Asia Water Forum 2022
8–11 August 2022 • Online

[APWF Side Event "Pathways for Quality-Oriented Growth through a Resilient and Water-Secure Asia and the Pacific"]
8th August 9:00-10:30 Manila time

Climate services for building resilience in the Hindu Kush Himalayan region

Asia-Pacific Water Forum

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ICIMOD

ADB

International Centre for Integrated Mountain Development

A regional mountain knowledge, learning, and enabling centre devoted to sustainable mountain development for mountains and people

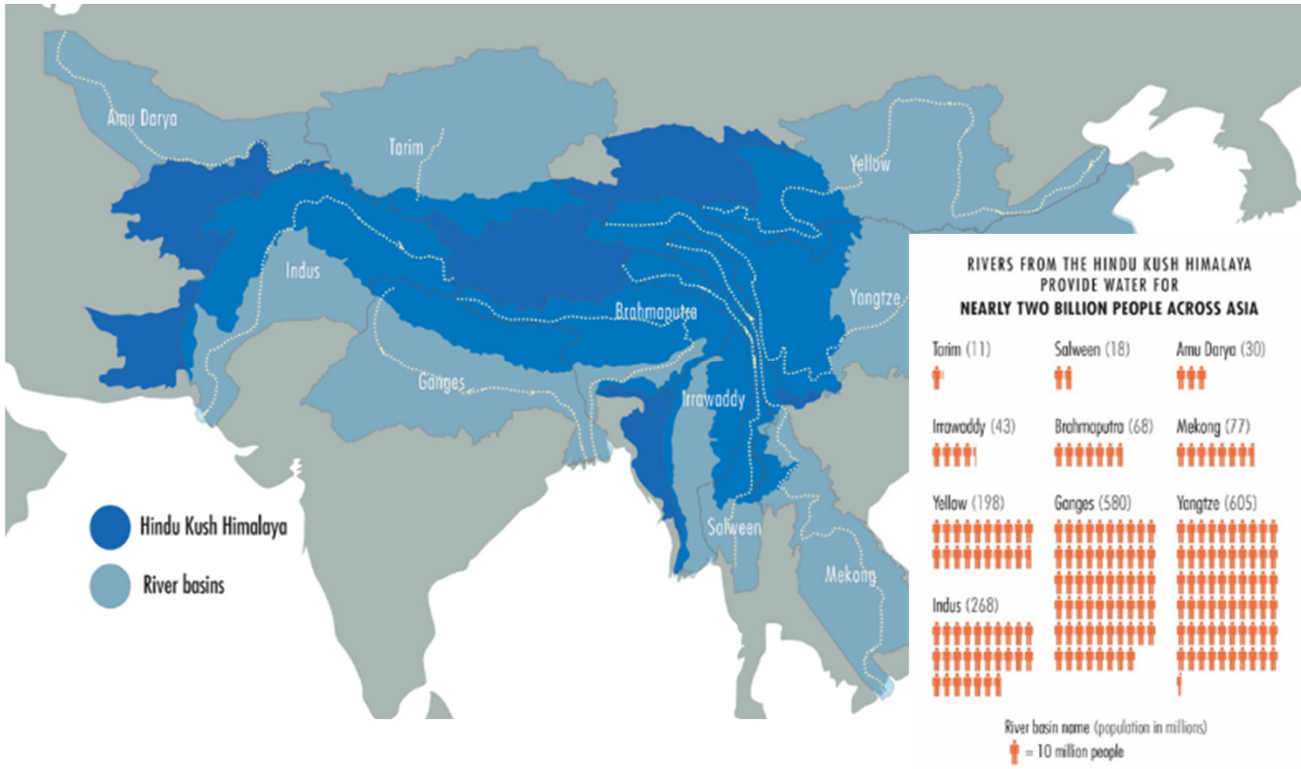
Hindu Kush Himalayan region

240 million people, 1.6 billion d/s

Youngest geological formation - dynamic & fragile mountain ecosystem;

