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

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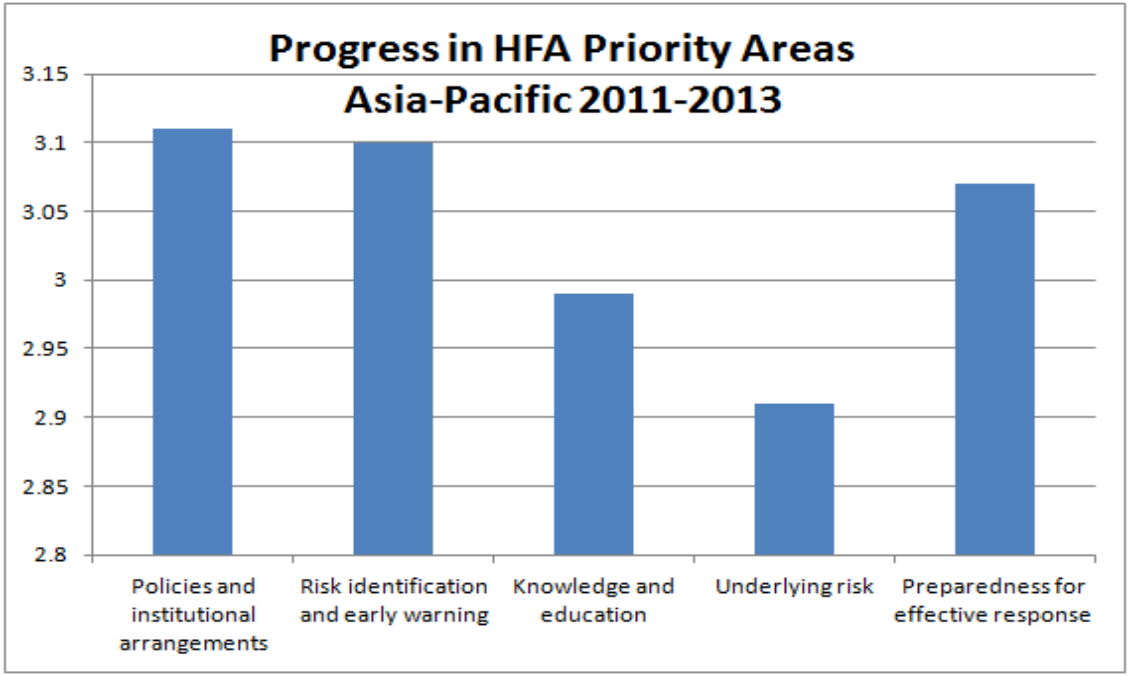
The Hyogo Framework for Action (HFA) learning

- 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



Reference: ISDR

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 exisitng 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

