

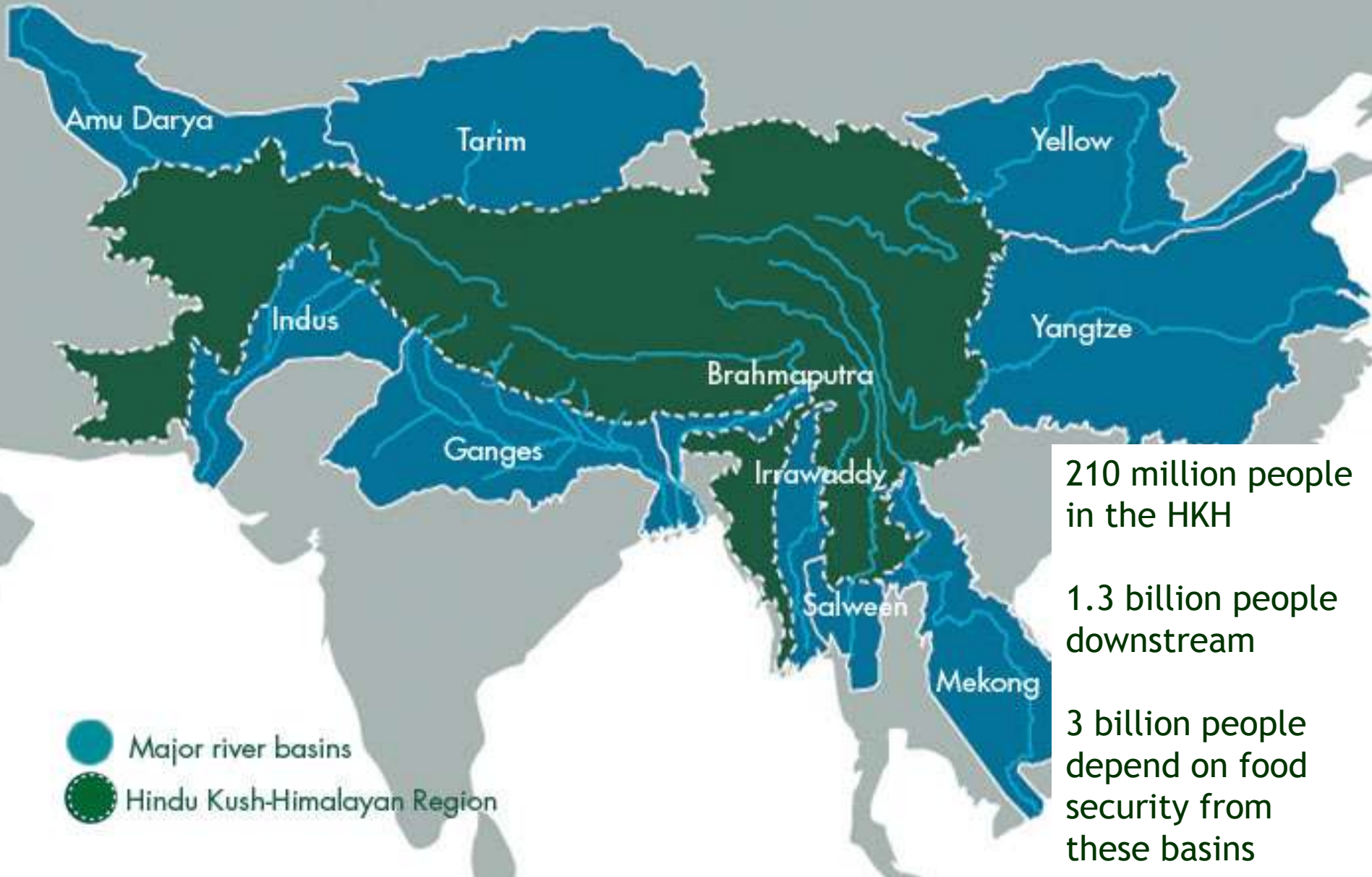
ICIMOD - Responding to Mountain Challenges in the Hindu Kush- Himalayas

