

Understanding Disaster Risk

Concepts and Trends in Global Disaster Risk Reduction

Workshop on Coherent Disaster Risk Reduction Strategy Development in the SAARC Region

09-11 July 2019, SDMC (IU), Gandhinagar, India

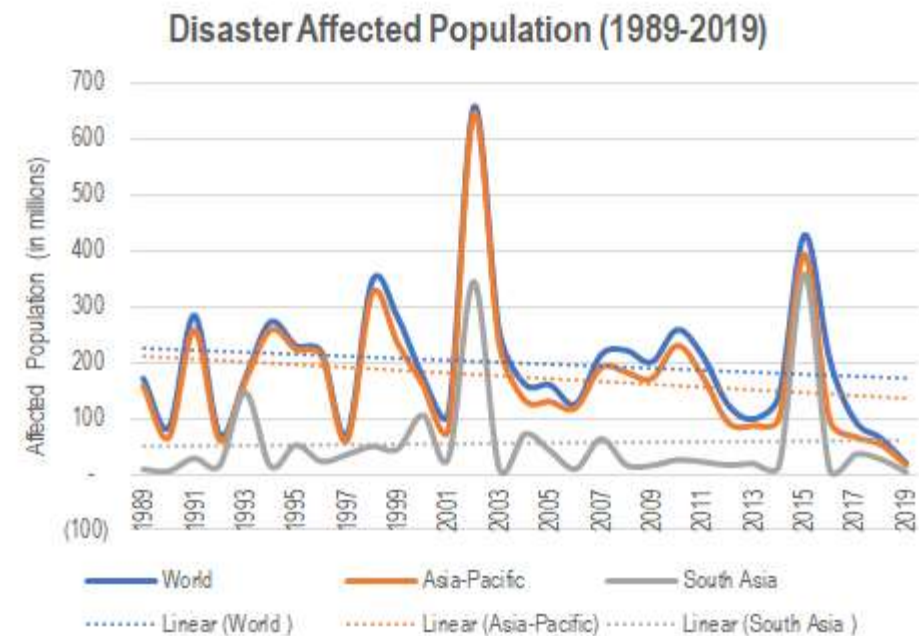
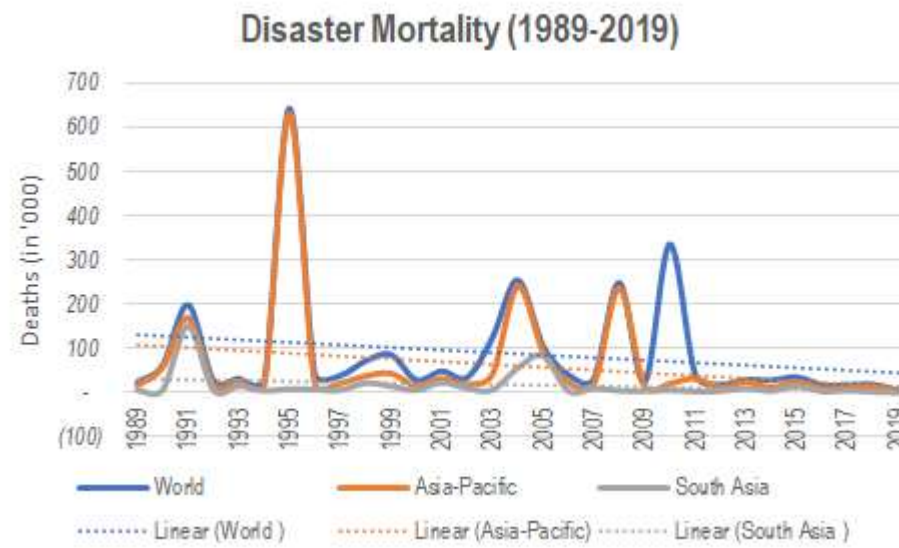
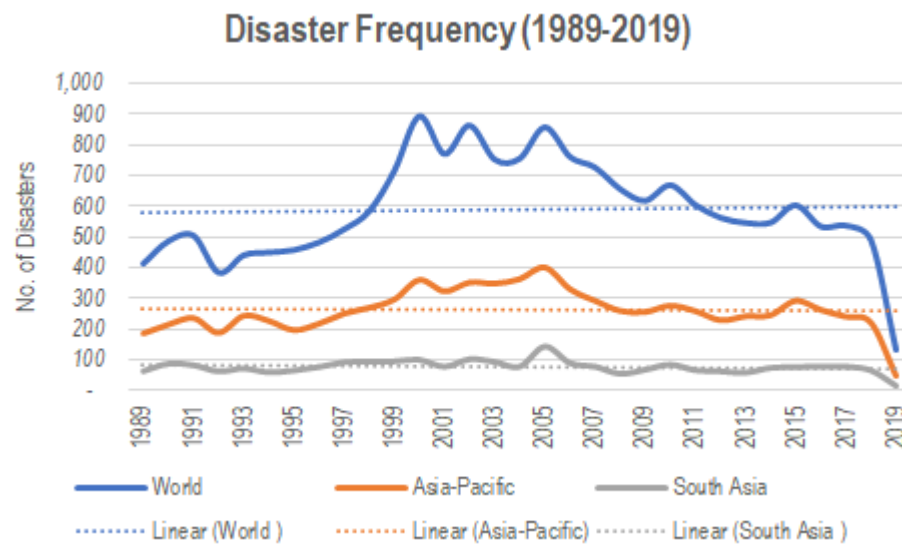
 [@animesh00](https://twitter.com/@animesh00)

 [@UNDRR_AsiaPac](https://twitter.com/@UNDRR_AsiaPac)