High spatial variations with widely varying physical and climatic conditions;

Third Pole - Largest reserve of snow and ice outside the polar region



Key issues in the HKH

Cascading multi-hazard environment

Upstream-downstream linkages

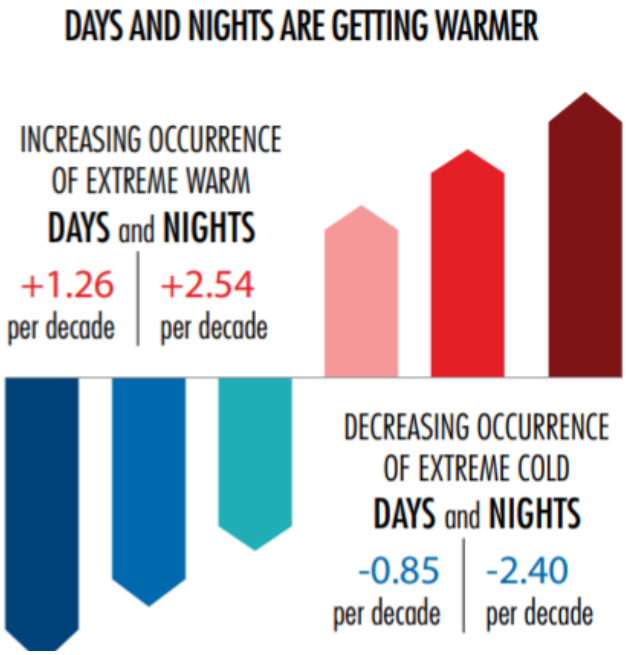
Climate change and variability

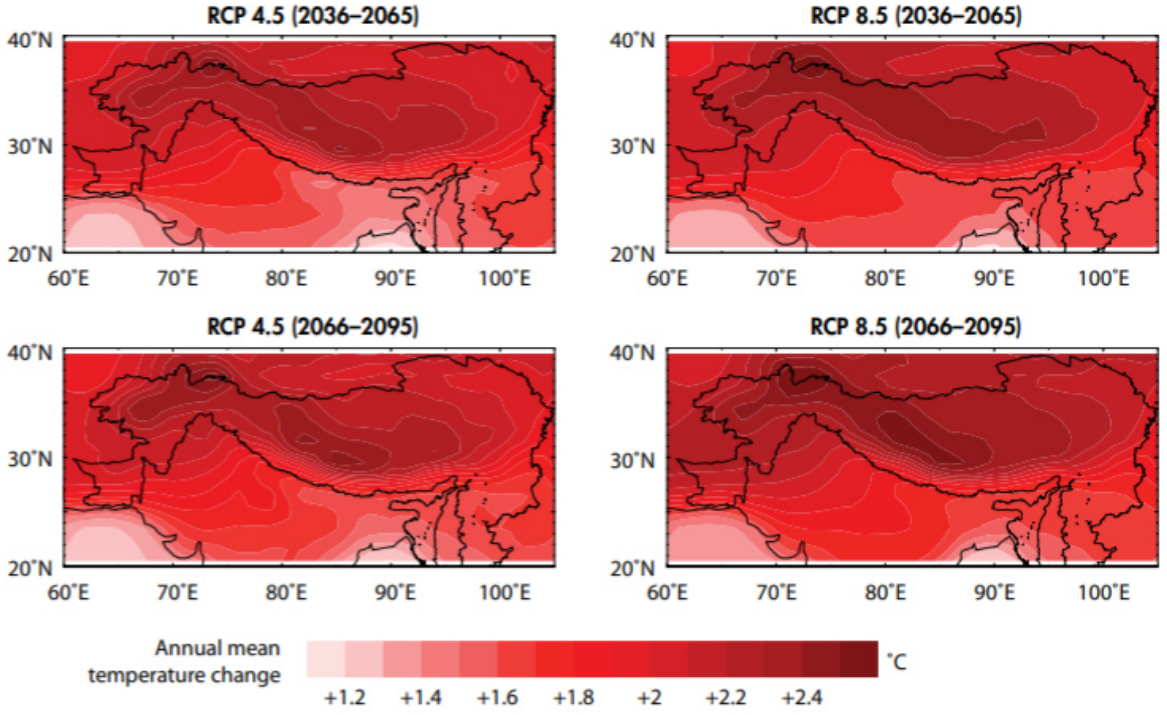
Connectivity

Governance

The Climate Context

In a 1.5˚C world, warming will likely be at least **0.3˚C higher in the