Eklabya Sharma

International Centre for Integrated Mountain Development
Kathmandu, Nepal

Regional Intergovernmental Learning and Knowledge Centre

ICIMOD



The Third Pole - Water Towers of Asia



2009

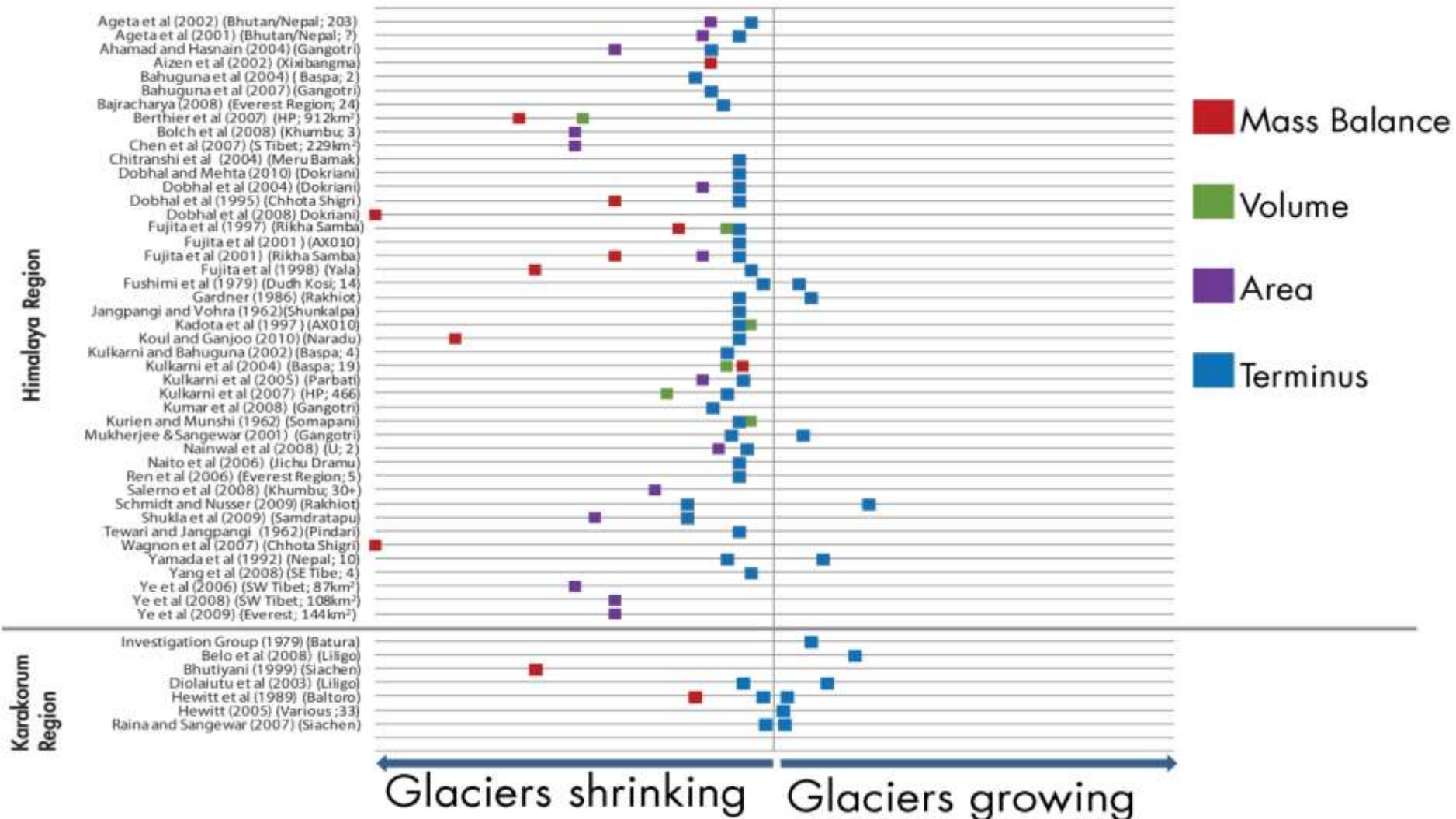


Photography: David Breashears, GlacierWorks

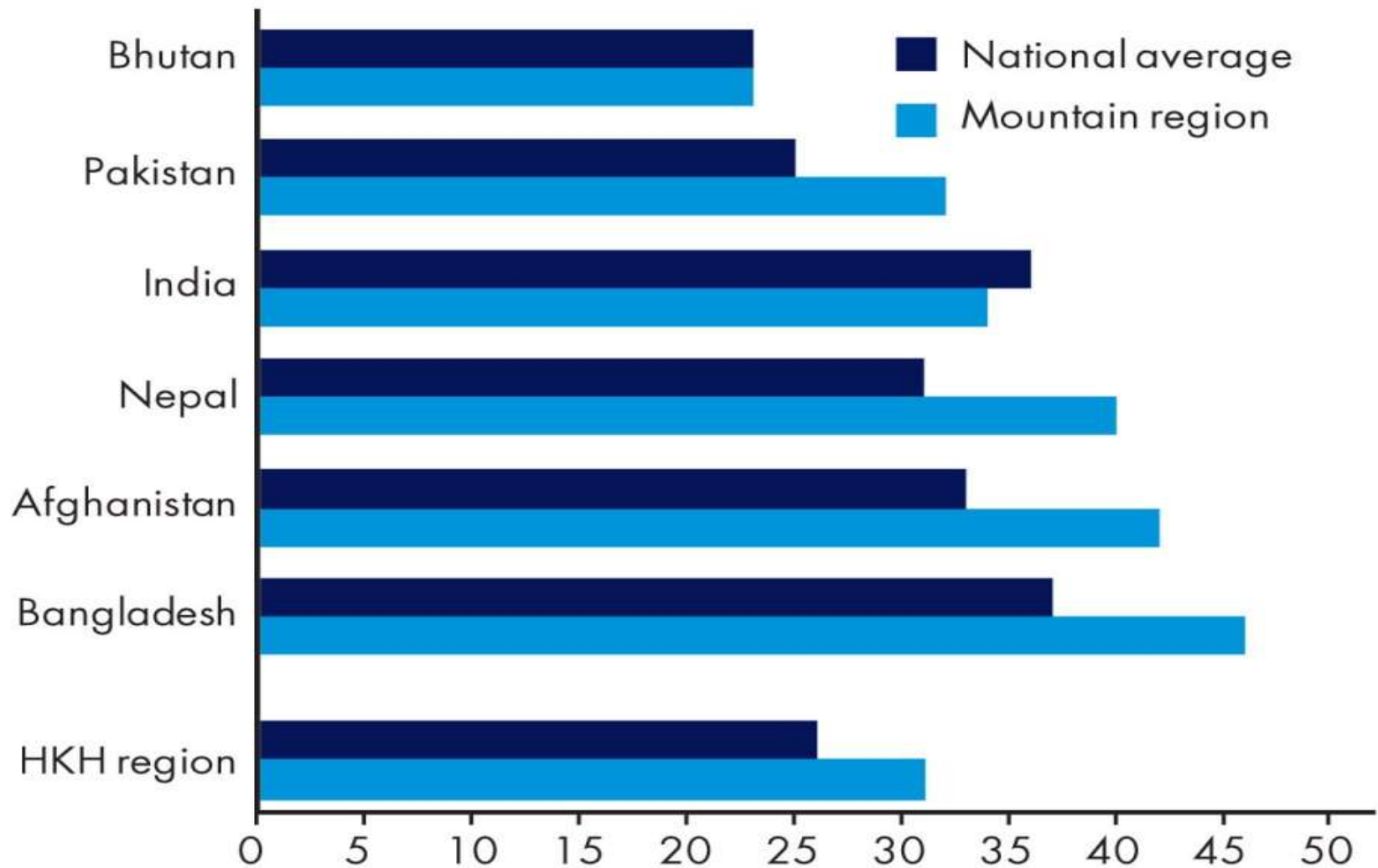


Photography: Jimmy Chin

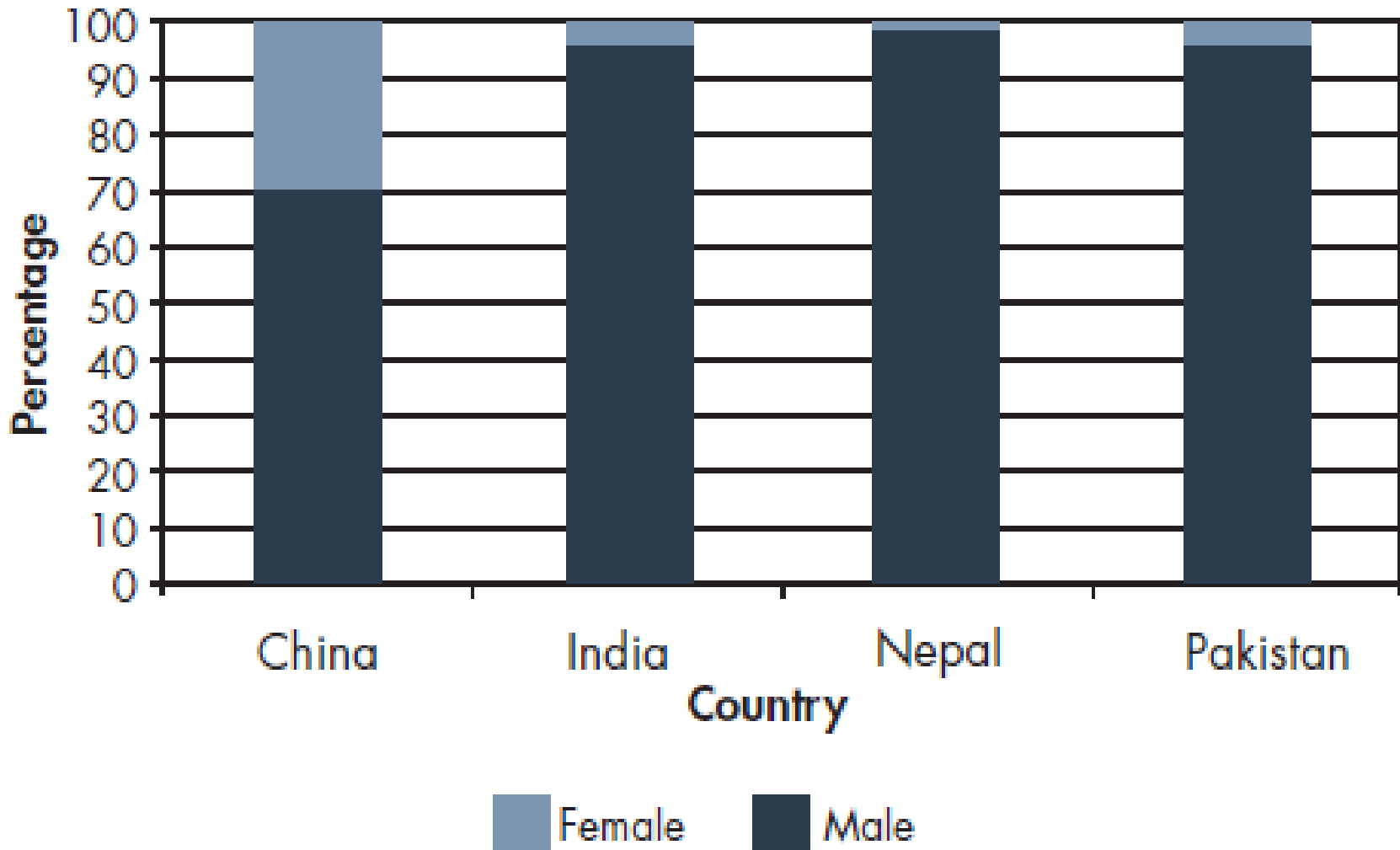
Himalayan Glaciers are Shrinking According to Many Studies



