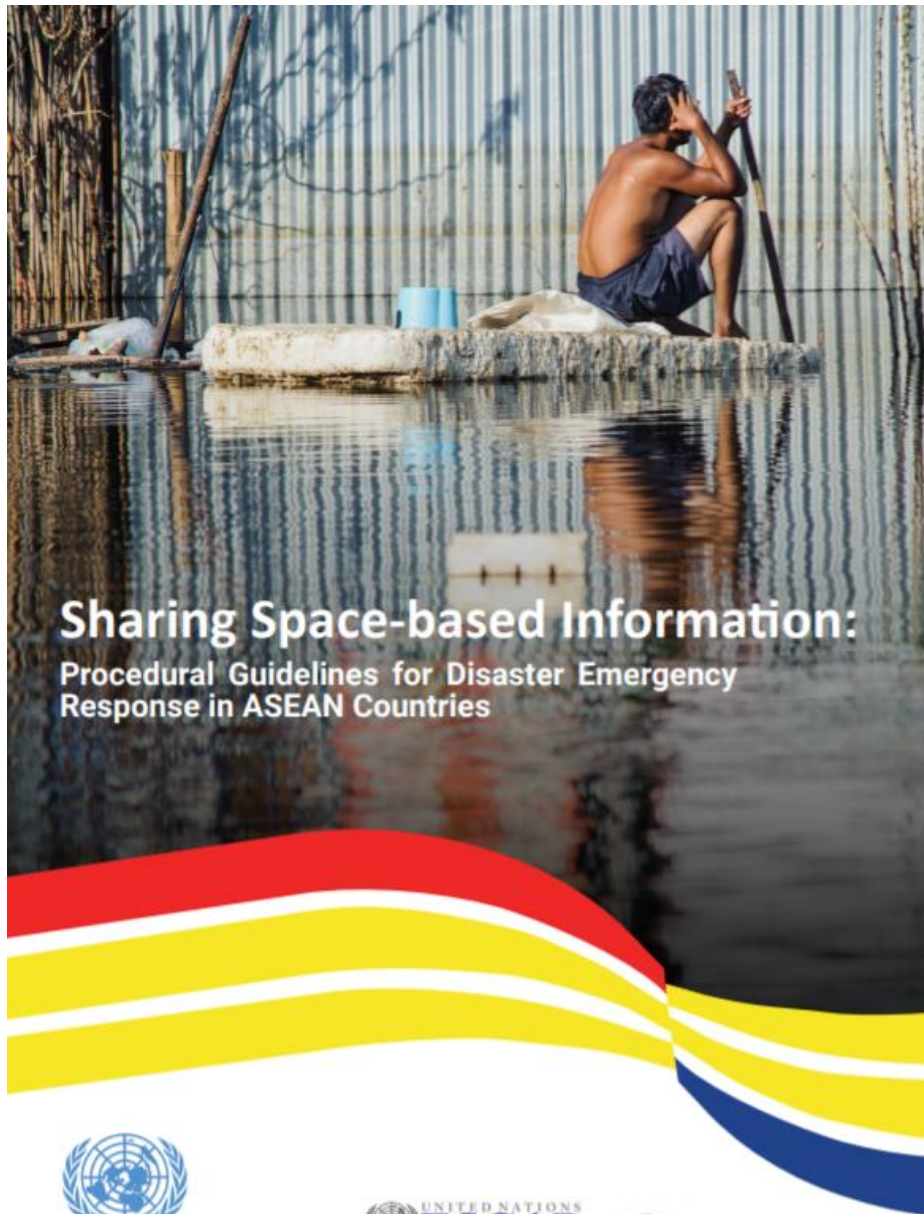




# Emergency Management

The organization and management of resources and responsibilities for addressing all aspects of emergencies, in particular preparedness, response and initial recovery steps.