HKH**, and at least 0.7˚C higher in the northwest Himalaya and Karakoram.



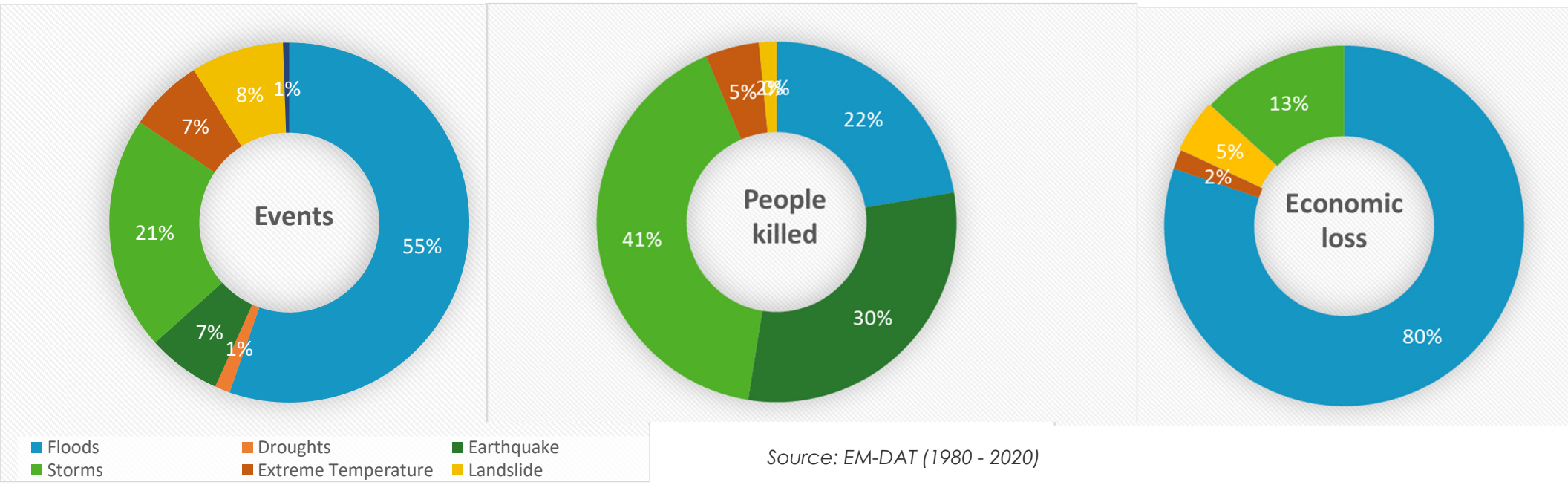


THE HKH WILL WARM MORE THAN THE GLOBAL MEAN AND MORE RAPIDLY AT HIGHER ELEVATIONS

Source: P. Wester, A. Mishra, A. Mukherji, A. B. Shrestha (eds) (2019) The Hindu Kush Himalaya Assessment—Mountains, Climate Change, Sustainability and People, Springer Nature Switzerland AG, Cham. Download the full assessment at https://doi.org/10.1007/978-3-319-92288-1