Poverty - Higher in Mountain Region



Source: Hunzai, K; Gerlitz, JY; Hoermann, B (2011) *Understanding mountain poverty in the Hindu Kush-Himalayas – Regional report for Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan*. Kathmandu: ICIMOD



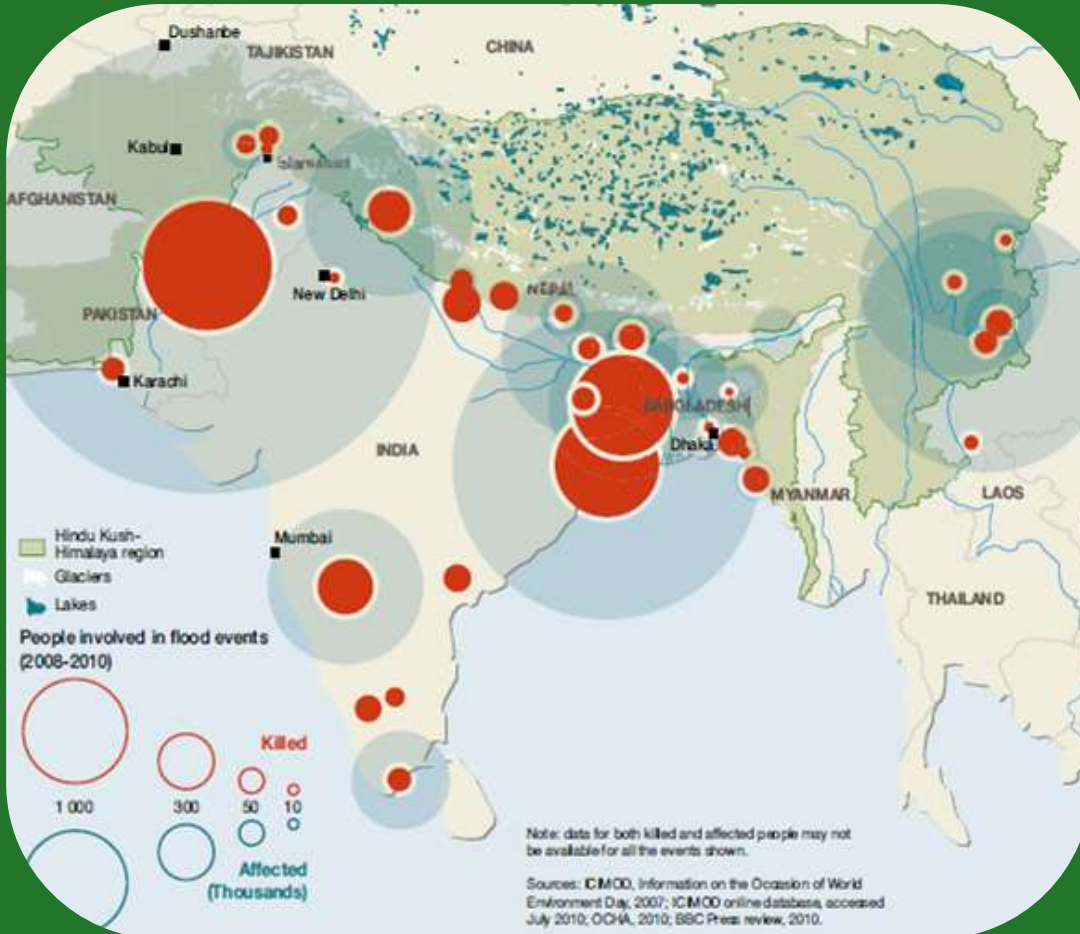
Nov to
April
Skies

Multiple Benefits of Mitigation:

- Less temperature rise
- Reduced glacial and snow melt
- Health benefits

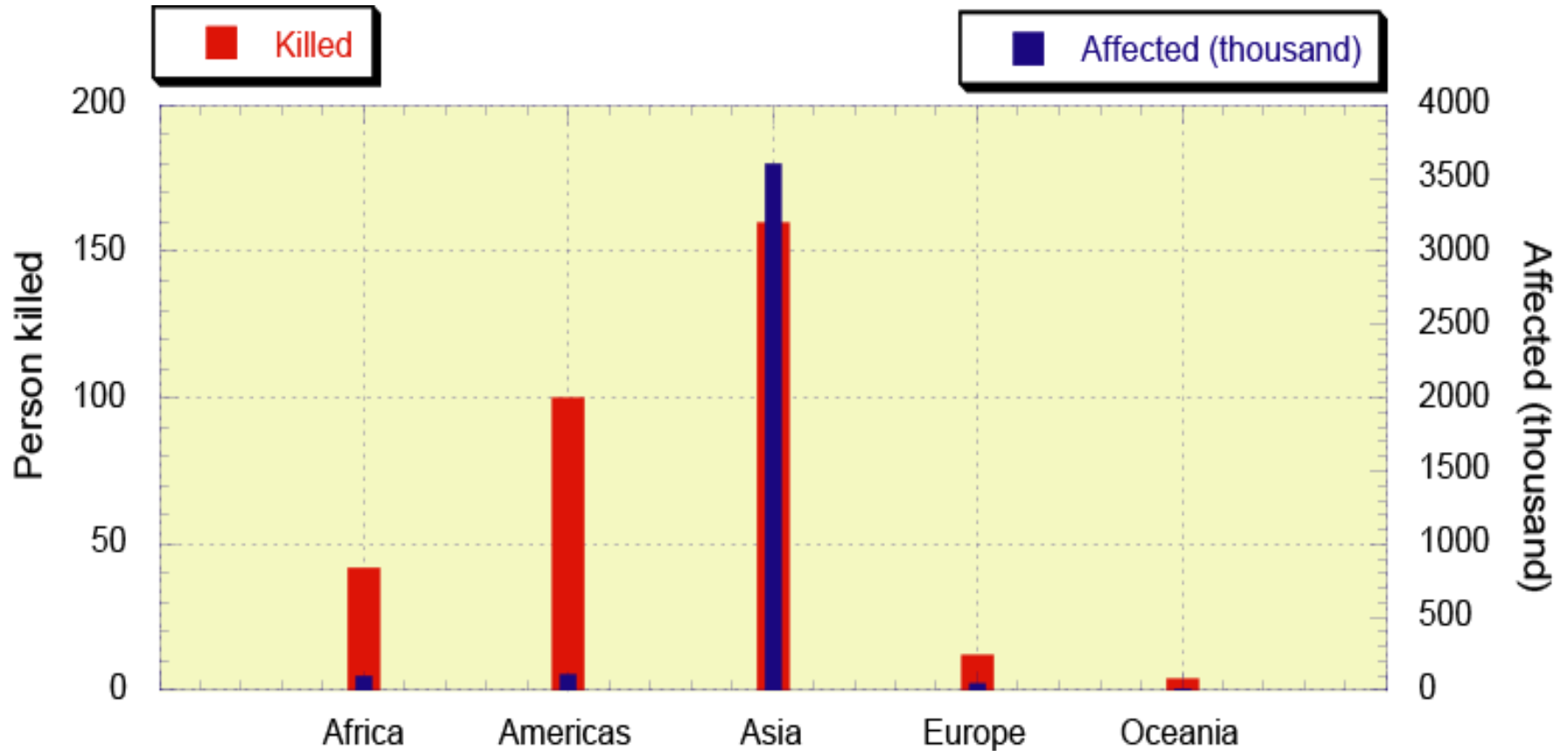


Water and Disasters

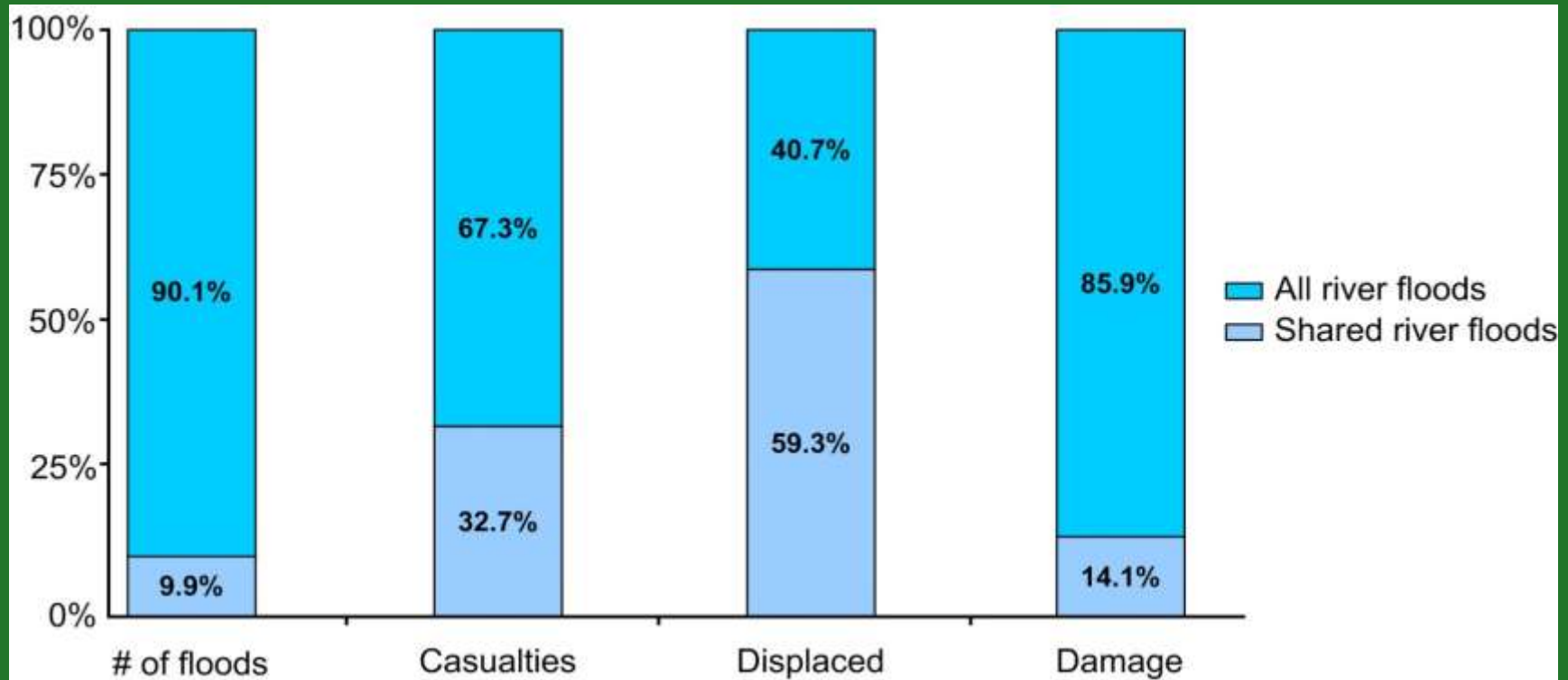


About 40% of Disasters in Asia are Flood related

Floods Kill and Affect More People in Asia than Anywhere Else in the World



Transboundary Floods: Shared Vulnerability Across National Borders

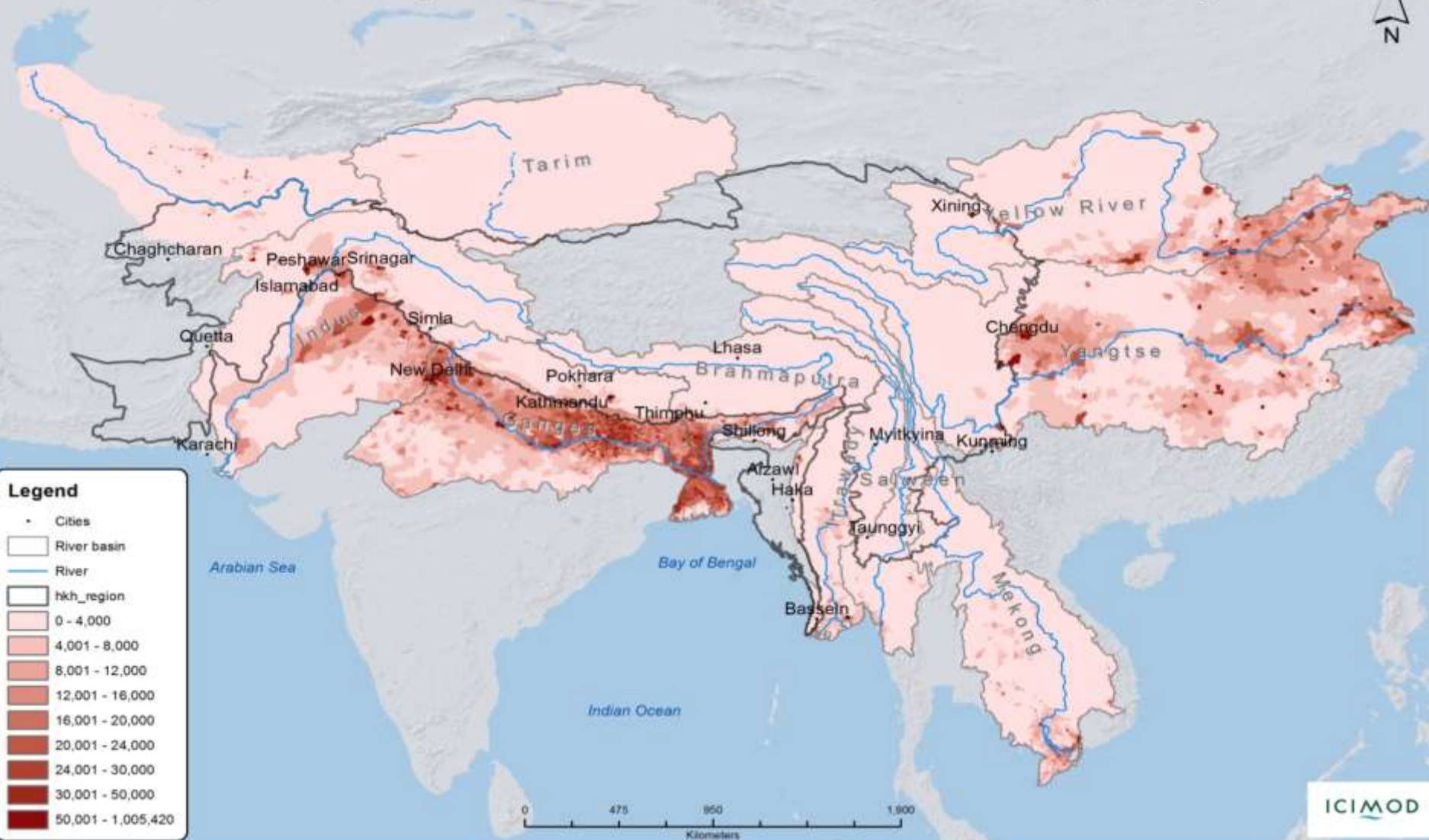


Globally, 10% of all floods are transboundary, and they cause over 30% of all flood casualties and account for close to 60% of all those displaced by floods.