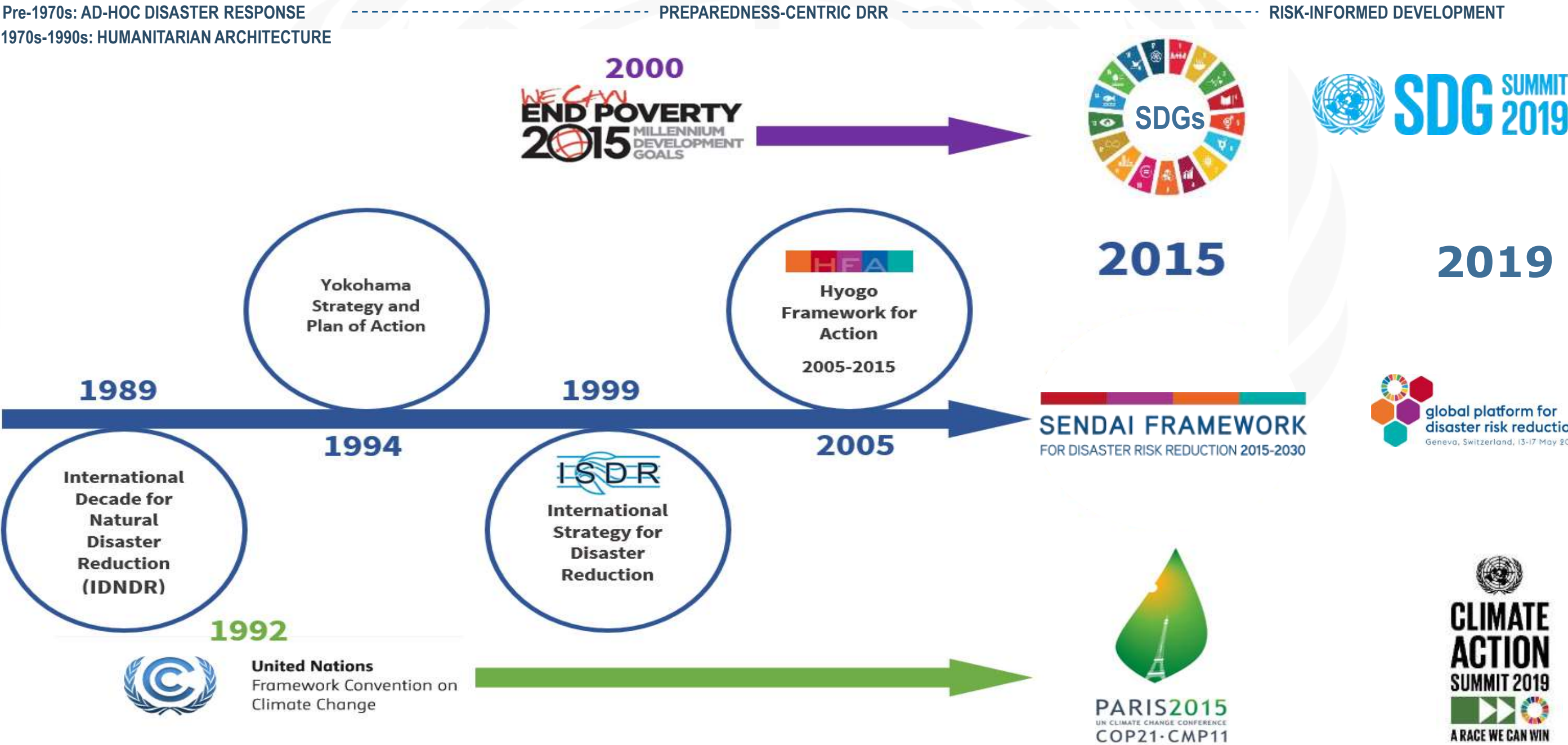
 [#ResilienceForAll](https://twitter.com/#ResilienceForAll)

30 Years of Disaster Impact

- *Globally:* 20,000 disasters, 2.7 million deaths and 6 billion affected
- *Asia-Pacific:* Most disaster prone region in the world – 45% of disasters, 70% of mortality and 90% of affected population
- *South Asia:* 30% of Asia-Pacific impact: Flood and Storm (most frequent); Earthquake and Storm (most mortality); Drought and Flood (most affected); Flood and Storm (most economic losses)