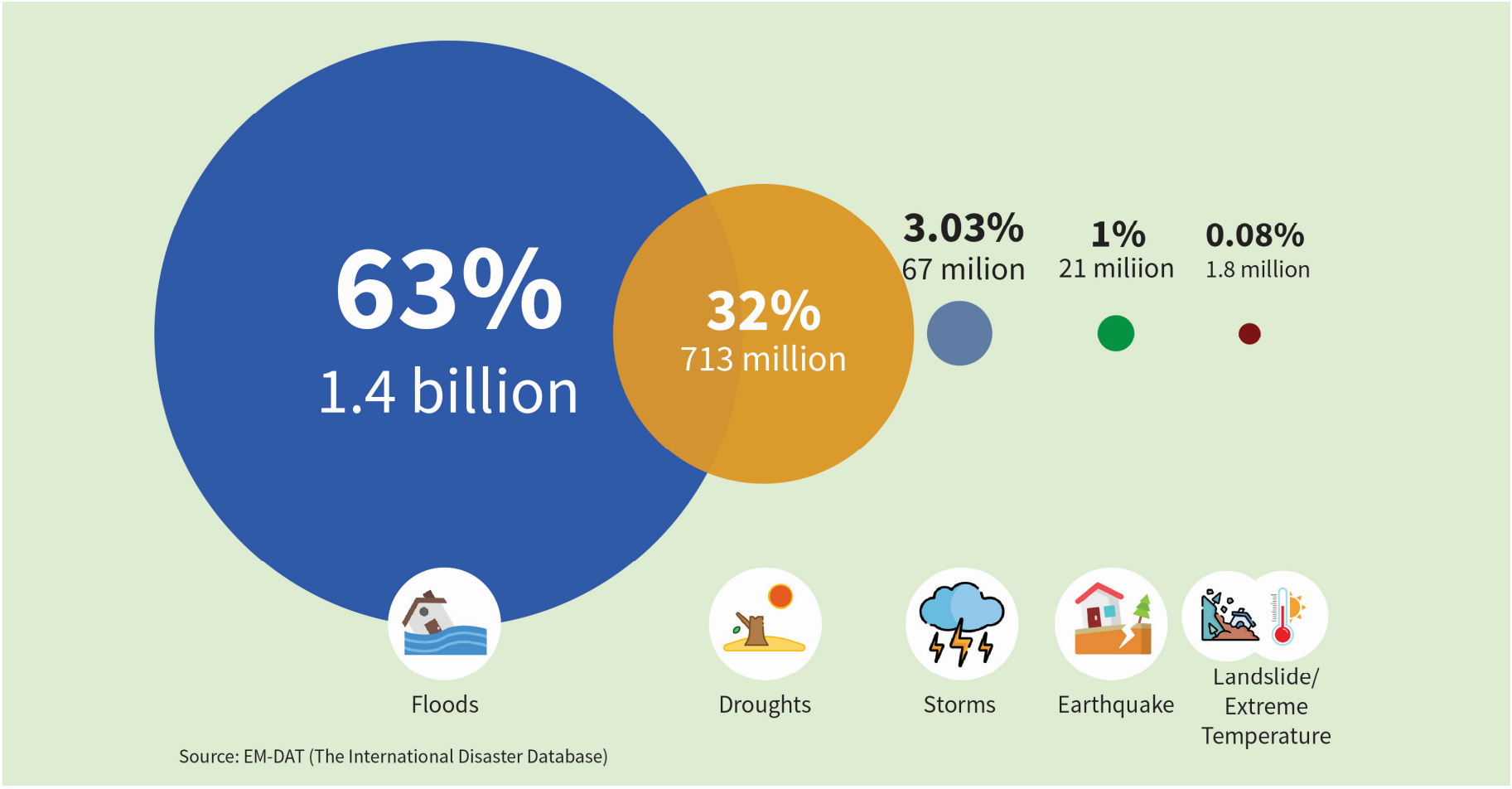
Hindu Kush Himalayan region is prone to disasters

More than 1 billion people are at risk of exposure to increasing frequency and intensity of natural hazards

