## Flood and Drought Risk Management

Implementing the Sendai Framework for Disaster Risk Reduction

06 June 2018, Bangkok, Thailand



## Disaster Impact: 2000-2017

- 700 disasters per year (45% in Asia-Pacific)
- 6700+ deaths per month (60% in Asia-Pacific)
- **0.5+ million** affected per day (85% in Asia-Pacific)
- US\$1.4 trillion Direct economic losses due to disasters in the last decade
- **30.6 million** people displaced in 2017 Over 60% due to disaster

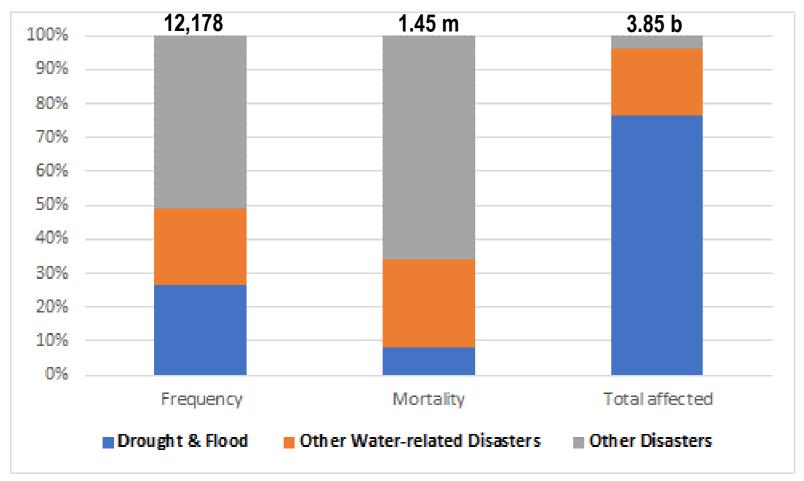




Source: EM-DAT and IDMC



## **Disasters 2000-2017**



...climate change and water-related disasters account for almost 90 percent of the 1,000 most disastrous events since 1990...

The Cancun High-Level Communiqué 2017

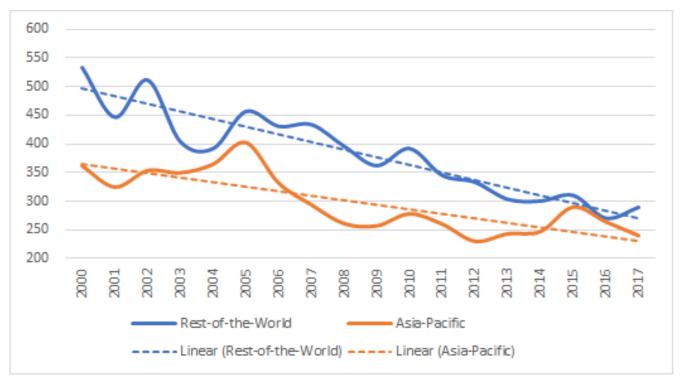
Source: EM-DAT



## Disaster Impact 2000 - 2017

### Disaster Frequency

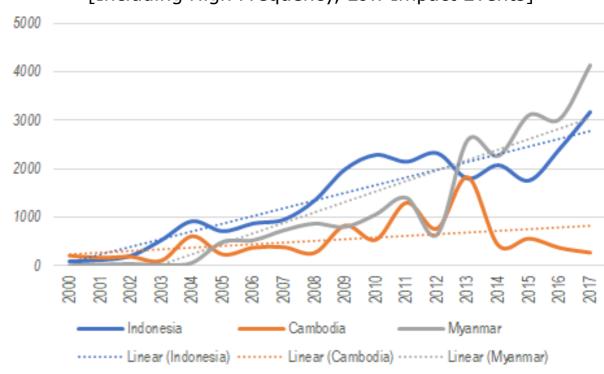
#### **Threshold Disasters**



Source: EMDAT

#### **Disasters at All Scales**

[Including High Frequency, Low Impact Events]



