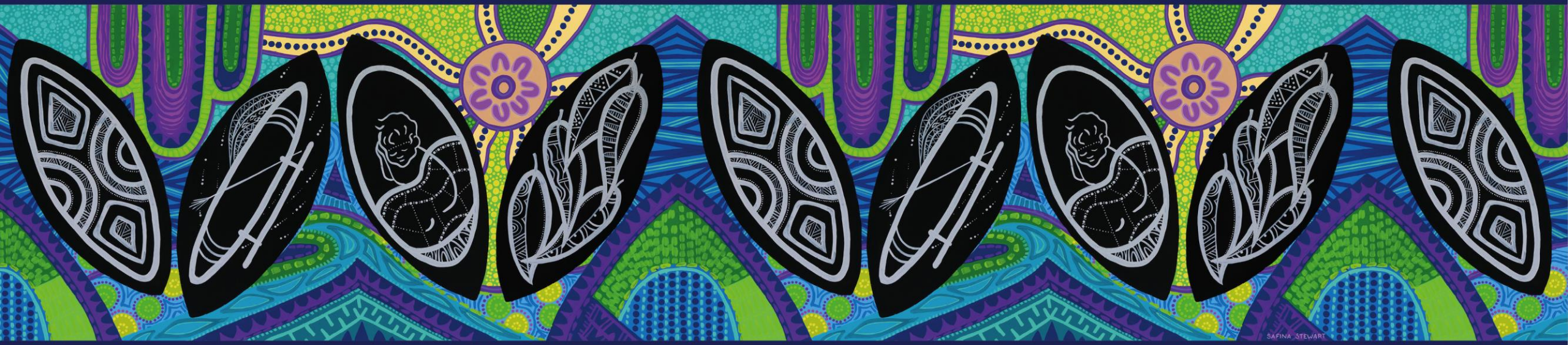
ASIA-PACIFIC MINISTERIAL CONFERENCE ON
Disaster Risk Reduction
Brisbane, Queensland, Australia **19–22 September 2022**



Asia Pacific Ministerial Conference for Disaster Risk Reduction, 2022

Spotlight 2: Supporting health system resilience through the Bangkok Principles

Madhurima Sarkar-Swaisgood
ESCAP

Australian Government

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Operationalizing the Bangkok Principles through ESCAP Asia Pacific Risk and Resilience Portal

Bangkok Principles

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 h*
7. ***Promote coherence*** *-create enabling environment for coherence of policies and s Sendai Framework for DRR, SDGs, climate change adaptation and other relevant*

Building back better from crises through regional cooperation in Asia and the Pacific (ESCAP/RES/77/1)

Implementing health aspects of the Sendai Framework for Disaster Risk Reduction
[Para 14. (a)]

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.

Operationalizing the Bangkok Principles through ESCAP Asia Pacific Risk and Resilience Portal

Through the Portal, ESCAP offers technical support to understand the impacts of the disaster-climate-health nexus through:

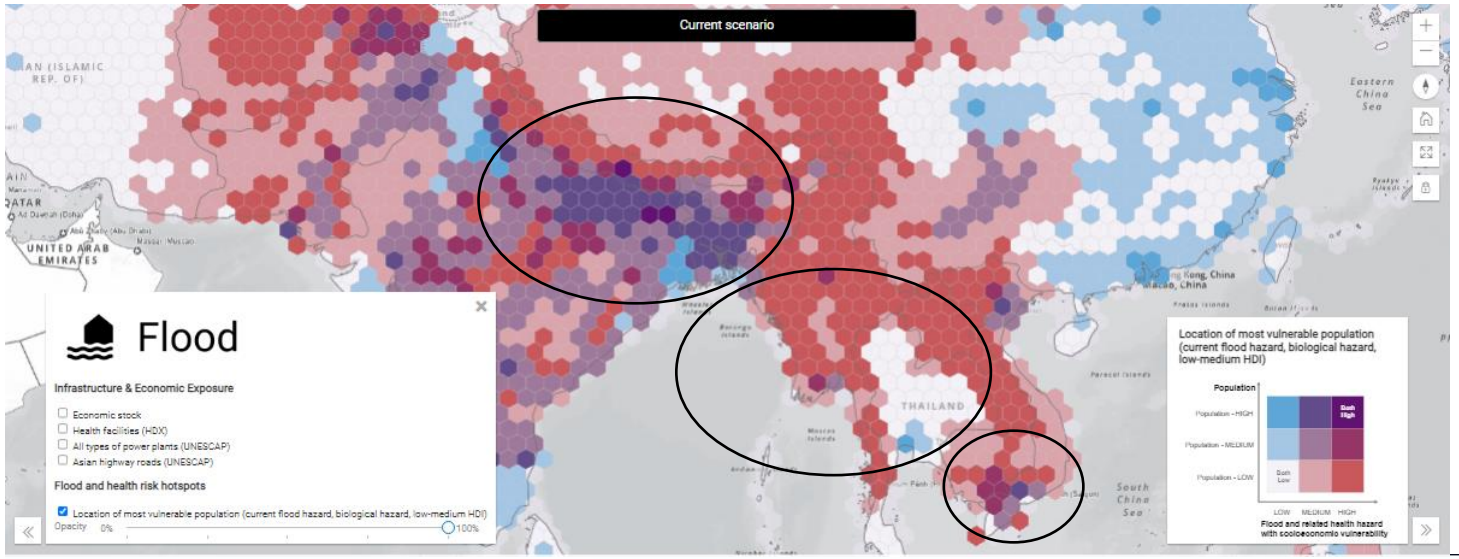
(1) understanding the combined risk hotspots of natural and biological hazards under various climate change scenarios,

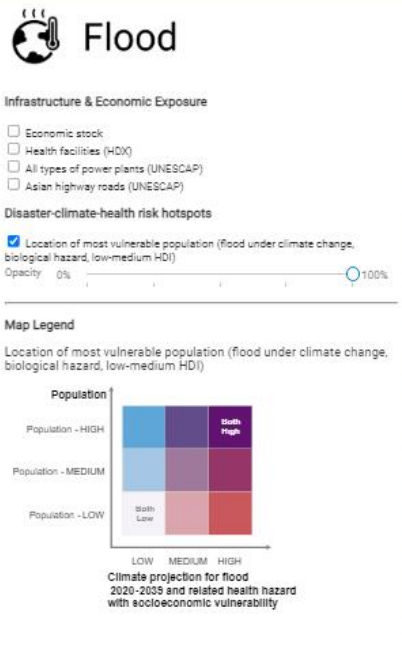
(2) estimating the current and projected economic and non-economic losses for both natural and biological hazards under climate change, and