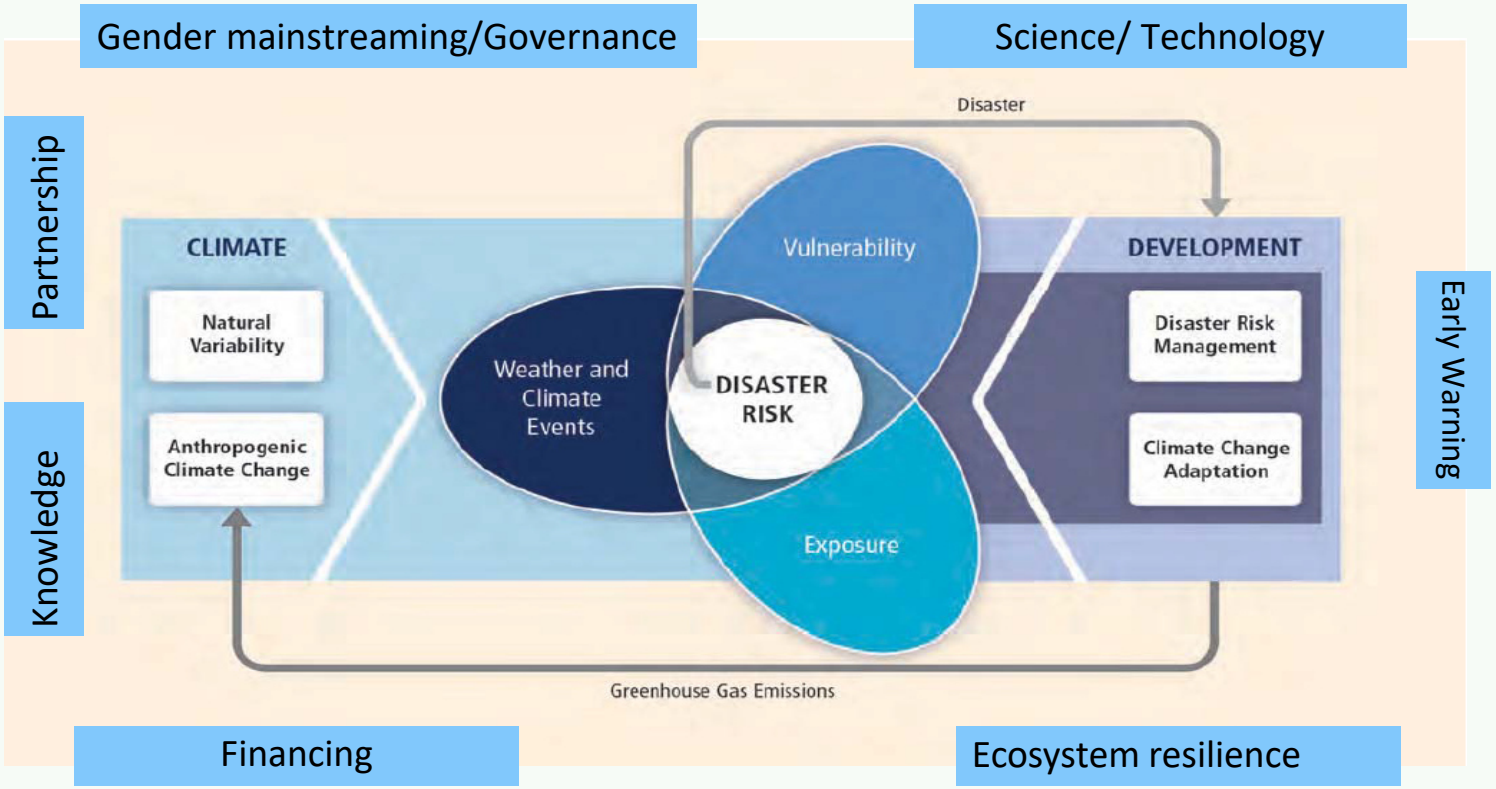


Source: EM-DAT (1980 - 2020)

People affected by disaster type in the HKH (2000-2019)