Source: DesInventar / UNISDR



## **Risk Outlook**

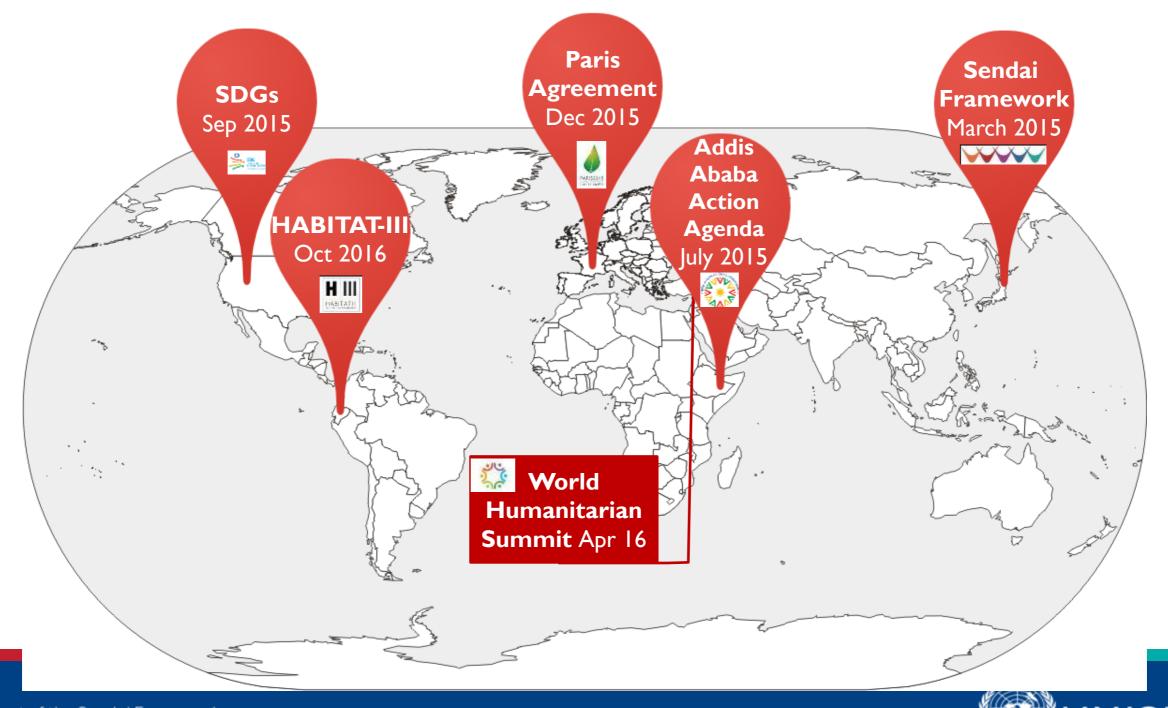
A growing economy is a thirsty economy. .. Water is life but also a threat to life.

HIGH LEVEL PANEL ON WATER

Effective disaster risk reduction requires the consideration of not just what has occurred but of what could occur. Most disasters that could happen have not yet happened.

- Overconsumption of water resources has surpassed the biocapacity of the planet – e.g. unsustainable extraction of groundwater
- Coastal and fluvial flood risk expected to accelerate in future, overwhelmingly in Asia.
- By 2030 the world may face a 40% shortfall in water availability
- By 2050, 45% of global GDP will be at risk due to water stress
- By 2050, it is estimated that 40 percent of the global population will live in river basins that experience severe water stress





## Sendai Framework: Priorities for Action





## **SDGs & Disaster Risk Reduction**





## Managing Disaster Risk & Water Resource

#### **Water:** The resource and a 'limiting factor'; From Droughts to Floods:

#### Disaster Risk Monitoring

- Early warning systems for the full range of hydrological variability
- Monitor the cascading impact of disasters

#### Preparedness:

 Recognize water supply as a critical infrastructure to ensure it remains safe, effective and operational during and after disasters

#### DRR Investments

- Integrated flood and drought management should be made central to the planning and management processes (e.g. watershed management)
- Ecosystem-based disaster risk reduction and adaptation
- Parametric insurance linked with early warning

...sustainable and integrated water resource management is necessary for successful disaster preparedness, disaster risk reduction and climate change adaptation ...

UNGA A/RES/72/218 (2018)



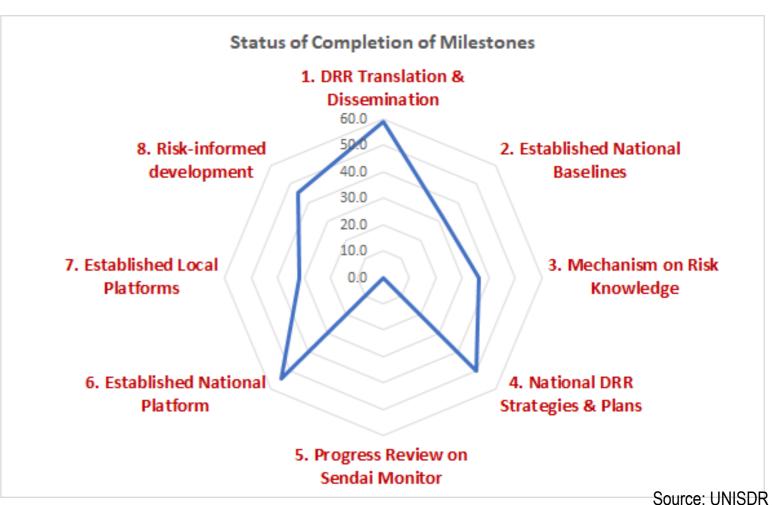
# Progress in Achieving Regional Milestones in Asia-Pacific

#### **High progress:**

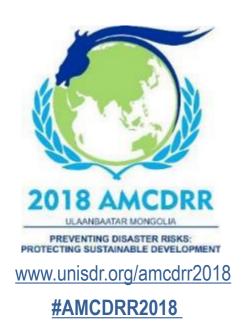
- Translation into national languages and dissemination
- National Platforms
- National DRR Strategies and Plans (?)

#### Low progress:

- National baseline assessment
- Progress review on Sendai Monitor
- Mechanism on risk knowledge
- Local Platforms







#### **Asian Ministerial Conference on Disaster Risk Reduction**

03 - 06 July 2018, Ulaanbaatar, Mongolia





## Thanks for your attention!

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