30 years of Disaster Risk Reduction

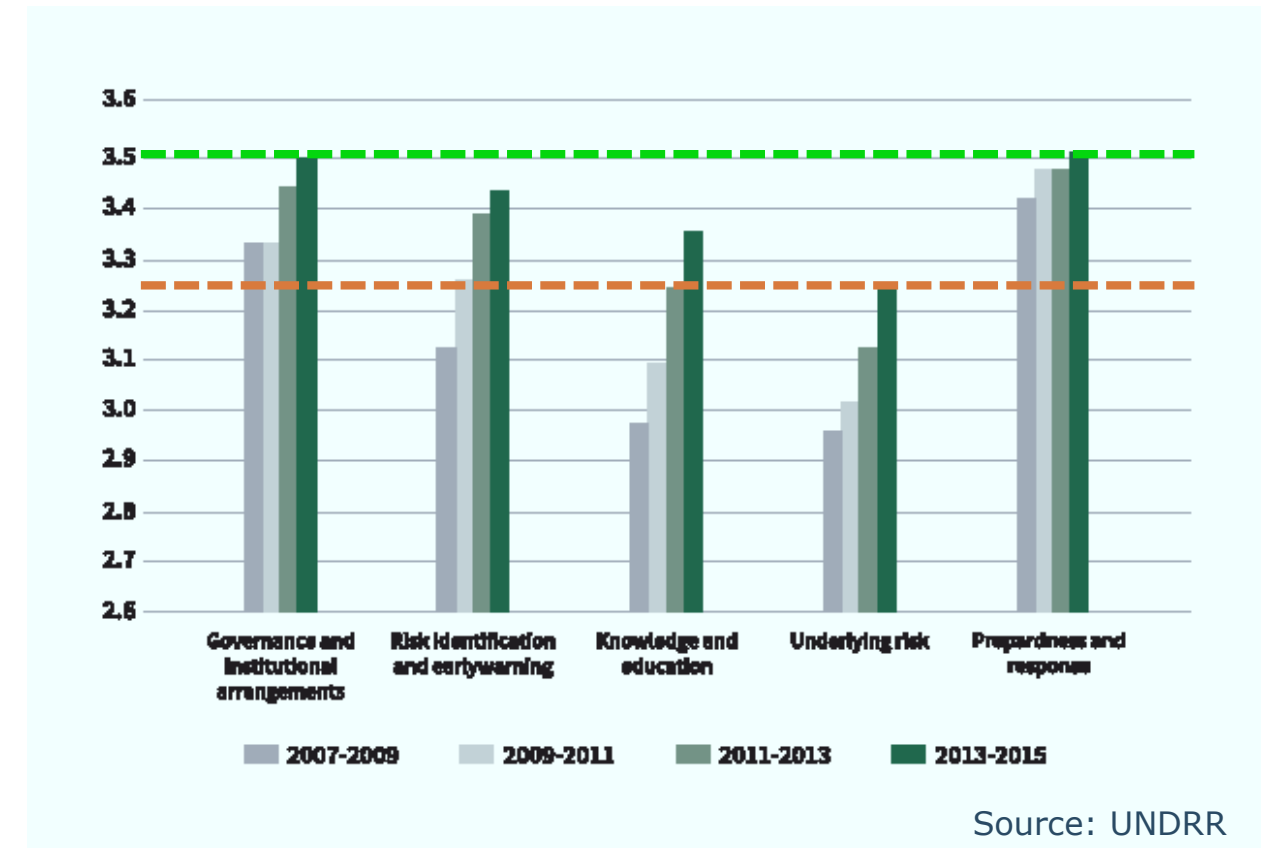


Disasters are not Natural



Progress and Achievements

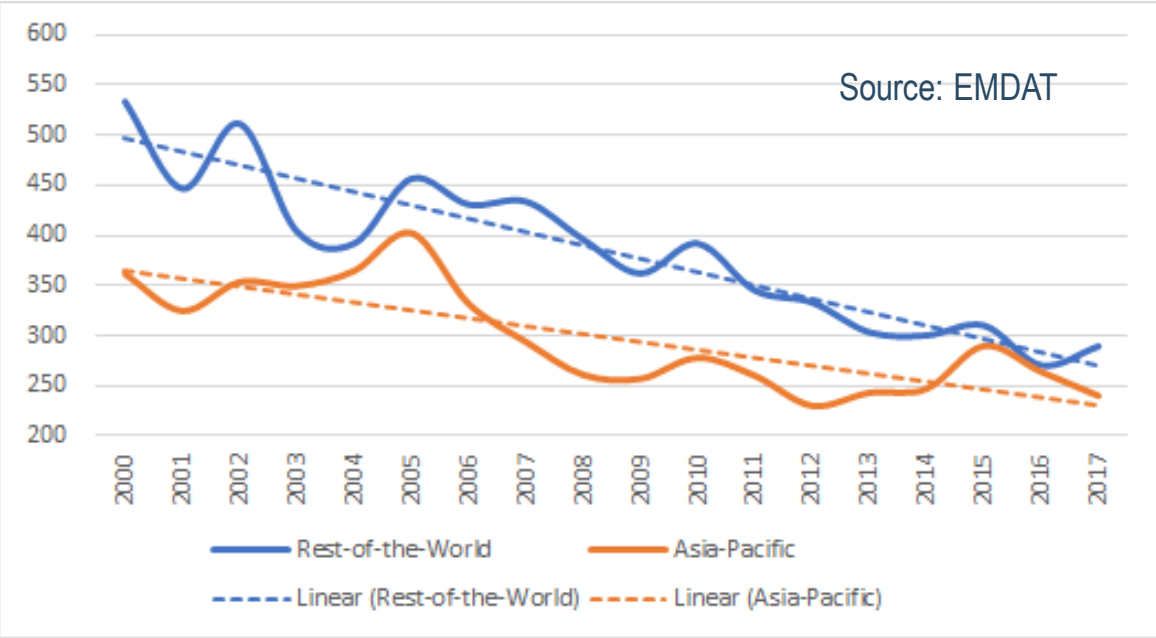
- A structured dialogue on disaster risk reduction: From global to local
 - Structured institutional structures on disaster risk management – Dedicated government institution and identified Focal Points
 - DRM policies, strategies and plans, and legislation
-
- Officialization of data (Sendai Framework / SDG reporting)
 - New actors and stakeholders
 - Guidance for implementation, innovative tools and instruments



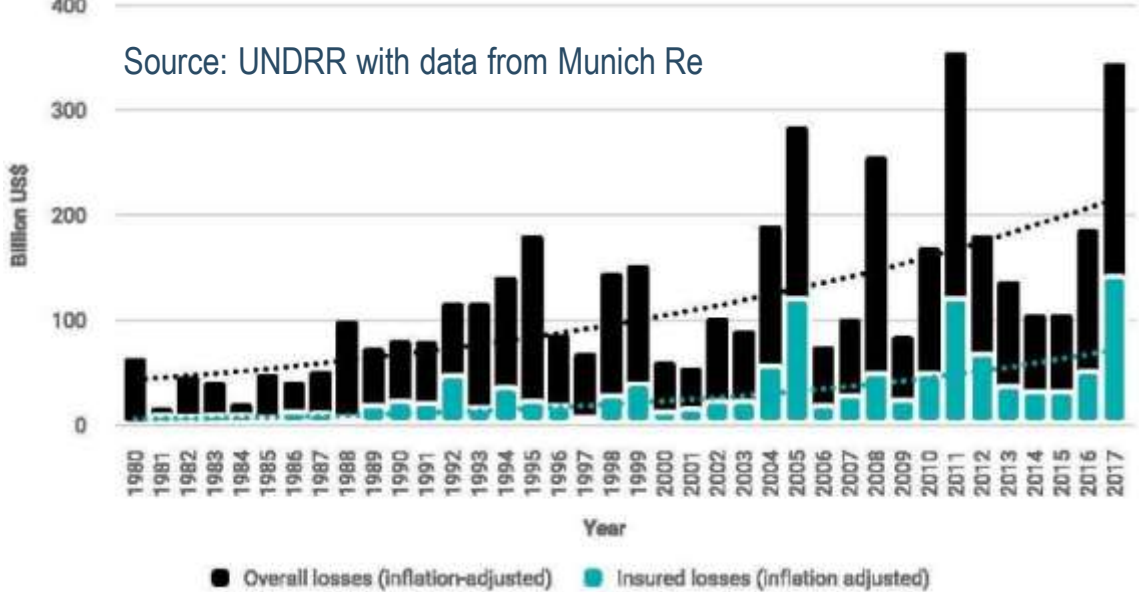
- High progress in governance and preparedness mechanisms
- Low progress in addressing underlying risks