Reference: ISDR

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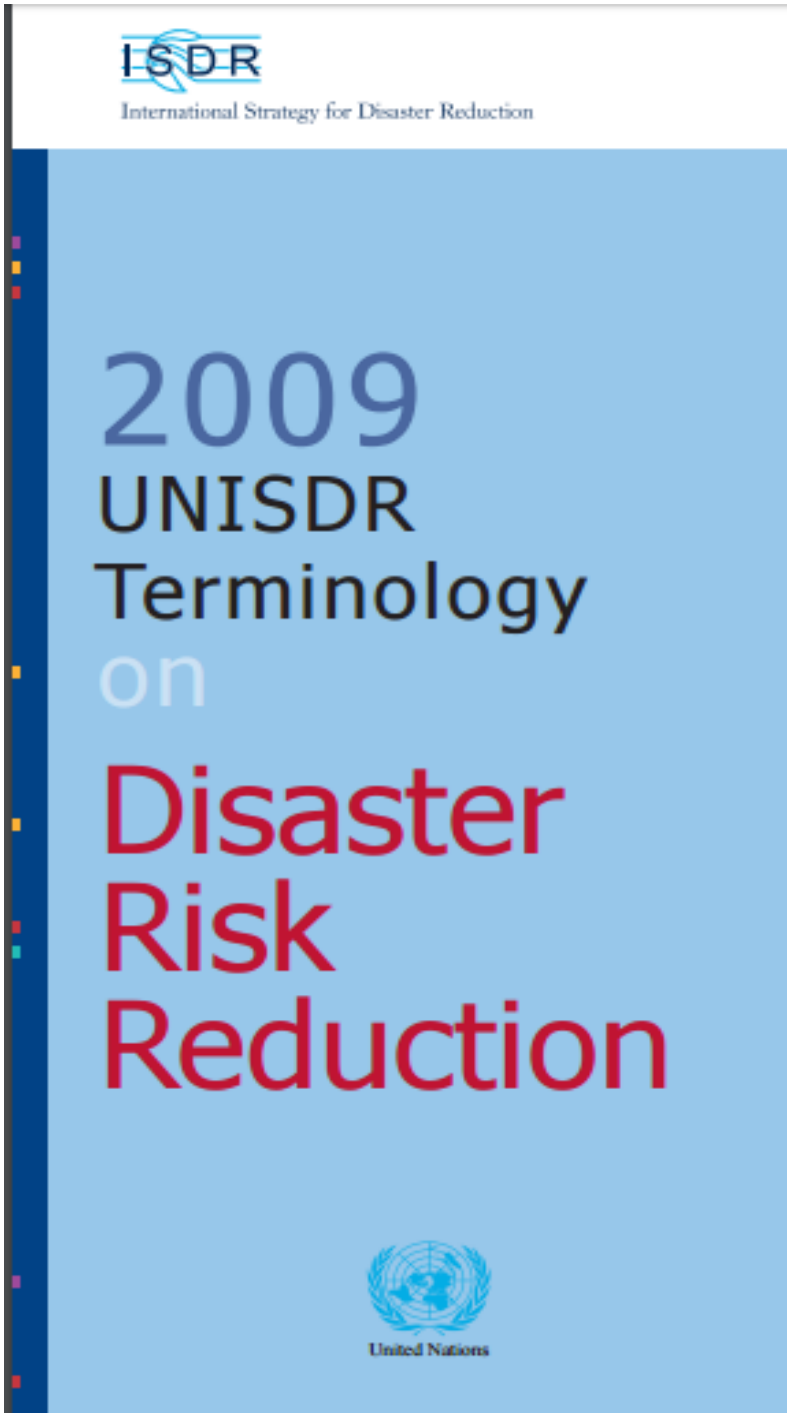
Learning Objective

Understanding of the basic concepts and definitions in disaster risk management



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

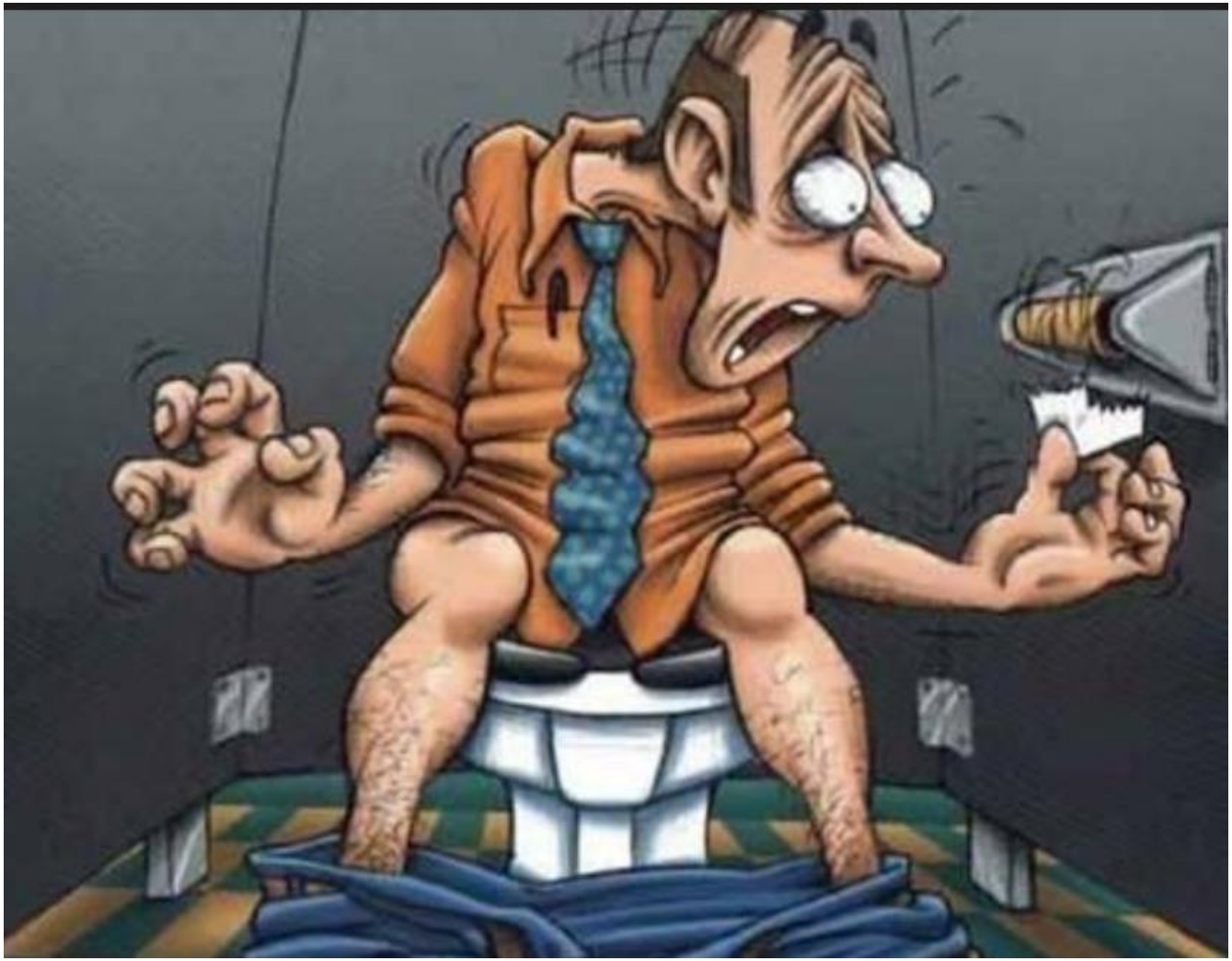
The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to *effectively anticipate, respond to, and recover from,* the impacts of likely, imminent or current hazard events or conditions.