Bakker, 2006

Basins support some of the most populated areas on the globe

Population Density in the 10 River Basins of Hindu Kush-Himalayan Region



Supports Extensive Irrigation Systems

538

S. Siebert et al.: Global map of irrigation areas

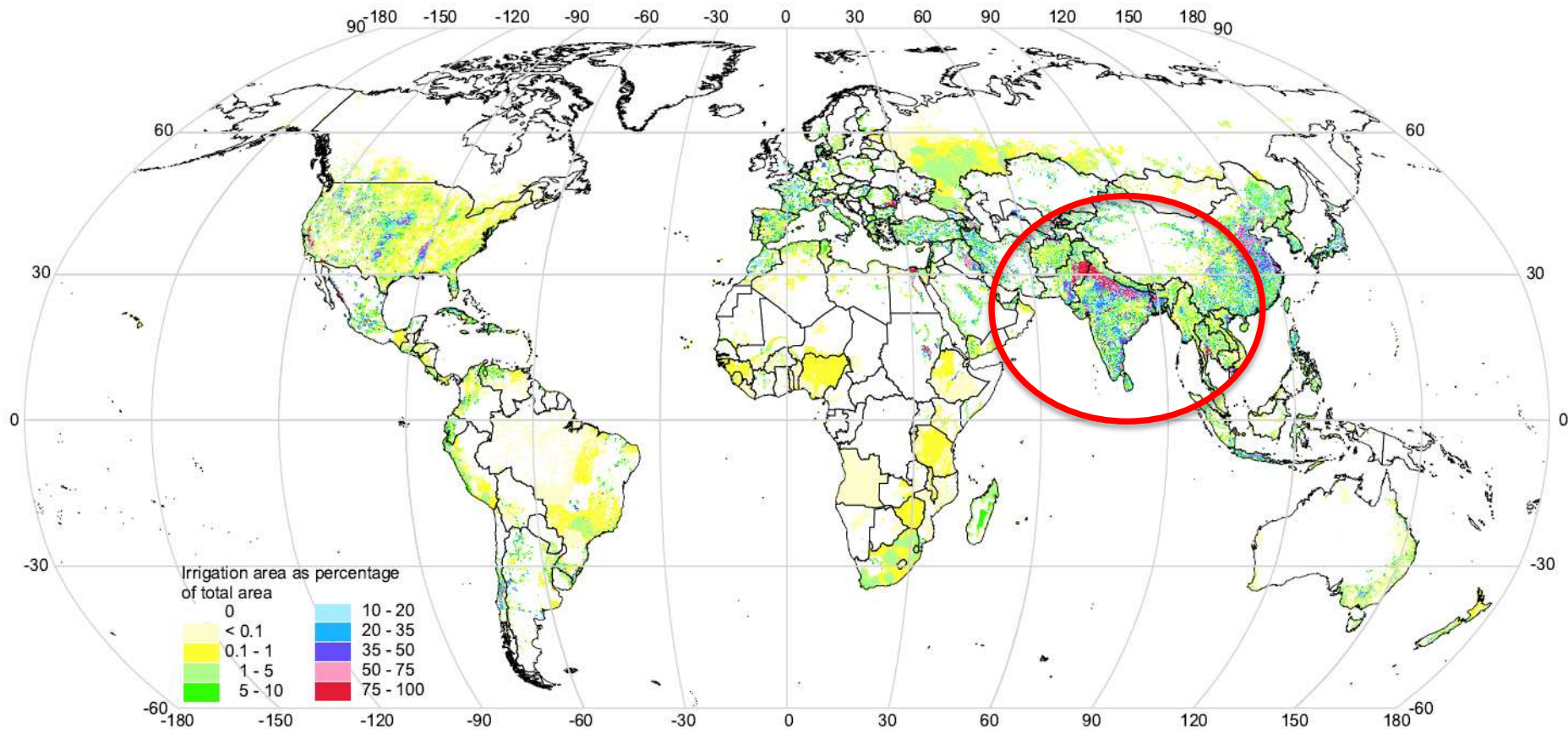
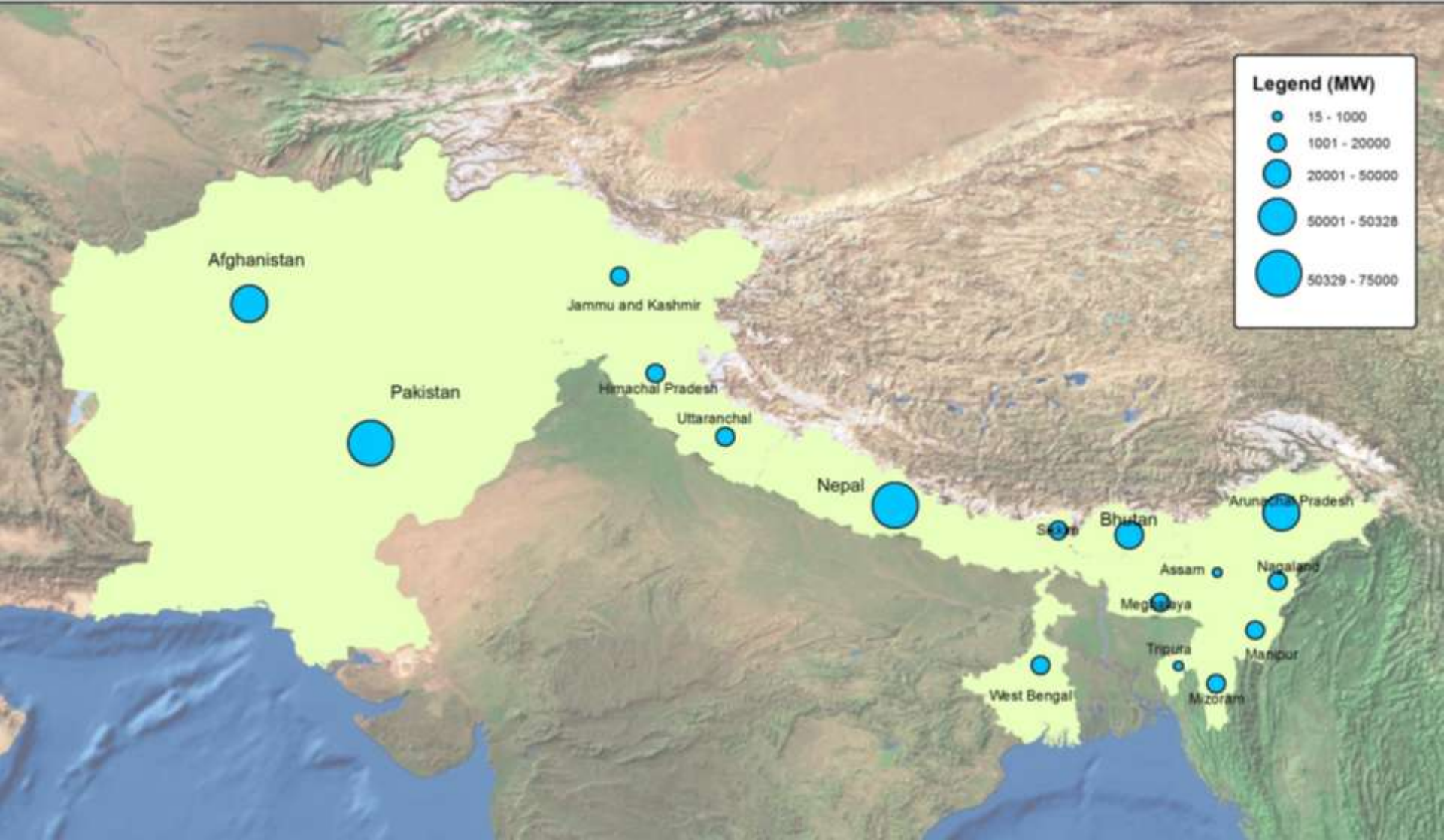
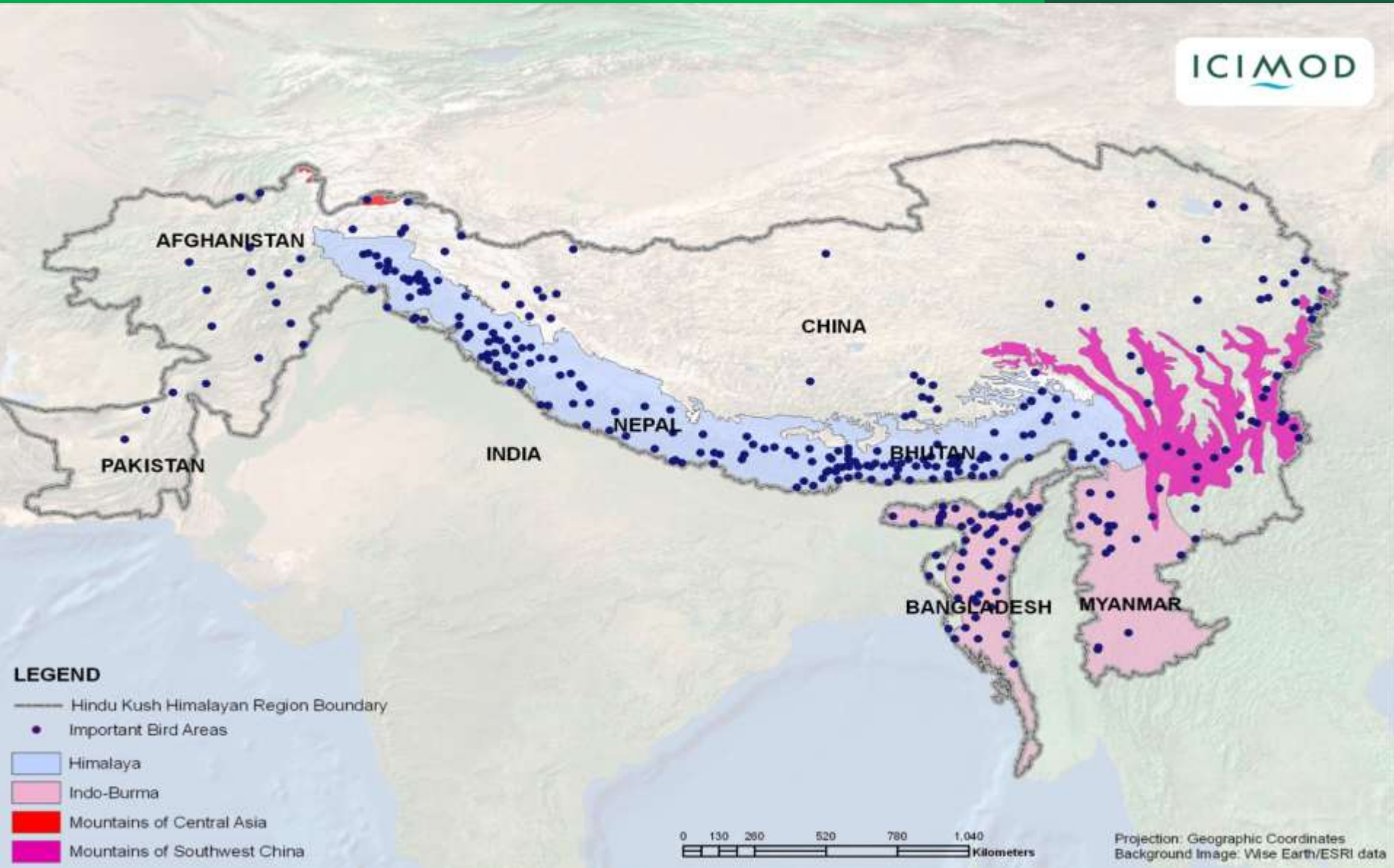