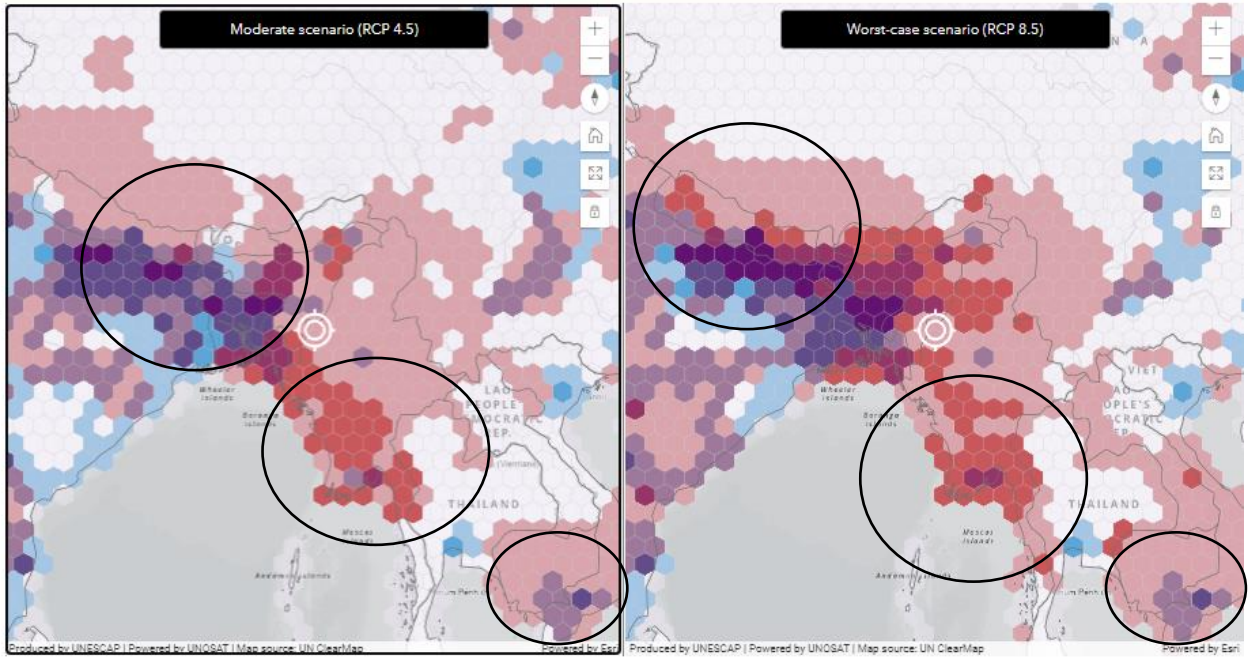
(3) estimate cost of adaptation of natural and biological hazards to support climate goals while recommending customizing key adaptation priorities at the regional, sub-regional and national levels.

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

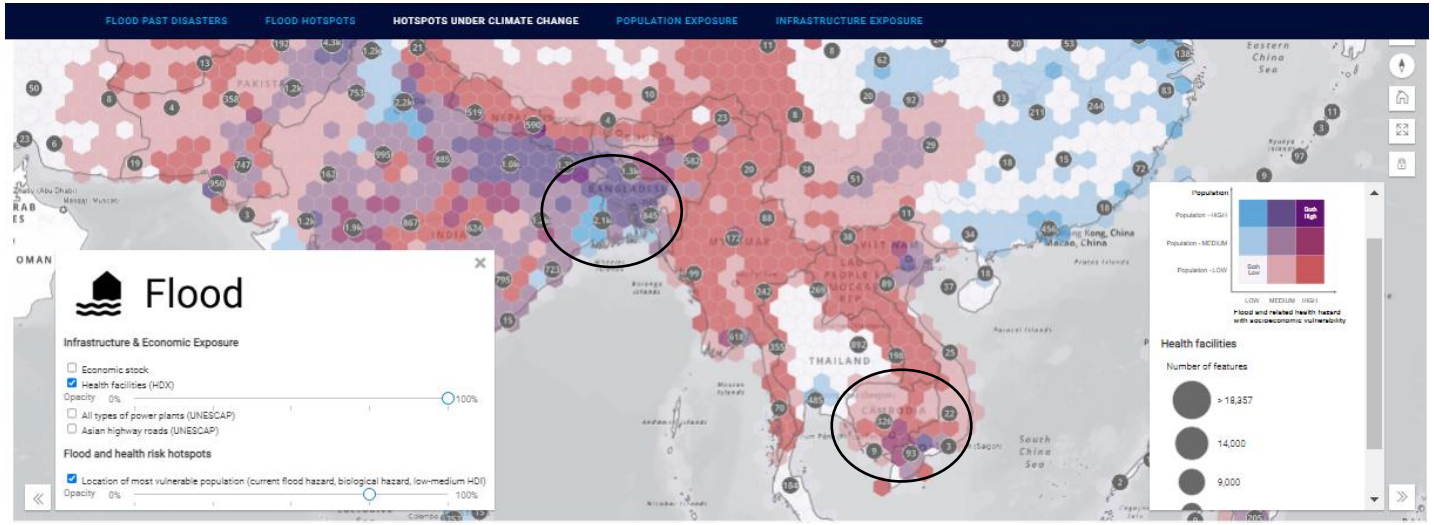
There are areas of emerging and intensifying risks of natural and biological under climate change which will require in-depth climate knowledge to make evidence-based investments