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

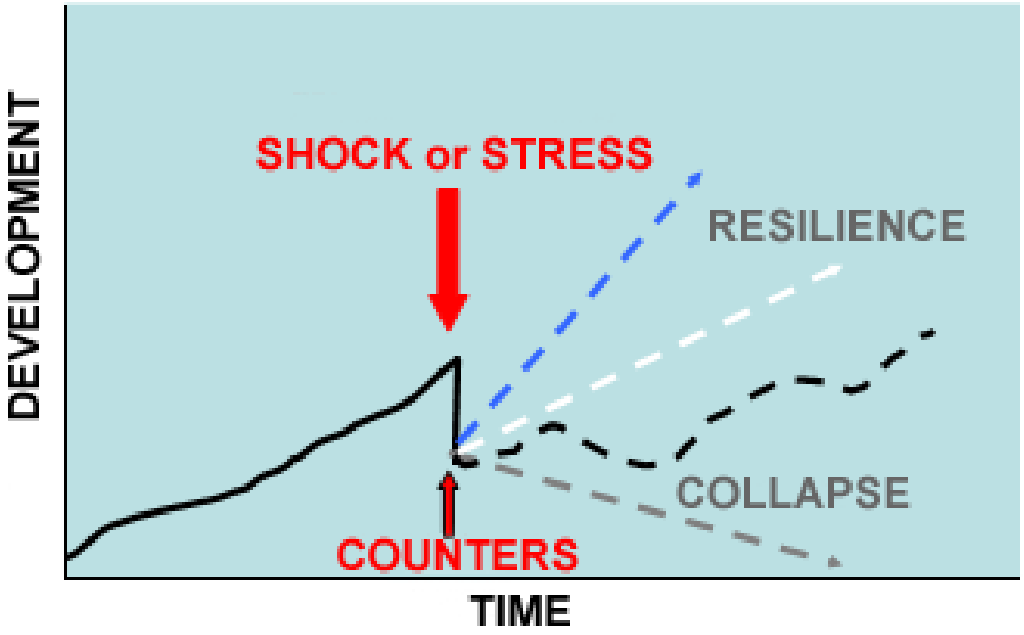
The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors.