Fig. 3. Global Map of Irrigation Areas Version 3: Percentage of 5-min grid cell area that was equipped for irrigation around the year 2000 (Robinson projection).

Huge Hydropower Potential >300,000 MW



Global Biodiversity Hotspots - 4 out of total 34 in the HKH region



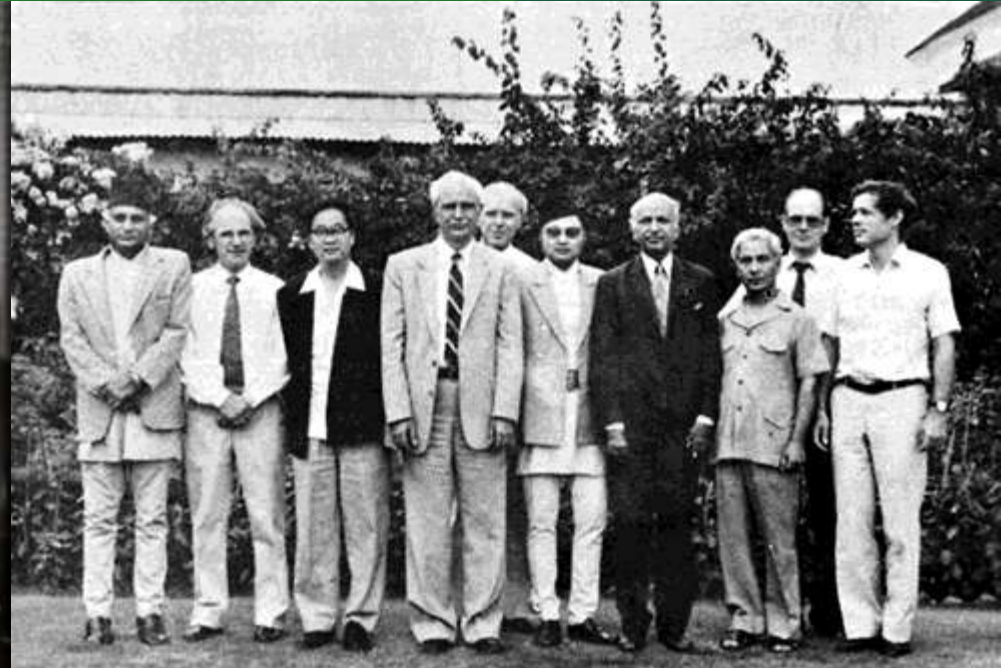
1983 - A Regional Intergovernmental Institution is Born

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UNESCO facilitates the establishment of ICIMOD



First ICIMOD Board of Governors Meet August 1983, Kathmandu

Regional Charter of HKH Eight Countries and Act of Parliament of Nepal for Headquarter Agreement

