

Regional and transboundary cooperation for floods and droughts risk reduction in South Asia

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Strengthening preparedness and resilience of South Asia's transboundary rivers

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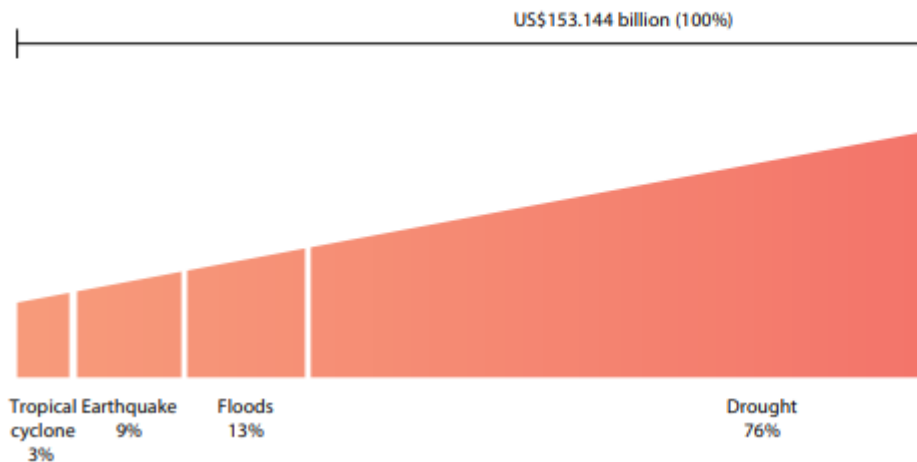


SENDAI FRAMEWORK
FOR DISASTER RISK REDUCTION 2015-2030

South Asia Riskscape

- South Asia river basins are flood and drought prone areas

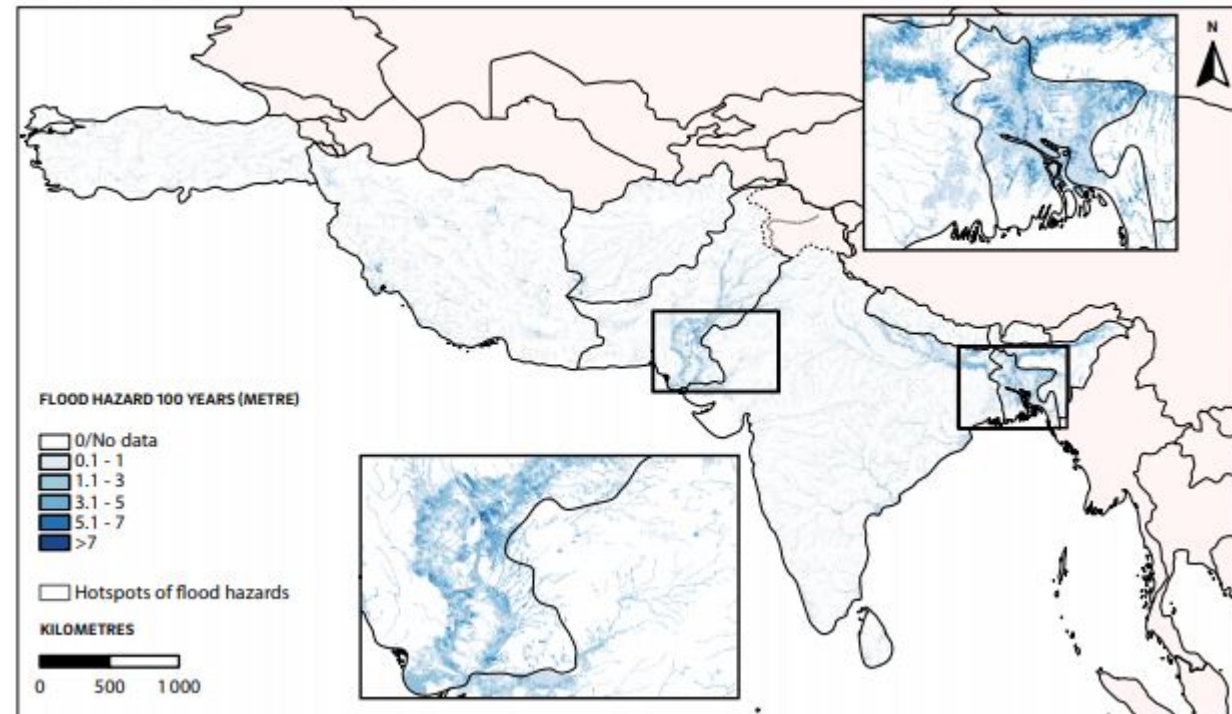
FIGURE 4 South and South-West Asia regional riskscape (average annual losses) – volumetric analysis