# Sharing Space-based Information:

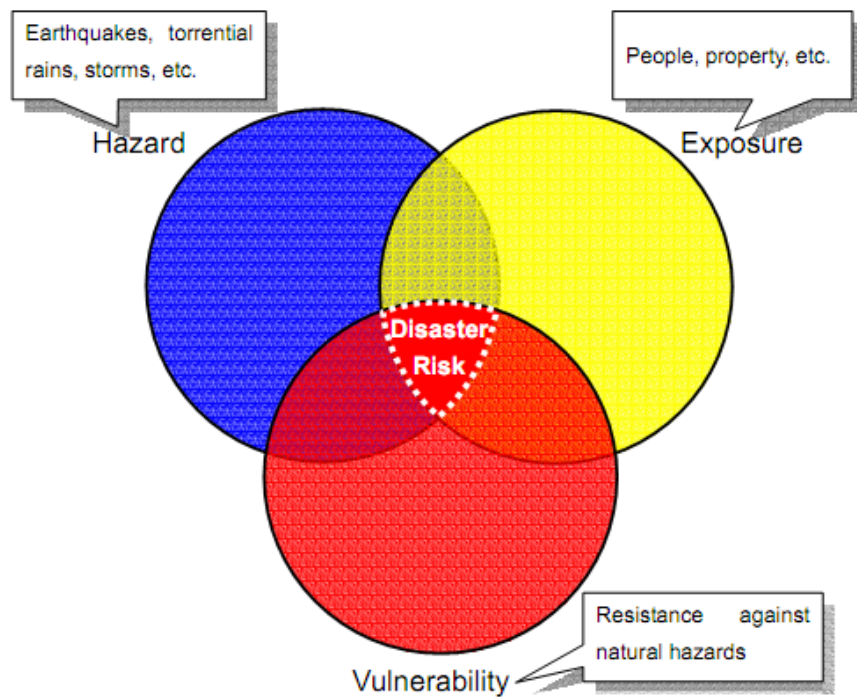
Procedural Guidelines for Disaster Emergency  
Response in ASEAN Countries