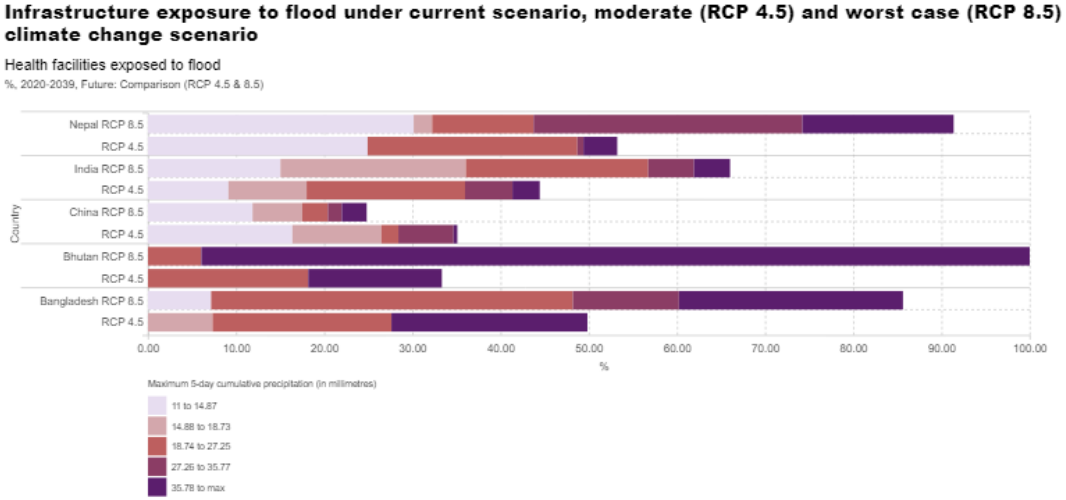
Populations in South and South-West Asia and South-East Asia are at highest risk from the combined impacts of floods, for example, and flood-related biological hazards like dengue, malaria and other vector-borne diseases

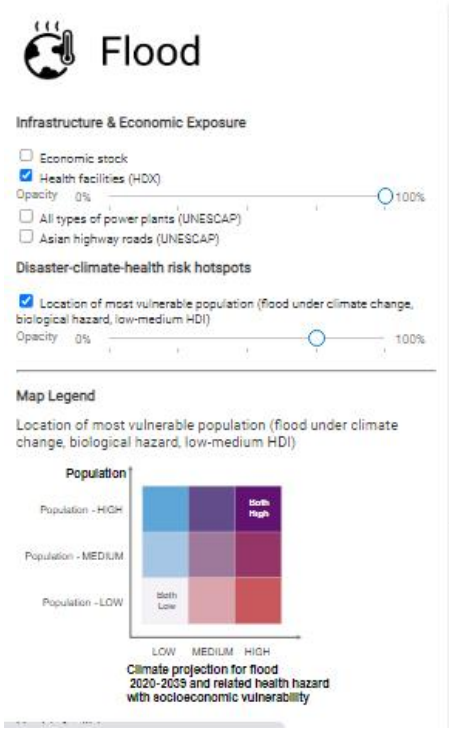
Currently, the Portal based on the RCP clim the process of upgrad AR6 models