Source: ESCAP 2019 Asia Pacific disaster report

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

FIGURE 5 Hotspots of floods and transboundary river basins



- Since 1900 disaster related to floods and droughts in South Asia have affected over 3 billion people and caused at minimum 184 million USD direct damage.
- Risk of droughts extend to countries with large agricultural sectors and large rural populations in high levels of poverty and limited access to social protection.

Transboundary river basins as Disaster risk hotspots

- **Risk from extensive and intensive risk in annual average losses (AAL) represent up to 7.65 % of the total GDP for Nepal, 9.92% for Bhutan, 6.77 for Pakistan and 6.40% for Bangladesh.**
- **Droughts and floods account for 89% of the total multi-hazard annualized losses.**
- ***Multi-dimensional vulnerability to climate risk and water-related disasters is on the rise:***
 - Increased occurrence of floods and droughts hazards driven to higher climate induced weather variability and land and water uses and practices changes.
 - Exposure continues to increase driven by population growth, land shortages, unsustainable urbanization and agriculture practices as well as risk-blind infrastructure development and economic growth.
 - Cascading and compounding disaster events highlight the systemic nature of risk – compounded socio-economic vulnerabilities and magnified disaster impact.

Transboundary disaster Risk reduction – entry points for enhanced water governance

Sendai Framework Priority 2 –transboundary cooperation to enable policy and planning for the implementation of ecosystems-based approaches with regards to shared resources such as river basin to build resilience and reduce risk.

- ***Transboundary disaster risk management***, especially cooperation on early warning systems as an entry point for collaboration on more contentious issues of water sharing agenda.
- ***Basin-wide climate and disaster risk assessment to highlight:***
 - Water management challenges not well considered in existing bilateral water treaties
 - Drivers of disaster risks such as deforestation, ecosystem degradation, etc.
- ***Risk-informed investments informed by climate and disaster impact assessment***
 - Climate and disaster risk to the plan/programme/project assessed
 - Impacts of investment in creating, exacerbating or reducing risks and vulnerabilities assessed
- ***Ecosystem-based approaches and nature based solutions for transboundary basin risk management***

Regional disaster risk governance

Asia regional plan for implementation of the Sendai Framework for Disaster Risk Reduction (DRR).



ASIA-PACIFIC MINISTERIAL CONFERENCE ON
Disaster Risk Reduction
2020

- **Priority 2: Strengthening Disaster risk governance** – Regional actions : Integrate DRR and ecosystem-based approaches to coherently implement the 3 conventions to prevent and reduce the impact of water-related disasters.
- **Priority 3: Investing in disaster risk reduction for resilience** - Regional actions :
 - Enhance the resilience of natural ecosystems, which function as natural buffers, through transboundary cooperation.
 - Integrated approach of blue, green and grey infrastructure for sustainable and resilient development.
- **Priority 4: Strengthen** existing regional mechanisms to enhance multi-hazard early warning and preparedness for multiple and transboundary hazards, as well as pre- and post-disaster recovery frameworks.
- **Multi-stakeholder engagement mechanisms** – APPDRR forum, APSTAAG, MCR 2030

Regional disaster risk governance for transboundary rivers

– opportunities in South Asia

■ SAARC disaster (risk) management framework to promote regional-level collaboration for floods and droughts Early warning – Early action

- Combined basin-wide meteorological and hydrological monitoring and forecasting systems
- Data exchange protocols and warning communication channels accompanied by coordinated preparedness and response systems.



SAARC

Disaster Management Centre

■ Regional, national and local support on climate and disaster risk management

- Regional-level frameworks and organizations supporting capacity development for coherent planning and implementation
- Linking governance levels (regional, national and sub-national) to support risk reduction objectives
- Promoting integrated water resource and natural resource management and nexus approaches (water-food-energy-ecosystems) in all-levels DRR strategies in support of mainstreaming and coherence agendas.

Thank you