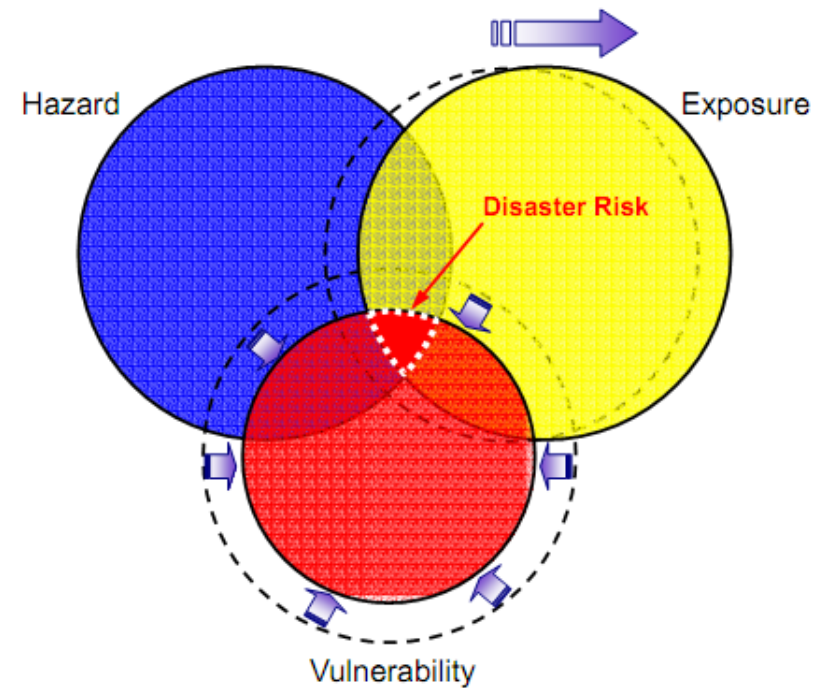


# Concept of Disaster Risk

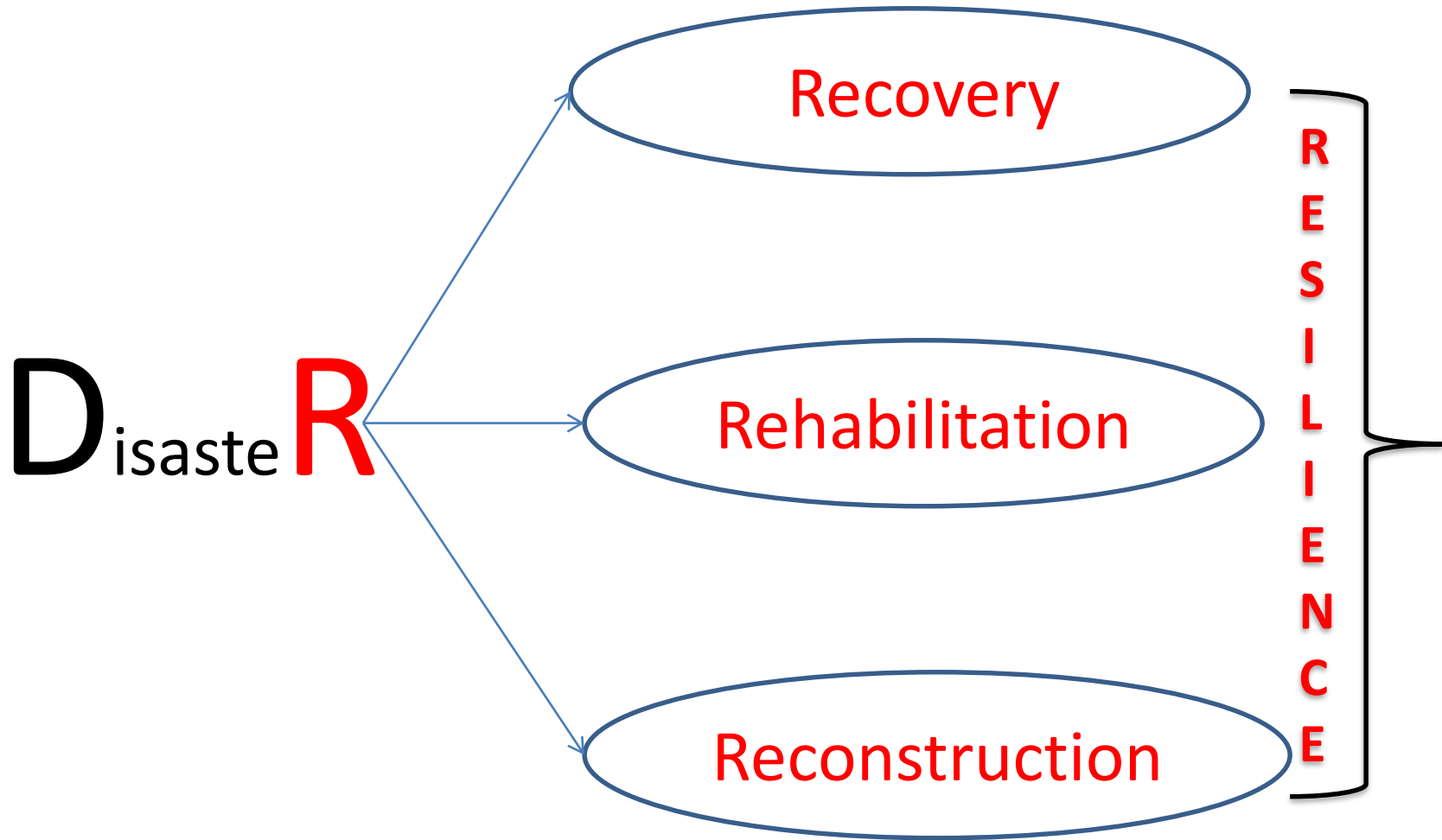
## Development of Disaster Risk



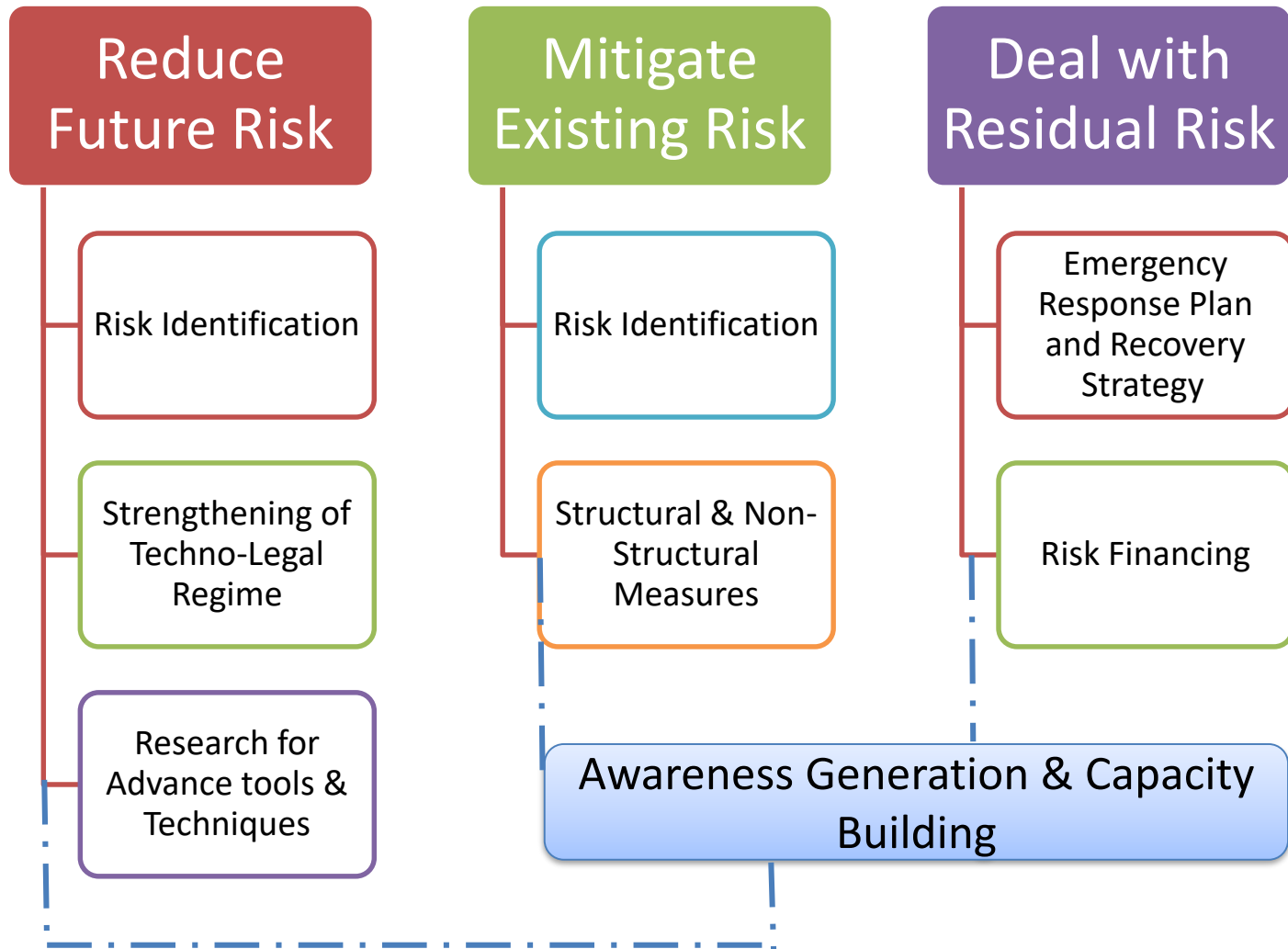
## Reducing Disaster Risk



# Concept of 4 R



# Disaster Risk Management Strategy







1:20 (**orange**) and 1:100 (**yellow**)  
flood **hazard**  
(defined by frequency and magnitude/location)

Infrastructure (railway, streets etc.)  
and houses **exposed**

*Not shown in map: different levels of  
e.g. physical vulnerability of houses or social  
vulnerability of the community*

Excerpt of flood information map of the Town of Badger, Newfoundland and Labrador, Canada  
(c) Newfoundland and Labrador Department of Municipal Affairs and Environment-Water Resources Management Division



THANK YOU  
for your attention