Disaster-Induced Mortality

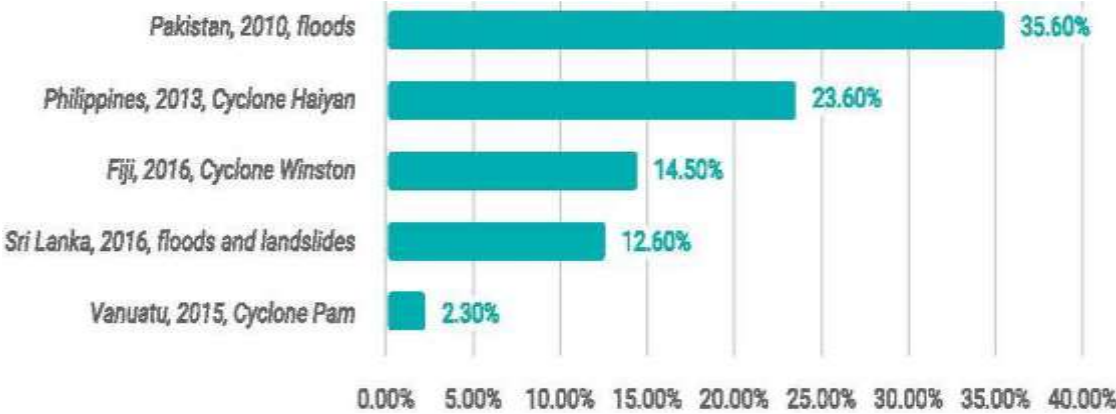
Result



Economic Losses 1980 – 2017



Proportion of people falling into poverty from selected disasters

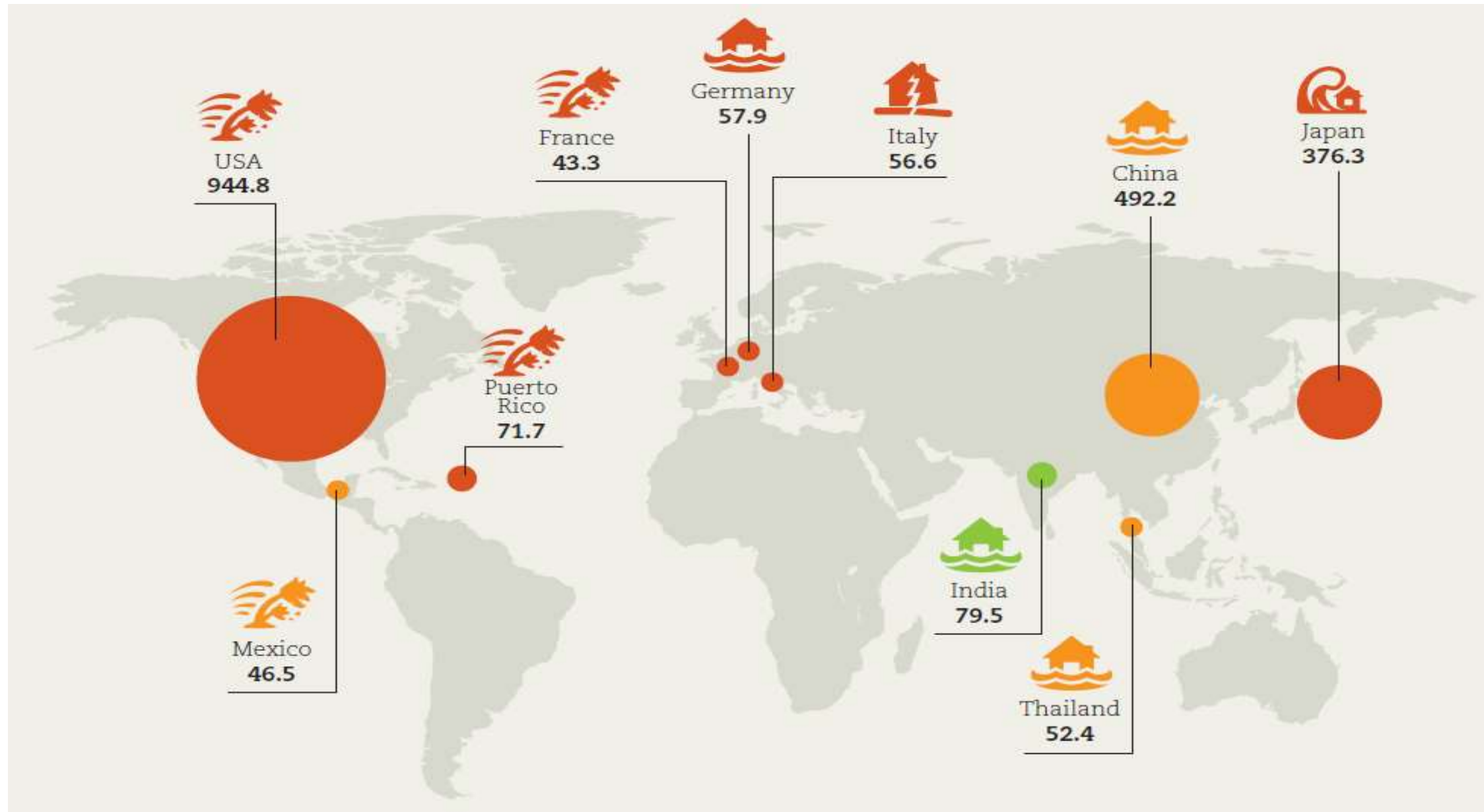


Source: ESCAP 2017

Disasters are resulting in **annual consumption losses of US\$520 billion** and pushing **26 million people into poverty every year.**
World Bank 2016

Top 10 countries/territories in terms of absolute losses (billion US\$) 1998-2017

Economic Losses, Poverty and Disasters 1998-2017 (CRED, UNISDR. 2018.)



Implications on Sustainable Development

Disaster risk constraints on the potential for sustainable development

- Capital investments (e.g. infrastructure) and social expenditures (e.g. health and education) required to mitigate disaster risk
- However, potential disaster losses will erode these investments
- Risk-blind investments will create further risks



The boundaries and names shown and the designations used on the map do not imply official endorsement or acceptance by the United Nations.

