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Spotlight 2: Supporting health system resilience through the Bangkok Principles

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Bangkok Principals
seven measures to prevent and/or reduce the risk of health emergencies such as pandemics that have the potential for huge social and economic impact

1. Promote systematic integration of health into disaster risk reduction policies and plans

2. Enhance cooperation between health authorities and relevant stakeholders

3. Strengthen public and private investment in health emergency and disaster preparedness

4. Integrate disaster risk reduction into health education and training

5. Incorporate disaster-related mortality, morbidity and disability data into multi-hazards early warning system

6. Advocate for, and support cross-sectoral, transboundary collaboration including information sharing, and science and technology for all hazards, including biological hazards

7. Promote coherence - create enabling environment for coherence of policies and strategies of the Sendai Framework for DRR, SDGs, climate change adaptation and other relevant instruments.
To promote discussions on the implementation of the health aspects of the Sendai Framework, including by taking note of the Bangkok Principles for the implementation of the health aspects of the Sendai Framework and other relevant regional and subregional frameworks and initiatives with a view to strengthening post-COVID-19 resilience and disaster preparedness in the region.

The Asia Pacific Disaster Report 2021 provides a snapshot of how natural hazards, climate change, and biological hazards are occurring simultaneously and increasing their combined impacts in various countries.
Through the Portal, ESCAP offers technical support to understand the impacts of the disaster-climate-health nexus through:

(1) understanding the combined risk hotspots of natural and biological hazards under various climate change scenarios,

(2) estimating the current and projected economic and non-economic losses for both natural and biological hazards under climate change, and

(3) estimate cost of adaptation of natural and biological hazards to support climate goals while recommending customizing key adaptation priorities at the regional, sub-regional and national levels.
Understanding the combined risk hotspots of natural and biological hazards under various climate change scenarios

Population exposure

The Portal shows through location-based GIS analytics the exposure of the most vulnerable populations in the Asia Pacific from natural and biological hazards under various climate scenarios.

There are areas of emerging and intensifying risks of natural and biological under climate change which will require in-depth climate knowledge to make evidence-based investments.

Populations in South and South-West Asia and South-East Asia are at highest risk from the combined impacts of floods, for example, and flood-related biological hazards like dengue, malaria and other vector-borne diseases.

Currently, the Portal’s climate scenarios are based on the RCP climate models but we are in the process of upgrading this to the latest IPCC AR6 models.
Understanding the combined risk hotspots of natural and biological hazards under various climate change scenarios

Healthcare infrastructure exposure

Shows through location-based GIS analysis where much of the critical infrastructure (like health facilities) will be exposed under climate change.

Estimates the number of vulnerable critical infrastructure under various climate change scenarios for each country in the Asia Pacific region.
Estimates annual average loss from natural and biological hazards under climate scenarios.

The current annual losses from natural and biological hazards are estimated at around $780 billion. Under RCP 4.5, these losses will increase to $1.1 trillion, and under RCP 8.5, to around $1.4 trillion.

The Portal further estimates this analysis for each country.
The Portal estimates adaptation cost for natural and biological hazards under climate scenarios for each country and subregions.

For example, in Bangladesh, the cost of adapting to biological hazards in 194 million USD, or only 0.1 per cent of the GDP.
The reverse trend on SDG 13 can be attributed to high disaster related mortalities and injuries & widening gap in climate change mitigation-adaptation in the region.

The Portal can be used for evidence-based risk informed decisions in planning and SDG implementation.

We are taking forward the applications of the Portal for integrating natural and biological hazards to the countries through the Issue Based Coalition on Resilience.
Thank you

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