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

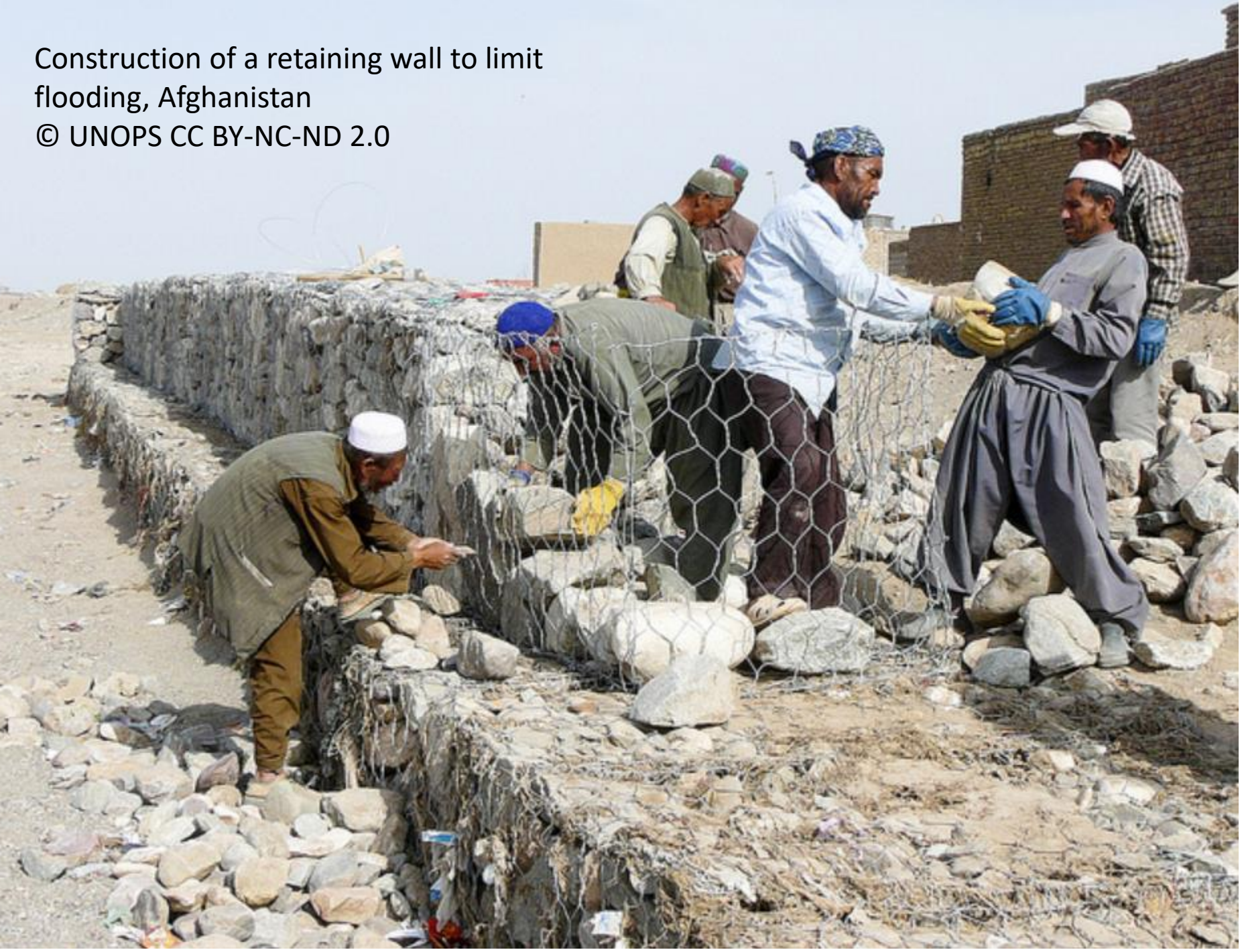
Disaster Risk Reduction

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.