A Changing Understanding of Risk

■ Changing environment

- Intensifying disaster trends & more frequent events
- Resource scarcity and degradation (land, water, food, energy, biodiversity)
- “Unchecked” urbanization coupled with high exposure of population and assets in high risk areas.
- Increasing governance challenges, coordination, accountability, institutional mechanisms, migration, conflict

■ Climate change - The great risk amplifier

- Risk profile will continued to be altered by climate change
- “Robust difference” between impacts at 1.5°C and 2°C – average temperature, frequency of hot extremes, heavy rainfall in some regions and the probability of drought in some areas [**Exponential disaster impact**]

■ Multidimensional understanding of vulnerability

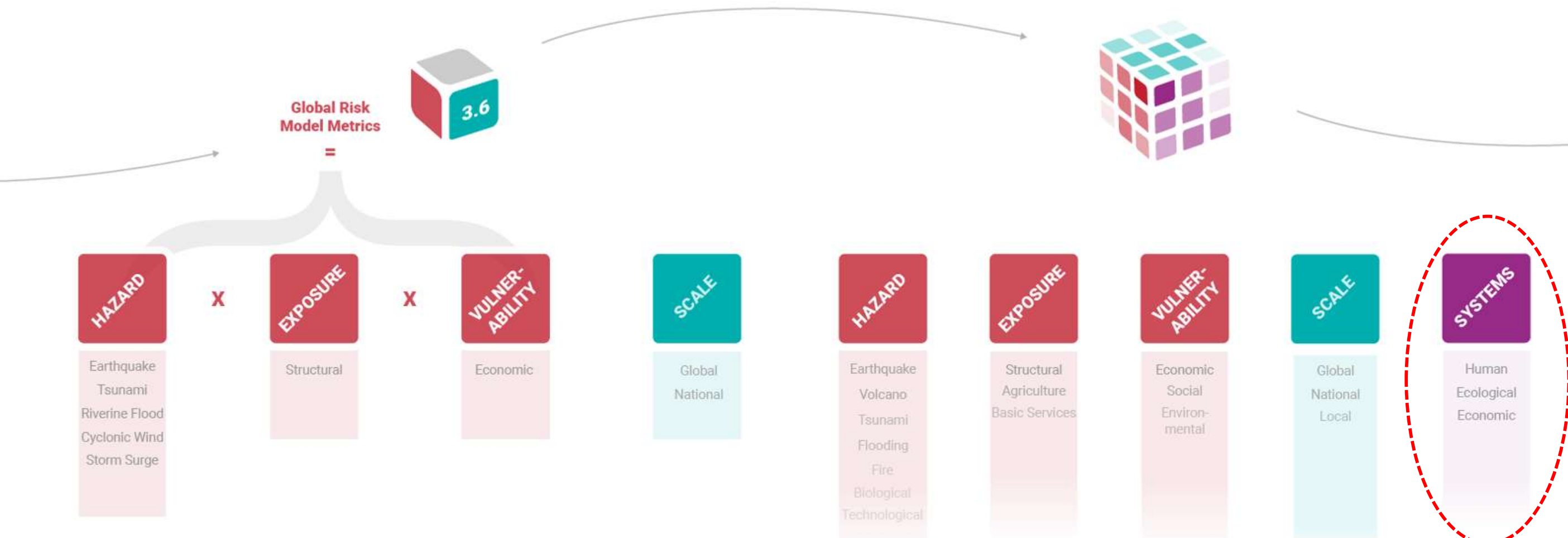
- Vulnerability is also dynamic: **Equity, poverty, inclusion** – all being fundamental development challenges contributing to vulnerability

➔ Risk cannot be compartmentalized :

- Systemic risk: Need to understand the cascading and interconnected nature of risk
- Avoid compartmentalized research, hazard-by-hazard risk assessment and management