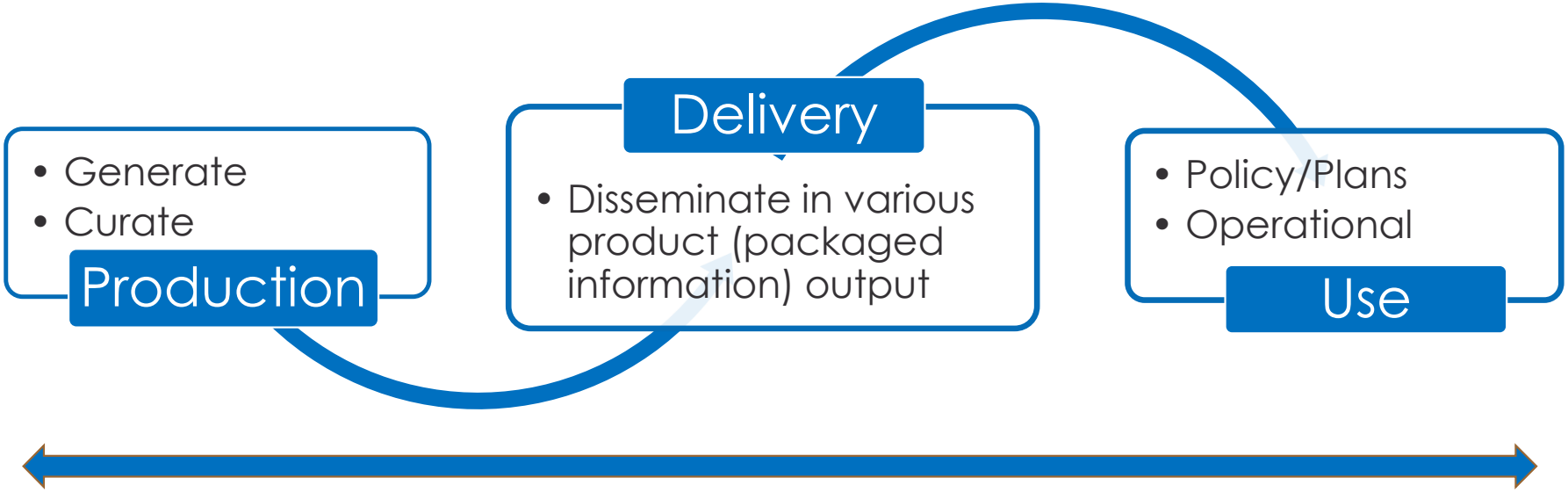
Reducing risk, vulnerability and exposure