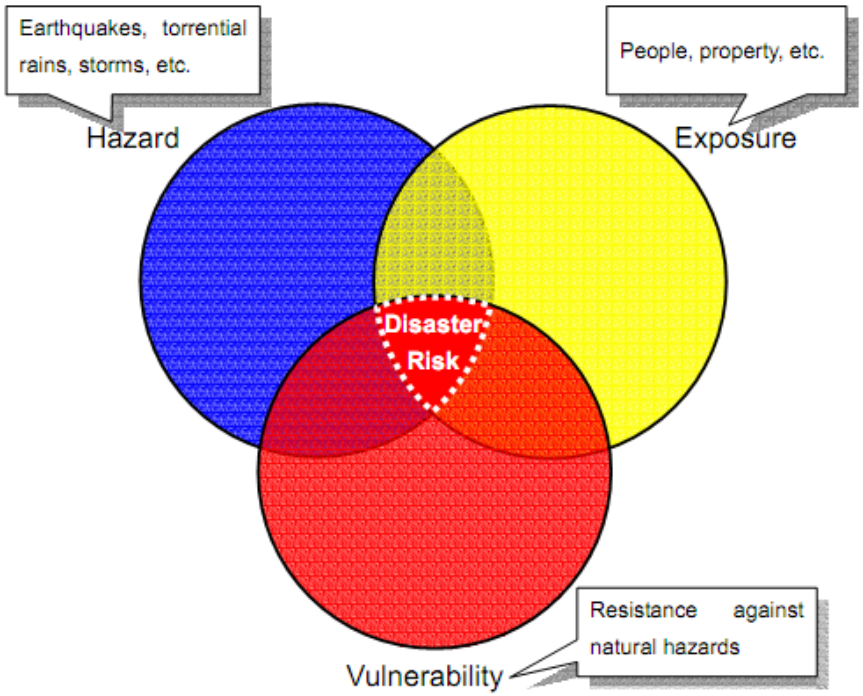
Emergency Management

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

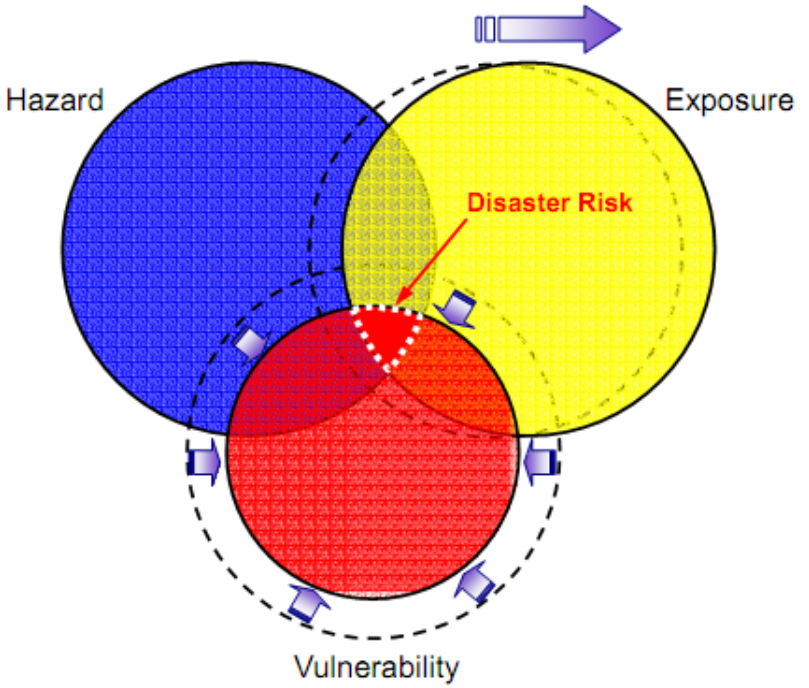
http://www.un-spider.org/news-and-events/news/unoosa-co-publishes-guidelines-disaster-emergency-response-asean-countries