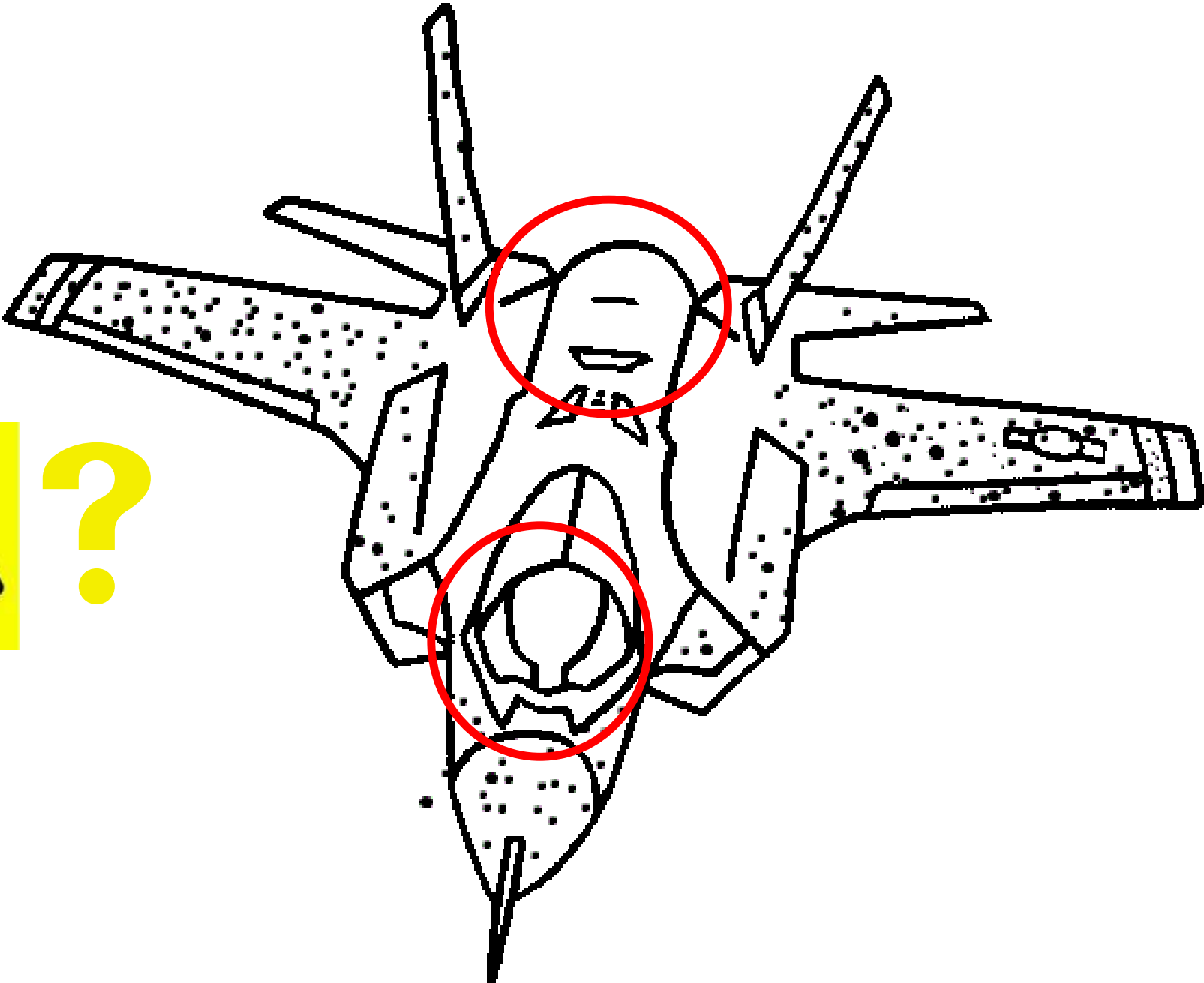
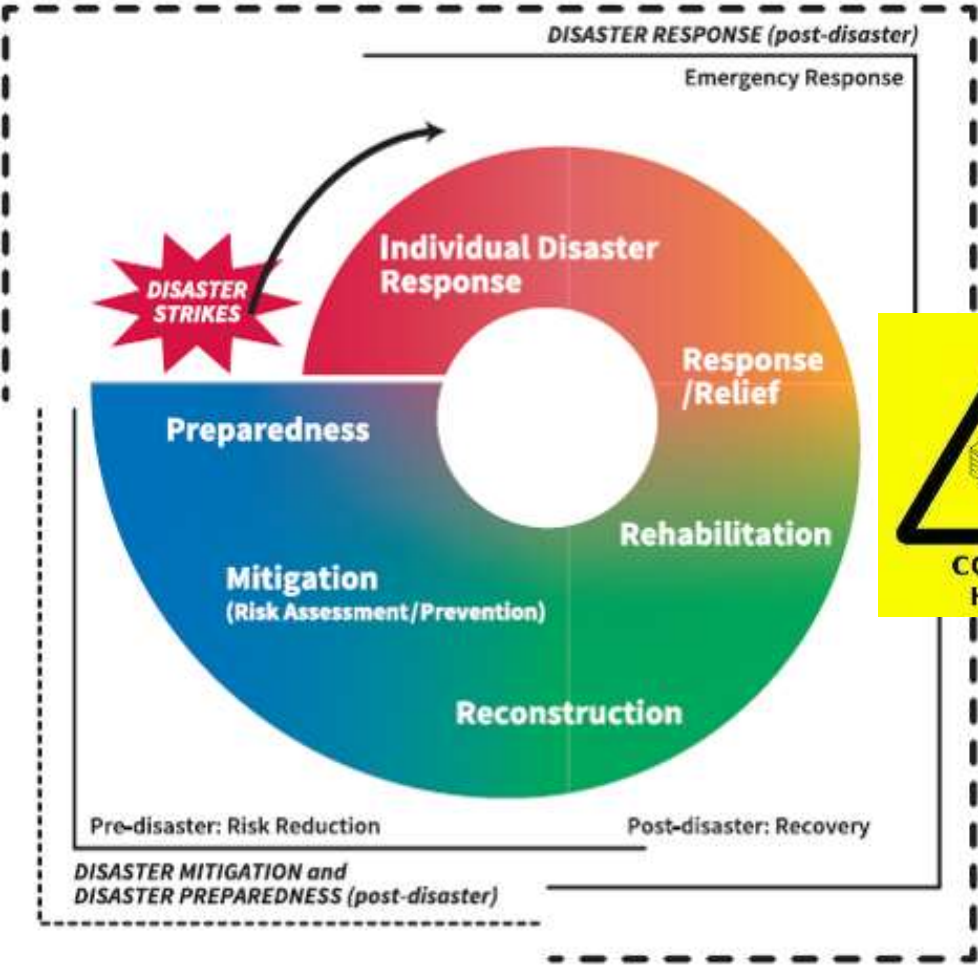
A Changing Metrics of Risk

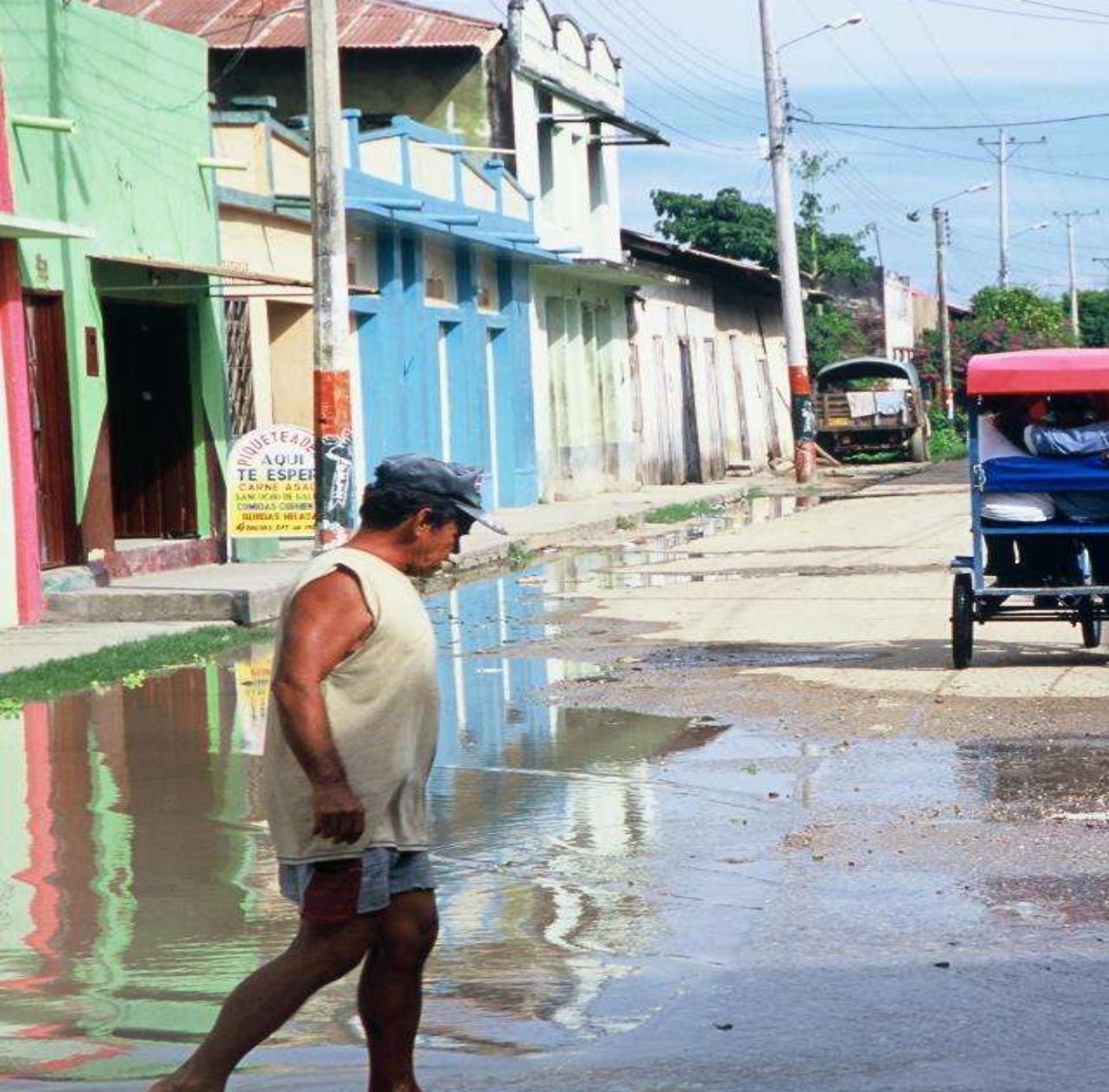
- We can no longer use the past as a reliable indicator of the future: Need for adaptive, anticipatory planning that seeks to identify the **drivers of risk**
- **Changing risk metrics**