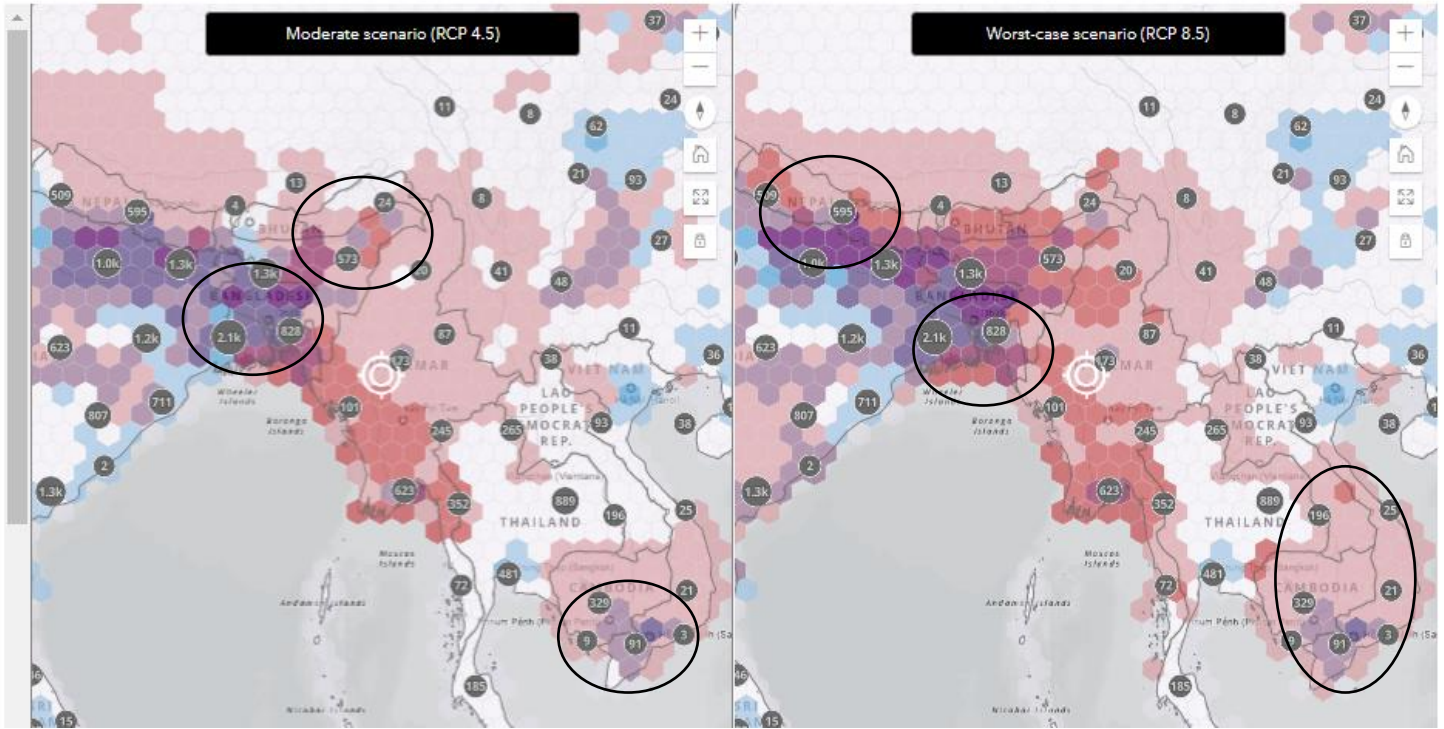
Understanding the combined risk hotspots of natural and biological hazards under various climate change scenarios