Concept of Disaster Risk

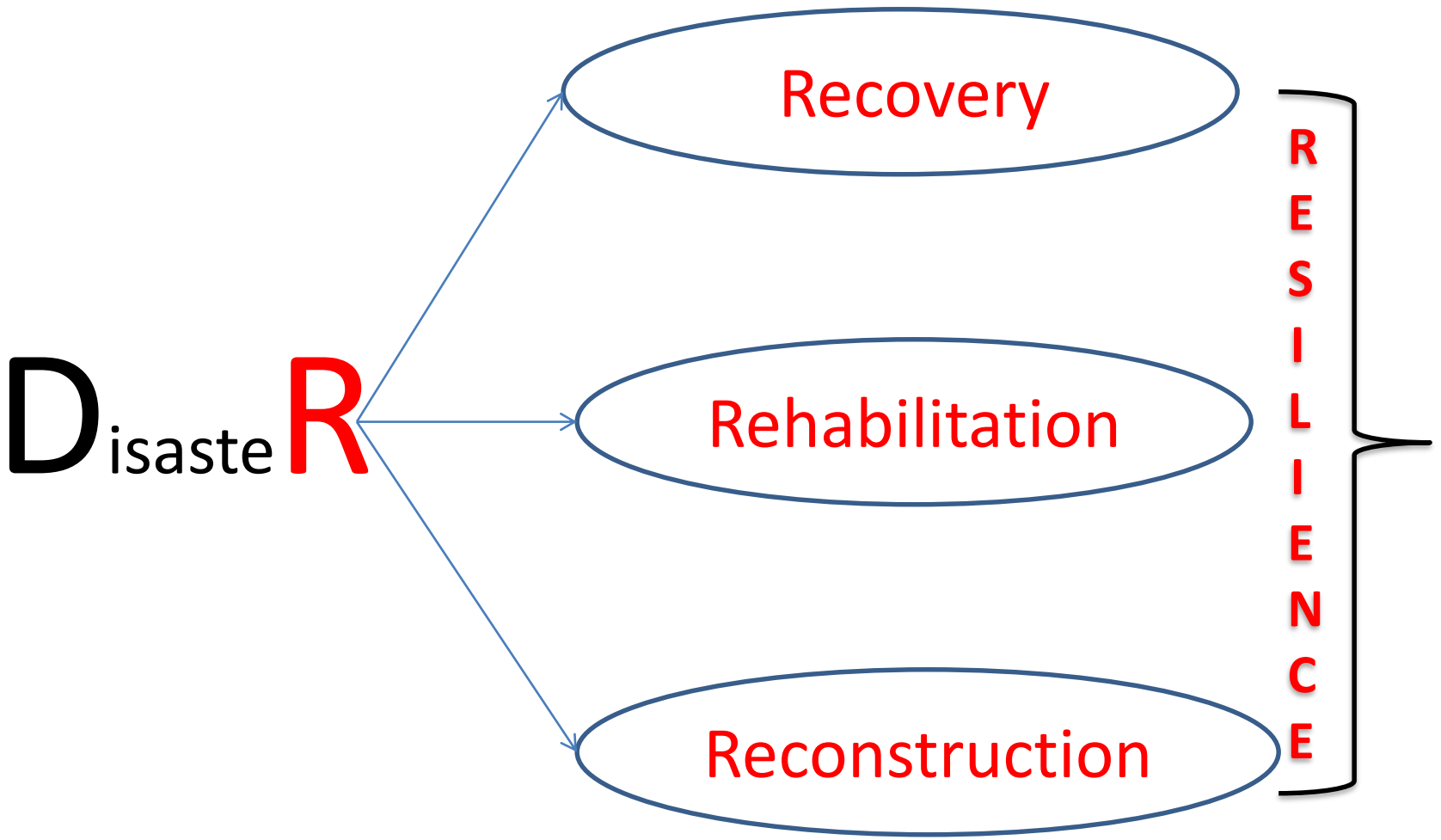
Development of Disaster Risk



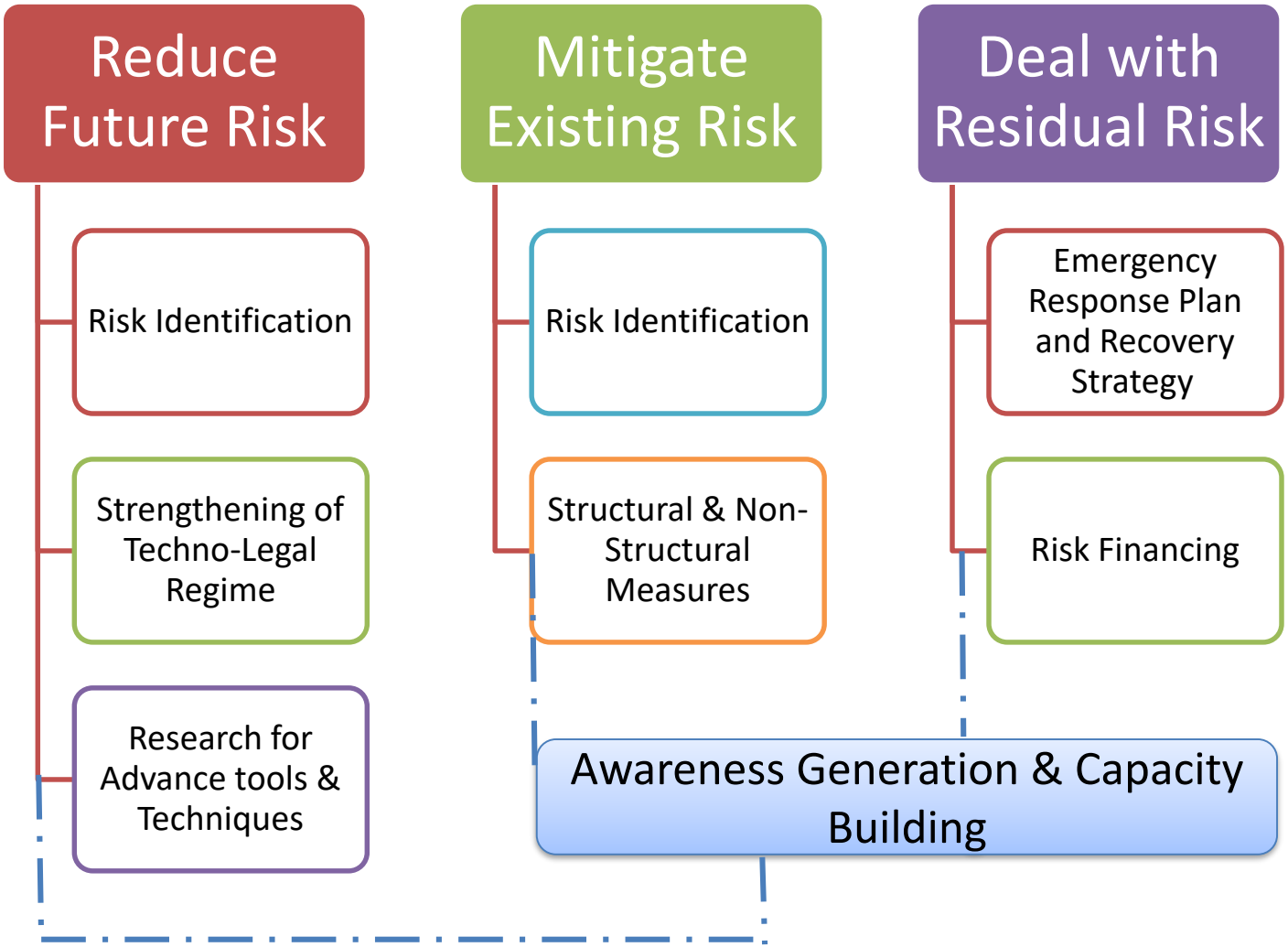
Reducing Disaster Risk