Linking Science-Policy-Practice

Basic science

Applied science

Knowledge sharing

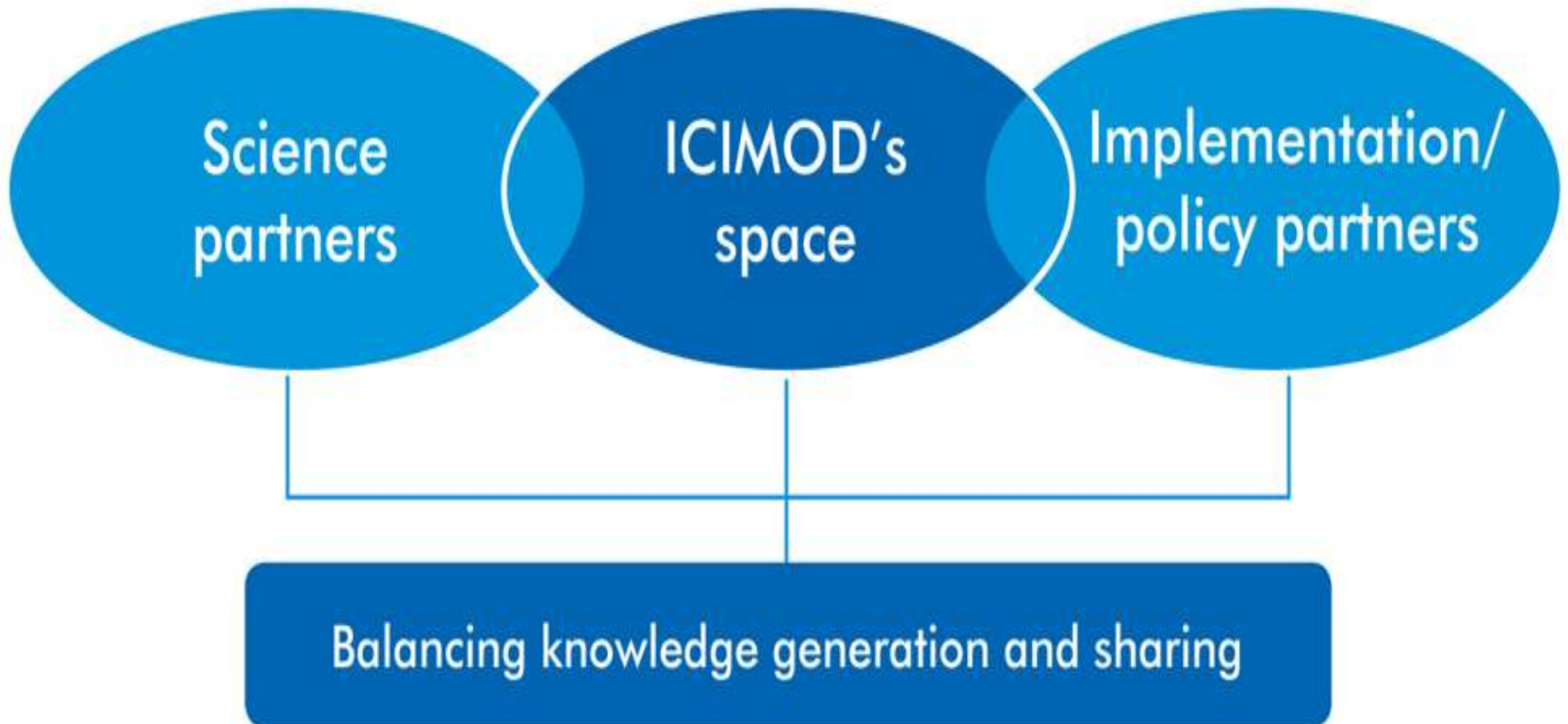
Policy/practice

Science
partners

ICIMOD's
space

Implementation/
policy partners

Balancing knowledge generation and sharing



Core competency areas developed in response to the needs of the region

- 1) Livelihoods
- 2) Ecosystem Services
- 3) Water and Air
- 4) Geospatial Solution