A Changing Paradigm of Disaster Risk Management

The classic ‘disaster risk management cycle’

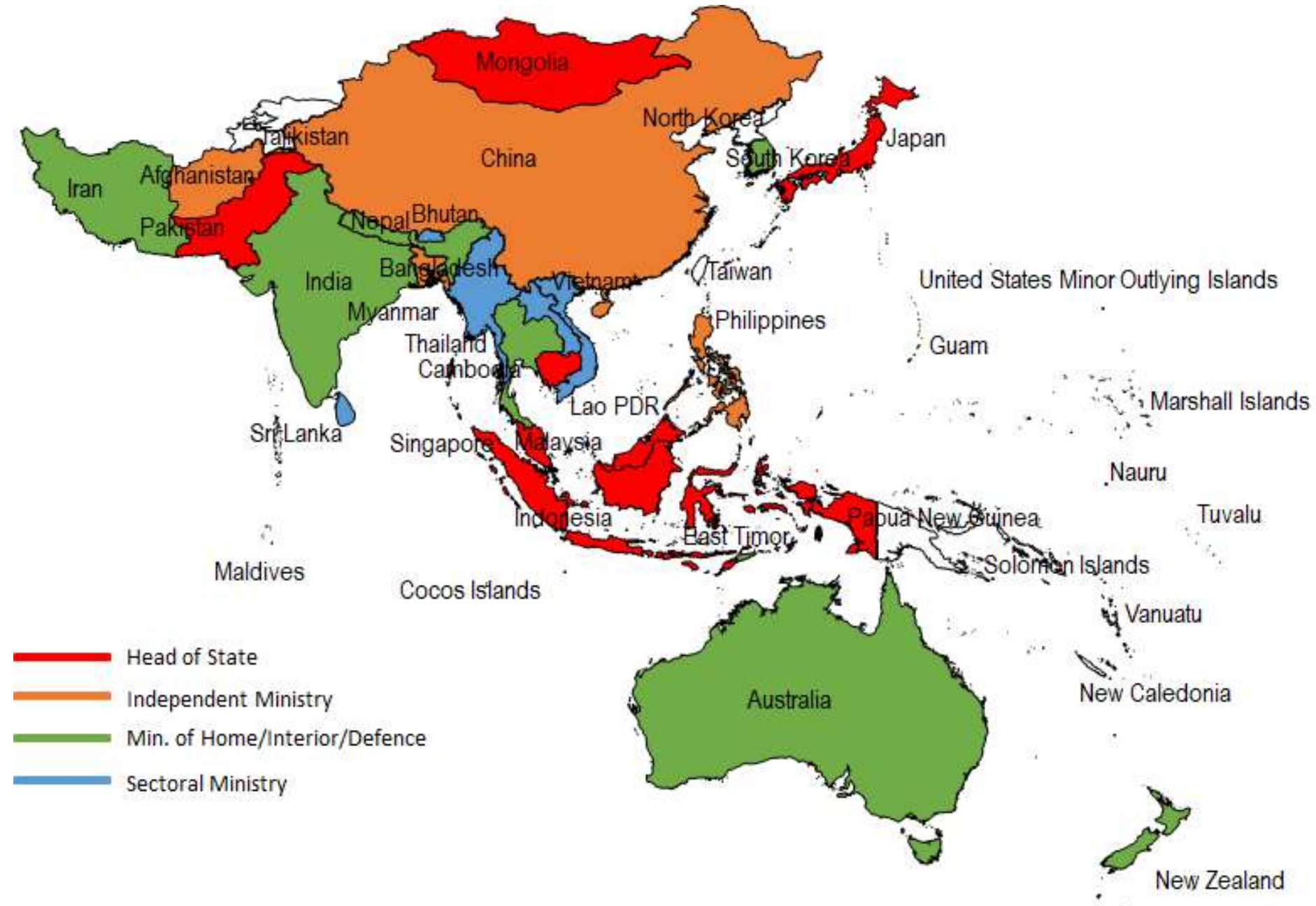




are we ready to
implement the new
paradigm?

Institutional Landscape

- Implementation through development plans, DRR plans, sectoral plans, hazard-specific plans
- Horizontal: Varied levels of shared responsibilities
- Vertical: Varied levels of devolved responsibilities

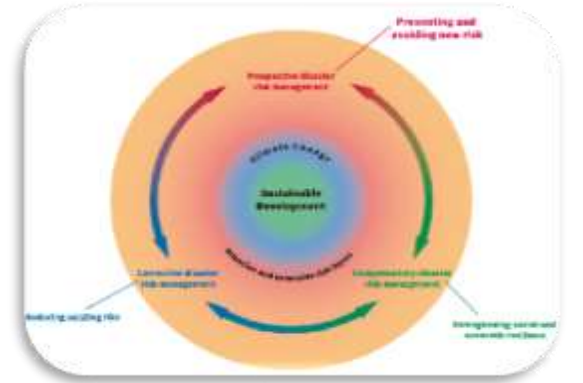


Towards System Risk Governance

“Innovation curve” – from destructive to regenerative approaches



Financing Disaster Risk Reduction



■ International financing:

- Disaster risk reduction accounts for less than 5 percent of global ODA,
- Post-shock assistance (response, reconstruction, relief and rehabilitation) receives 20 times the funding compared to prevention and preparedness