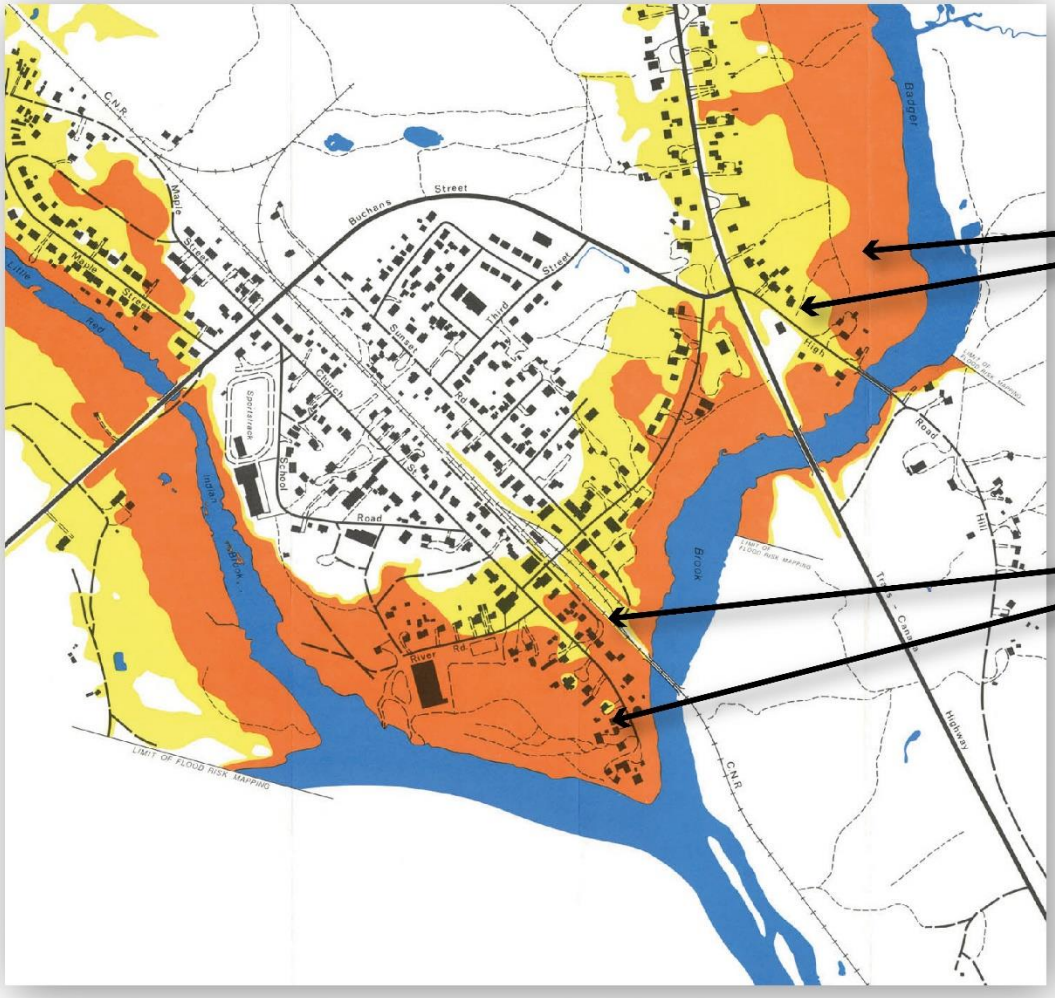


Concept of 4 R



Disaster Risk Management Strategy



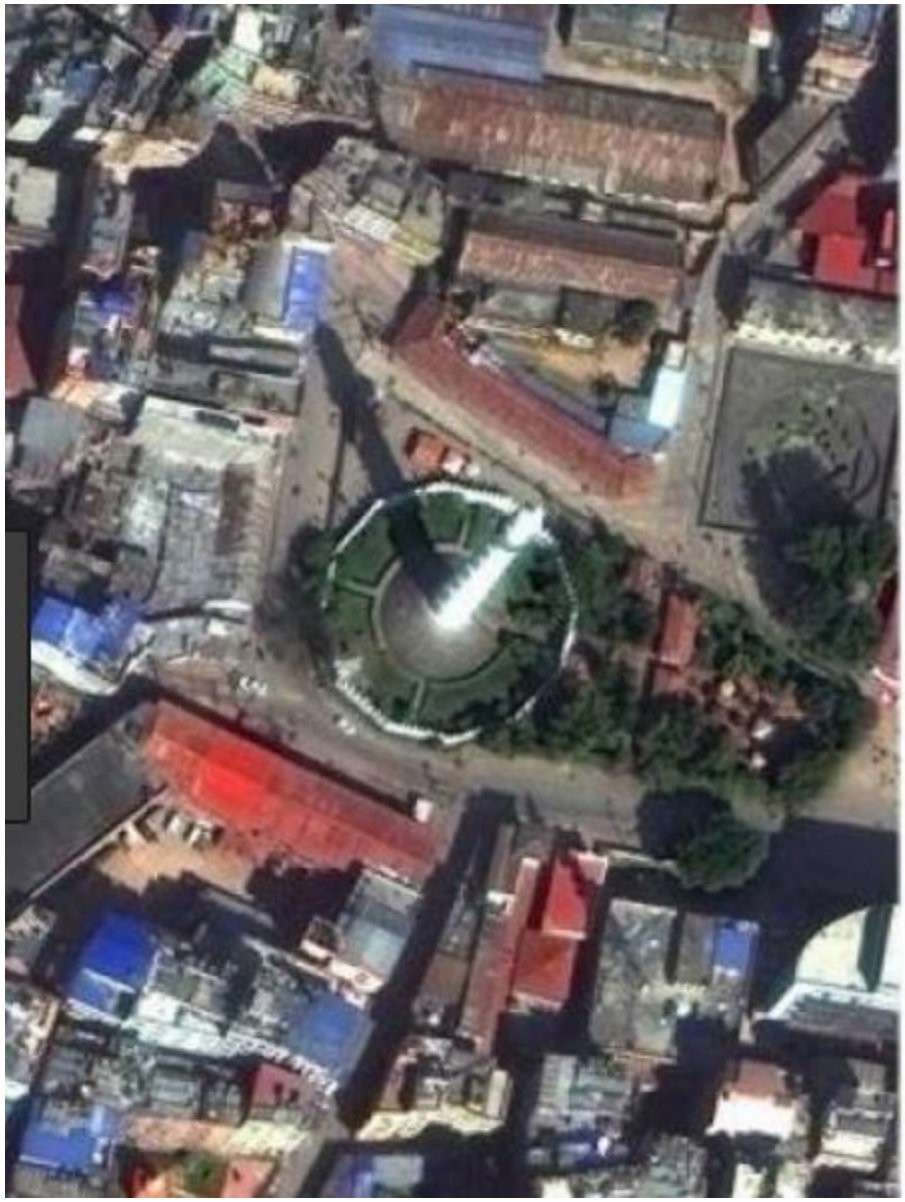


1:20 (**orange**) and 1:100 (yellow) flood **hazard**
(defined by frequency and magnitude/location)

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