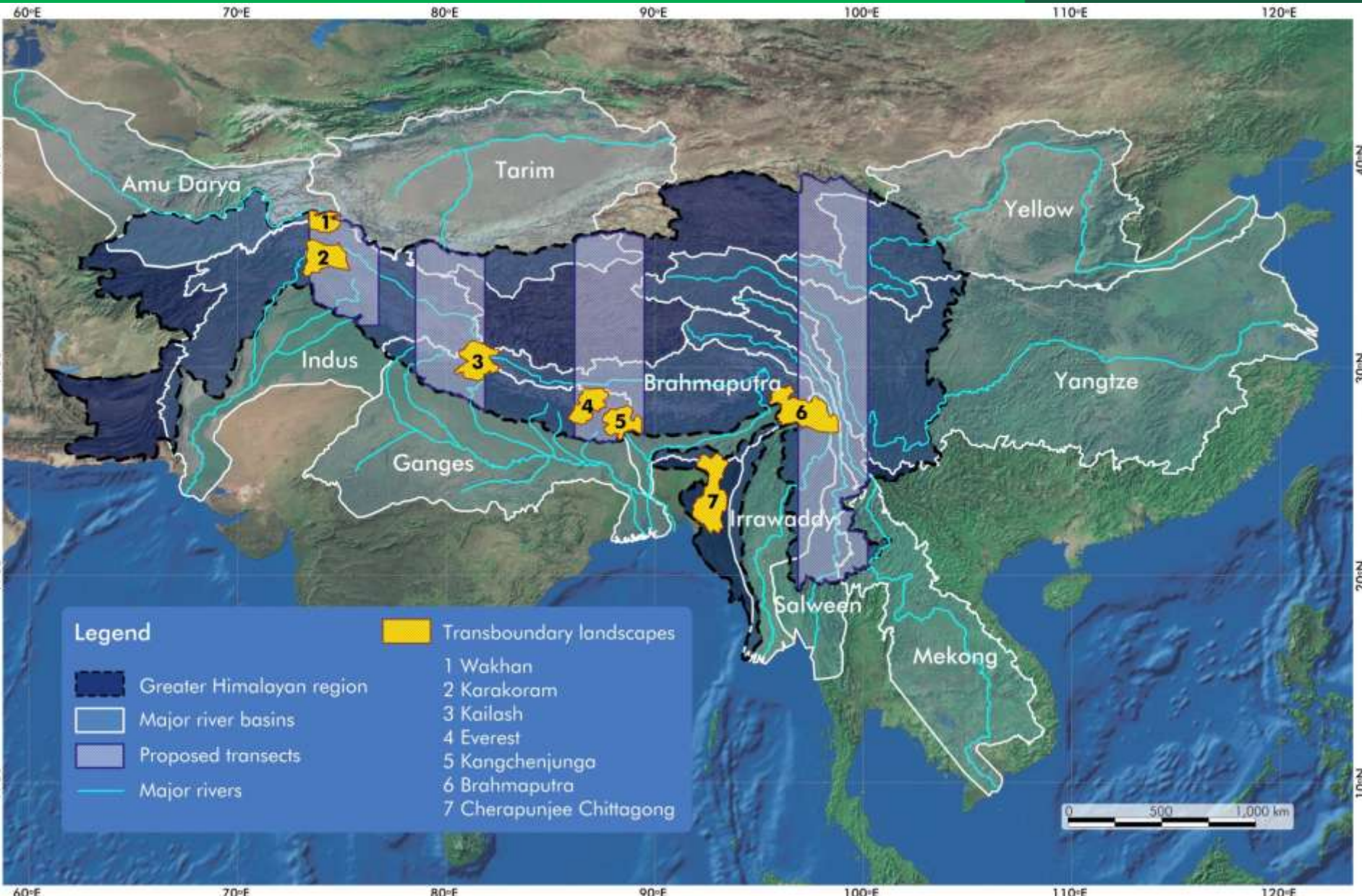


Piloting, testing and monitoring innovative approaches

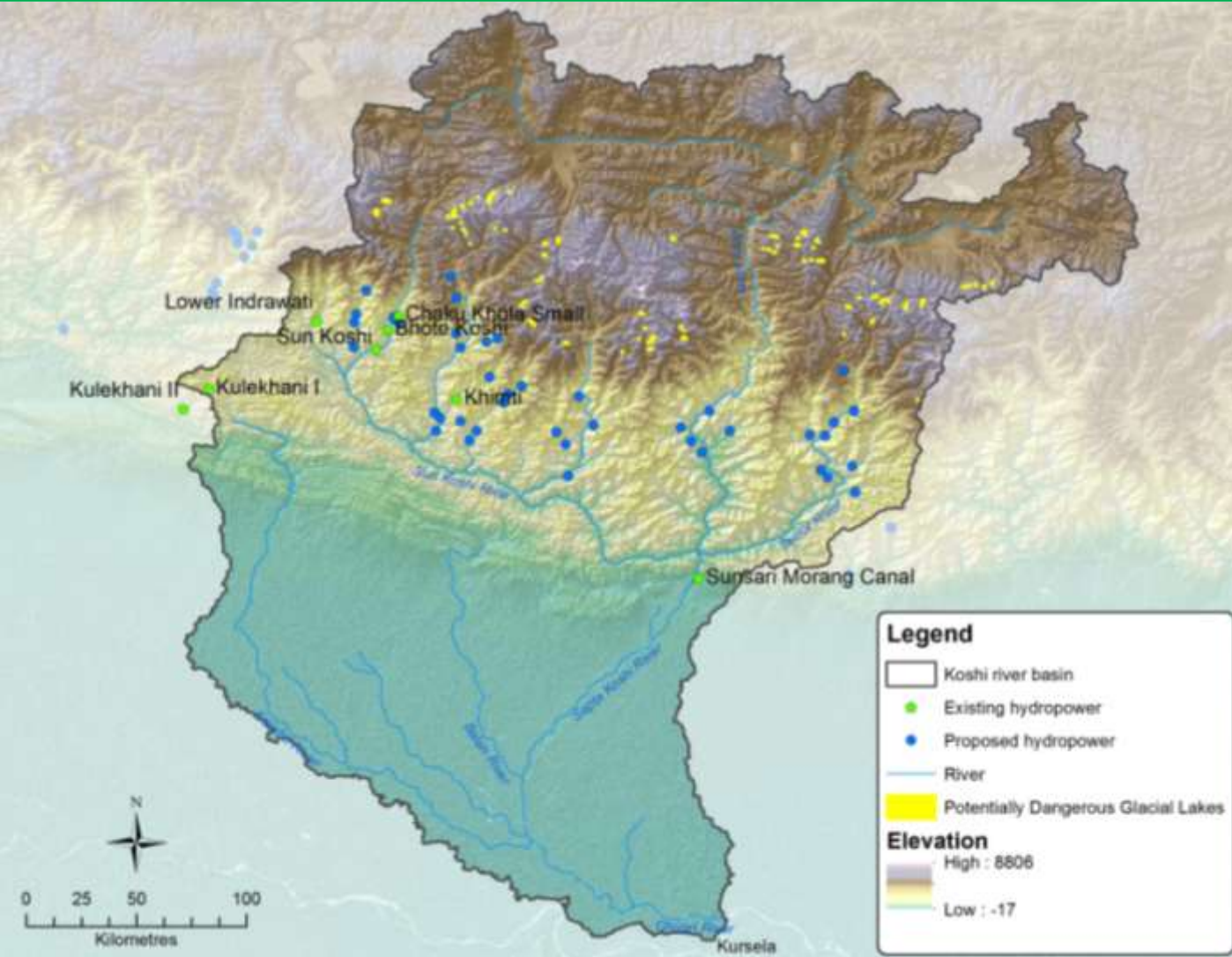
- 1) Adaptation to Change
- 2) Transboundary Landscapes
- 3) River Basins
- 4) Cryosphere and Atmosphere
- 5) Mountain Environment Regional Information System
- 6) Himalayan University Consortium



Regional Transboundary Approaches



Koshi Basin: GLOFs and Hydropower



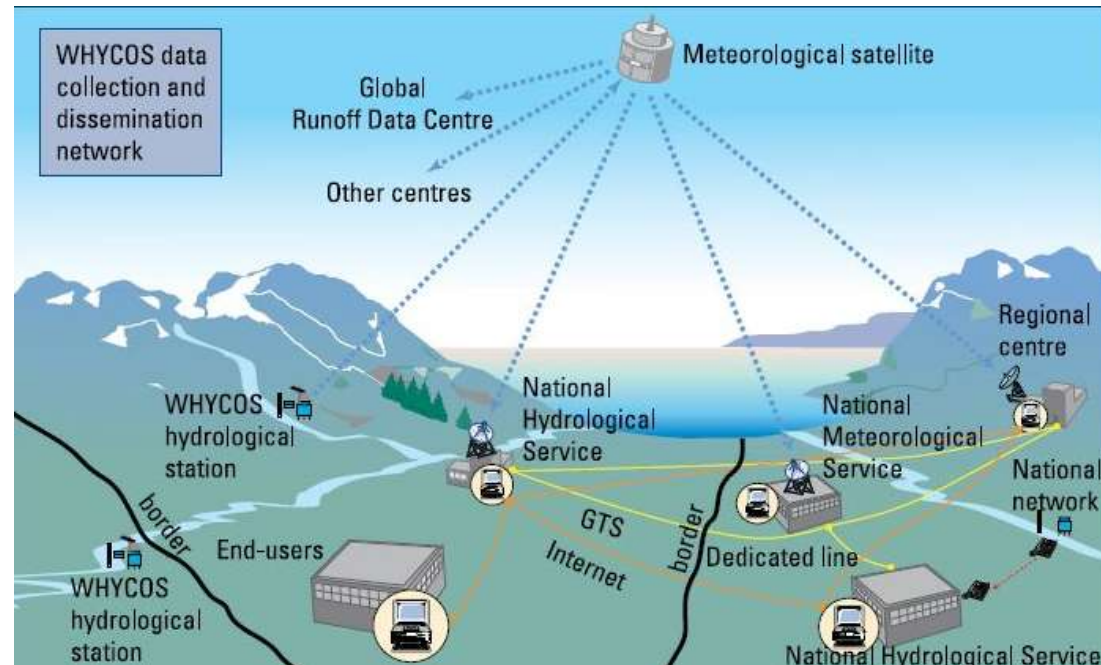
Transboundary Approaches are Critical

Improving Lead-time and Planning: Using technology and increasing cooperation to unravel the 'mystery' of floods

- HKH-HYCOS

- Establishing real-time Regional Flood Information System
- Setting up monitoring stations and building national capacity

Making Information
Travel Faster
Than Flood Waters



Low-cost Early Flood Warning System in Bangladesh Using a Wireless Sensor Network

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2010



High Valued Natural Products: A Pathway out of Poverty?

Niche Products: bay leaf, medicinal plants, honey, fruits and nuts



ICIMOD's work on value chains

- Member Ad hoc Committee of CBD Programme of Work on Mountain Biodiversity; implementation of ‘Mountain Biodiversity Programme of Work’ of CBD by HKH Countries
- HKH Climate Change Report; Contribution to IPCC Assessments
- Background Paper on ‘Mountain Green Economy’ for Rio+20
- Proceedings of the ‘International Mountain Green Economy Conference’ - for Rio+20
- Asia-Pacific Region Rio+20 Assessment Report
- Now, Comprehensive Assessment has been started

- Mountain Days in COPs of UNFCCC
- Side Events in CBD COPs
- Effort for 'Mountain Agenda in Rio+20 process
- UNCSD Mountain Pavilion
- Work with ICIMOD country governments in the preparation of Global processes, events, reports and COPs
- Organize International Conferences, e.g. Cryosphere, Bhutan+10, Biodiversity, Upcoming Poverty Conference in December
- Member of Mountain Partnership

- Asia Pacific Mountain Network - e-conference, e-discussion, publication, photo contest, engaging youth and media etc
- Exchange between other Mountain regions of the world, e.g. sharing of Alpine Convention, Works/Conference between Himalayas and Andes, Exchange programmes such Grand Paradiso (Italy) with Sagarmatha (Nepal) National Parks
- Adaptation Network - Mountain Resource Centre
- Abu Dabi Dialogue, SAWI, and Stockholm World Water Week
- Member of various consortiums on thematic topics for the Hindu Kush Himalayas

Thank you

ICIMOD