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 vulnera
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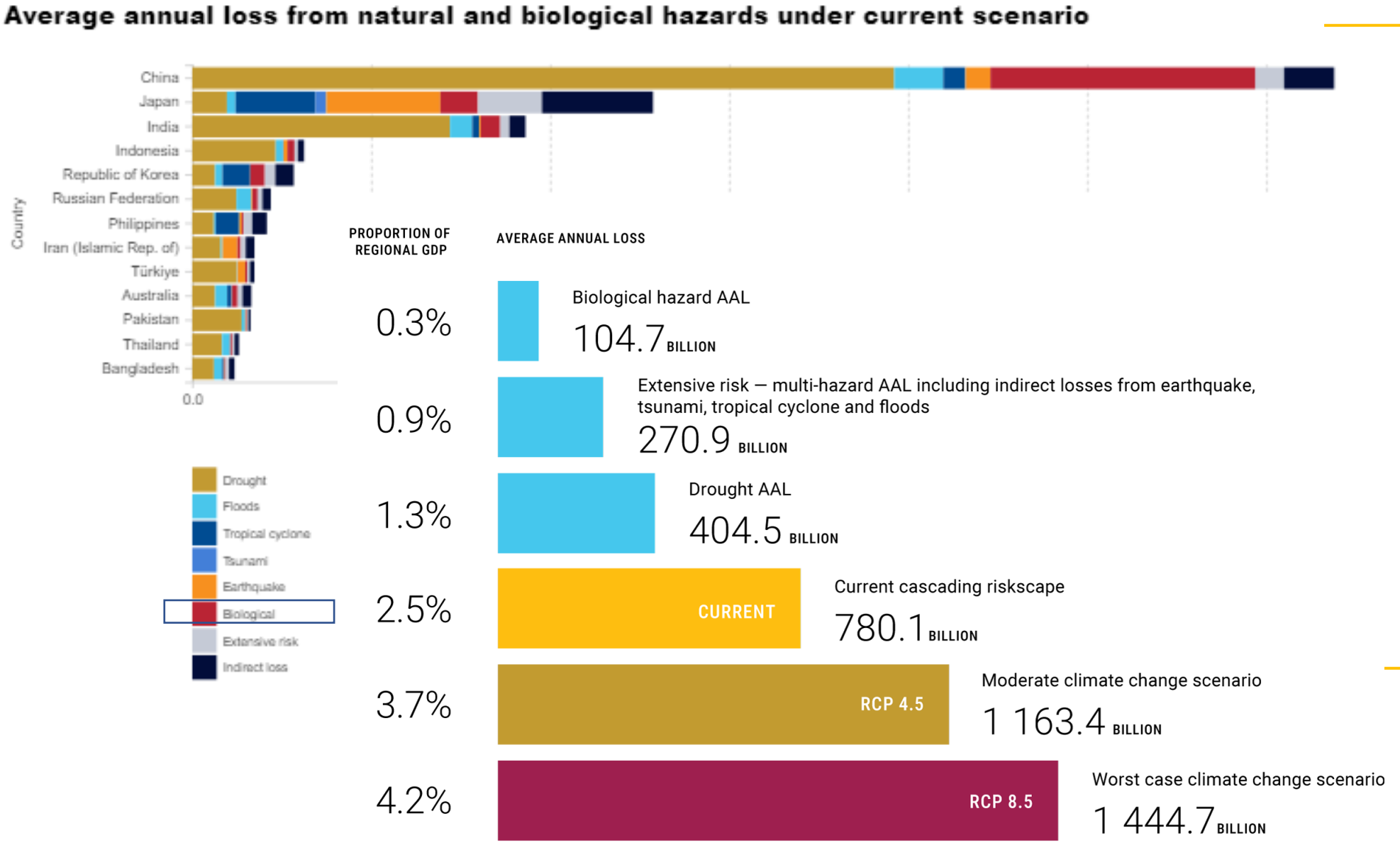
scenari

Estimating the current and projected economic and non-economic losses for both natural and biological hazards under climate scenarios