■ Public financing / Macroeconomics: ----->

- Dedicated DRR funding?
- Budgetary allocation a function of recent/last disasters
- Sector-specific implementation – issues of financing and coordination
- Local DRR funding
- Issues of contingent liability

■ Private financing

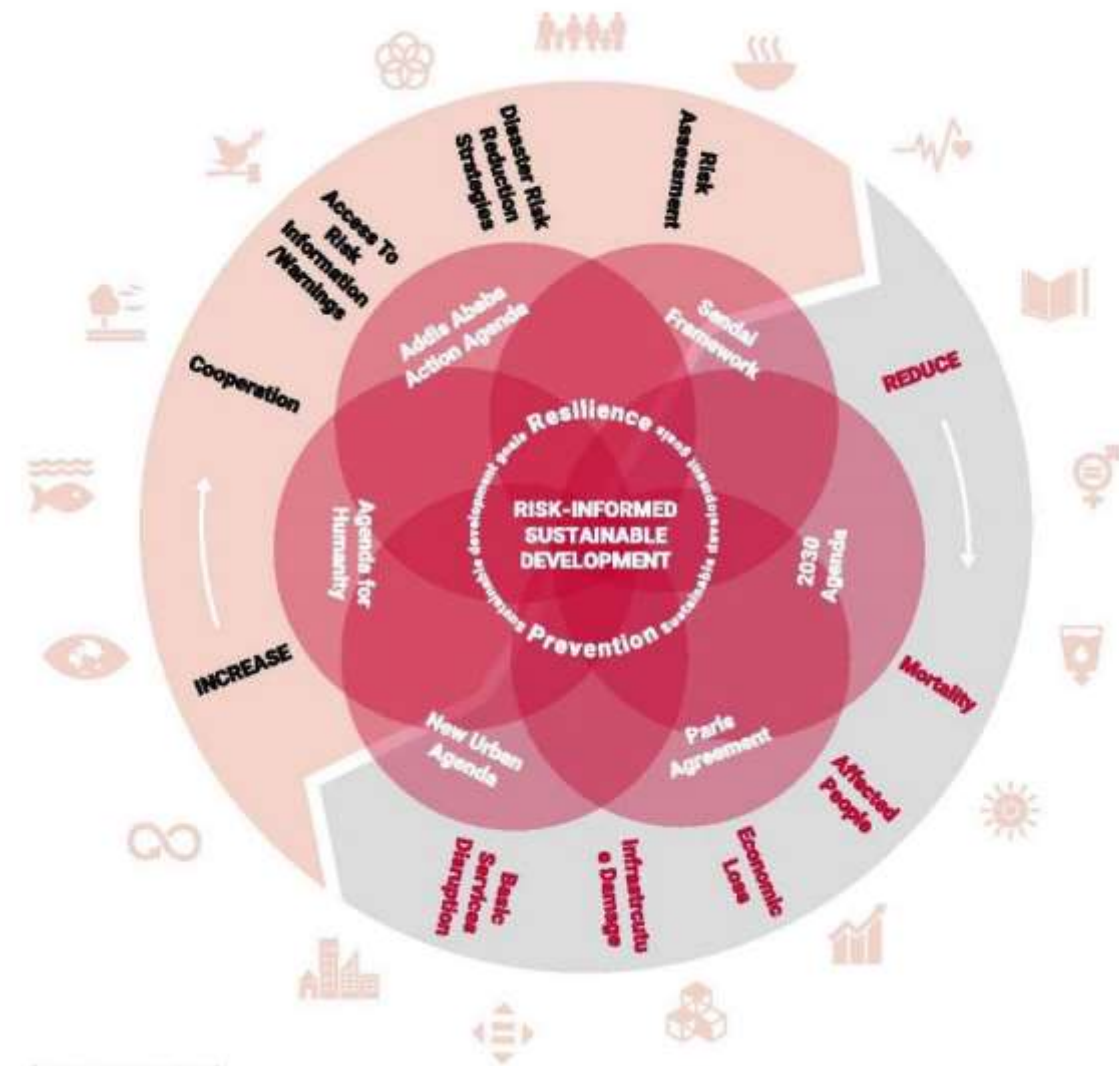
- Role of business resilience

Revisiting DRM cycle – Implementation and Financing

1. Corrective risk management:
Mitigation / Early warning and preparedness
2. Compensatory risk management:
Insurance, Risk Transfer, Risk Financing
3. Prospective risk management?
 - Drivers of risk

Key Messages

- Appreciate the risk complexity and renew efforts to adopt a systems approach its understanding
- Apply the most appropriate or mix of risk management strategies in specific contexts
- Risk disclosure → Risk pricing
- Revisit public financing mechanism to invent means for financing prevention
- From 'Government' to 'Governance': A whole-of-government and whole-of-society approach
 - Inclusiveness
 - Localization
- Risk is everyone's business!



Key Resources

- **Disaster Risk Reduction Terminology**

<http://www.preventionweb.net/english/professional/terminology/>

- **Sendai Framework for Disaster Risk Reduction 2015-2030, UN**

<http://www.preventionweb.net/drr-framework/sendai-framework>

- **The Global Assessment Report 2019 with link to GARS 2013, 2011, 2009 & the Global Risk Atlas**

<http://www.preventionweb.net/gar/>

- **Understanding Disaster Risk – based upon GARs 2009, 2011, 2013, 2015, UNISDR – including risk models, viewers and data**

<http://www.preventionweb.net/risk> and <http://risk.preventionweb.net/capreviewer>

- **The Global Risks Report 2019, 14th Edition, World Economic Forum**

http://www3.weforum.org/docs/WEF_Global_Risks_Report_2019.pdf

- **Unbreakable, GFDRR, World Bank**

https://www.gfdrr.org/sites/default/files/publication/Unbreakable_FullBook_Web-3.pdf

- **View all UNISDR GETI National Workshop Recommended Reading and Sources:**

▪ <https://www.preventionweb.net/collections/geti-national>

A horizontal bar with four colored segments: red, purple, orange, and teal.

2020 ASIA-PACIFIC MINISTERIAL CONFERENCE ON DISASTER RISK REDUCTION

23-26 JUNE, BRISBANE

Thank you

Animesh Kumar
Deputy Head (Asia and the Pacific)
UN Office for Disaster Risk Reduction
animesh.kumar@un.org
[@animesh00](#)