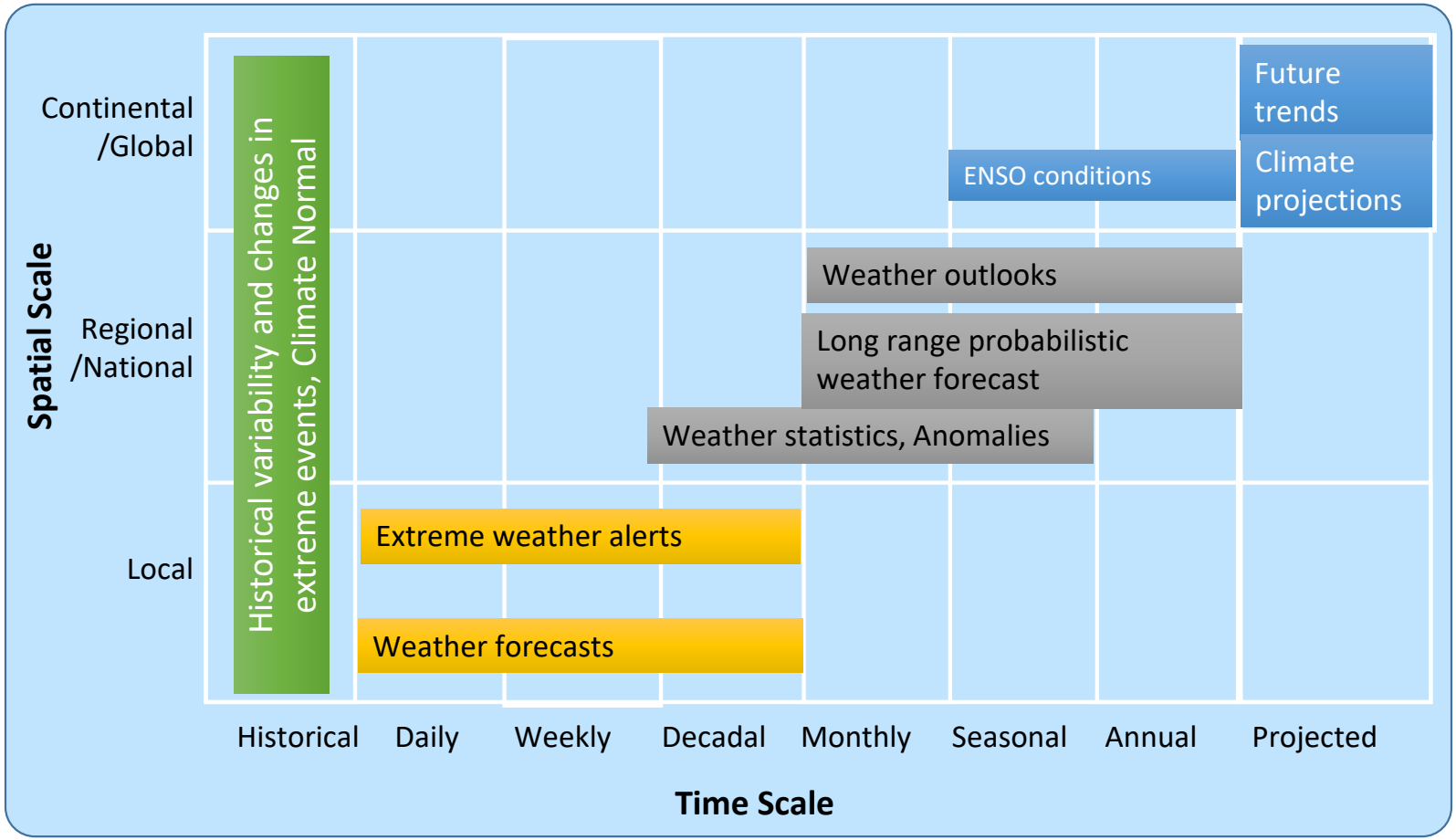
Source: Adapted from IPCC, 2012 (SREX report)

Data and information is critical

Climate service is defined as ***Science-based information and forecasts that empower decision-makers at different levels to manage the risks and opportunities of climate variability and climate change (WMO, 2011)***.



Spatial and temporal scale



Climate risk sensitive growth sectors

Agriculture: Climate change is detrimental to agriculture systems.

Tourism

Water and energy

Health

Disasters – floods, droughts, forest fire, extreme temperatures/heat waves, air pollution

Results in loss of productivity, infrastructure, property and lives.

Opportunities

Harmonization of climate data and information, standardization and risk assessment methodologies to enhance climate resilience

Build capacity to improve the adaptive capacity to climate change

Use of science and technology: EO and geospatial tools for monitoring, assessing, and forecasting

Develop gender responsive climate services for better risk preparedness

Co-create innovative, inclusive and proven solutions to understand, interpret and use for informed decision making

Enhance partnerships and regional cooperation

ICIMOD 2030 strategy

A greener, more inclusive, and climate resilient Hindu Kush Himalaya

- Resource efficient
- Carbon neutral
- Cleaner
- Nature positive

- Gender sensitive
- Youth empowering
- Equal opportunity

- Protected via disaster reduction measures
- Adapted via livelihoods/enterprises
- Transformed via systems (policy, financial, institutional)


Thank you
Let’s protect
the pulse.