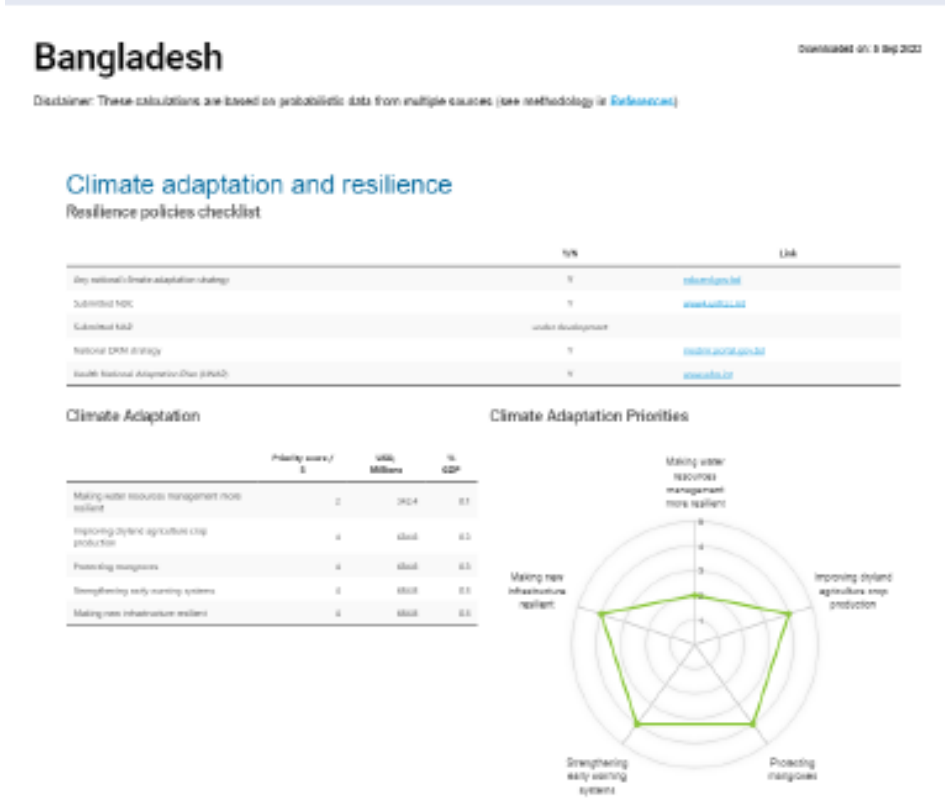


Estimates annual average loss from natural and biological hazards under climate scenarios

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

Customized adaptation cost and priorities for natural and biological hazards stemming from the riskscape



Annual adaptation cost under RCP 8.5 by subregion, billions of US dollars

Subregion	Climate-related hazard AAL (flood, tropical cyclone, drought)	Adaptation cost for climate-related hazards	Biological hazard AAL	Adaptation cost for biological hazards	Total climate adaptation cost
East and North-East Asia	640	130	180	61	190
North and Central Asia	9.2	1.8	0.66	0.22	2.1
South and South-West Asia	230	47	13	4.4	51
South-East Asia	102	20	5.9	2.0	22
Pacific	21	4.5	2.2	0.74	5.2
Total	1 000	200	200	68	270

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

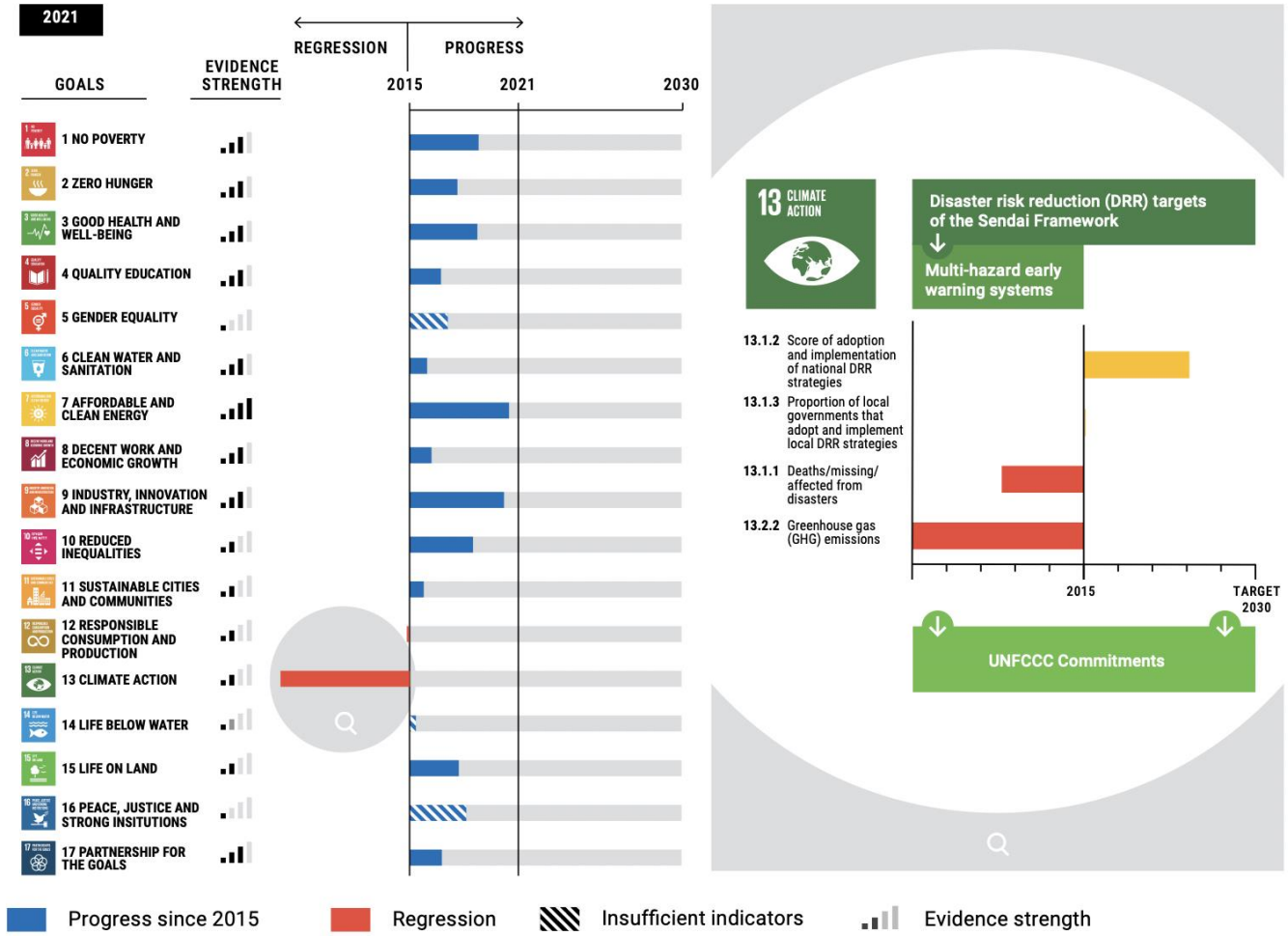
For example, in Bangladesh, the cost of adapting to biological hazards in 194 million USD, or only 0.1 per cent of the GDP

Annual adaptation costs, millions of USD

	USD, Millions	% GDP
Cost of adapting to climate related hazards	3,081.6	1.1
Cost of adapting to biological hazards	194.2	0.1
Total adaptation costs	3,256.0	1.2

Comprehensive monitoring to support to accelerating the implementation of SDGs and Reversing the regressing trend on SDG Goals such as Goal 13

Progress on the SDGs in Asia Pacific



Source: *Asia and the Pacific SDG Progress Report 2022* (United Nations publication, 2022).

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

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Thank you

Dr. Madhurima Sarkar-Swaisgood
Economic Affairs Officer
UNESCAP
Sarkar-Swaisgood@un.org