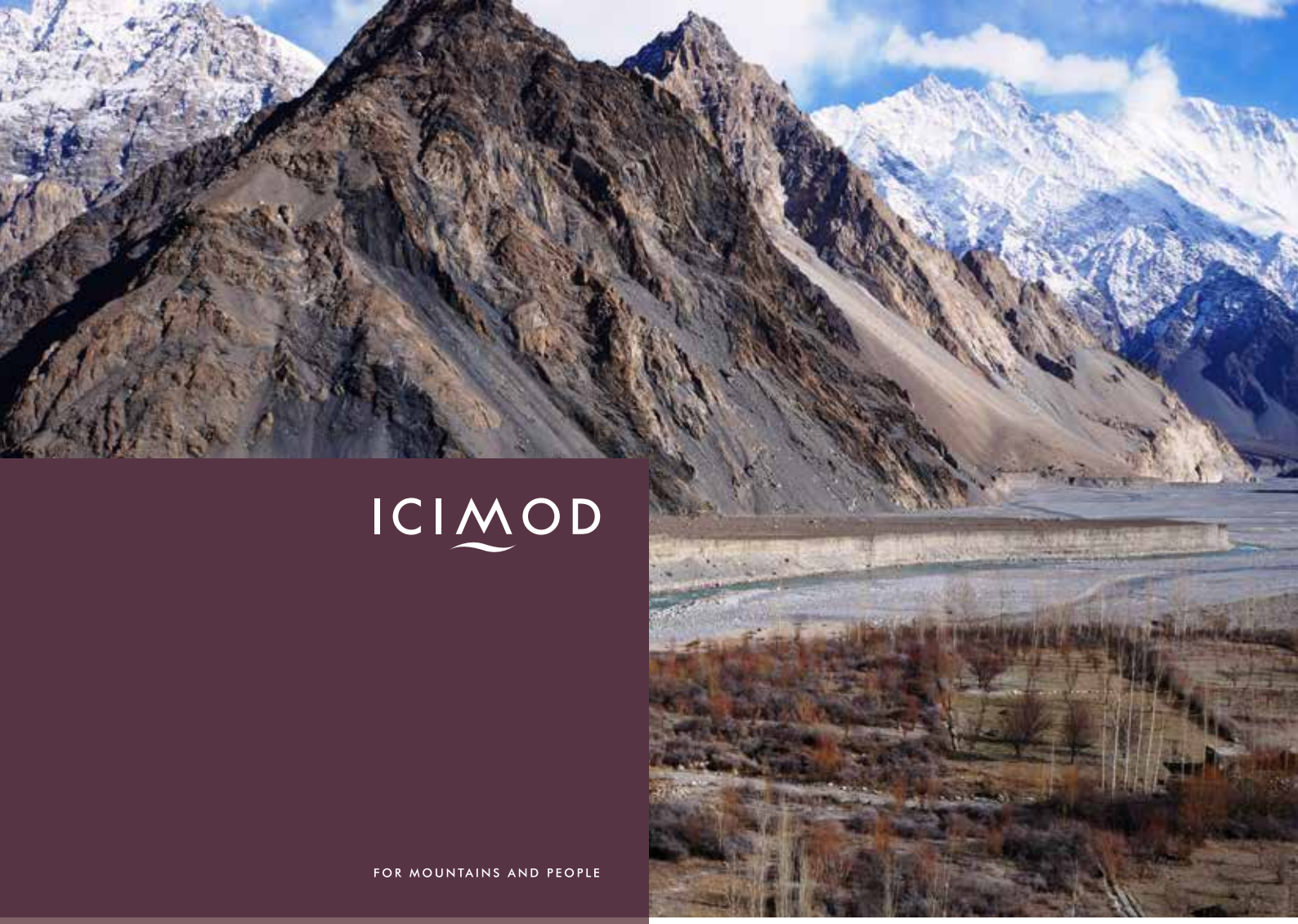


ICIMOD

FOR MOUNTAINS AND PEOPLE

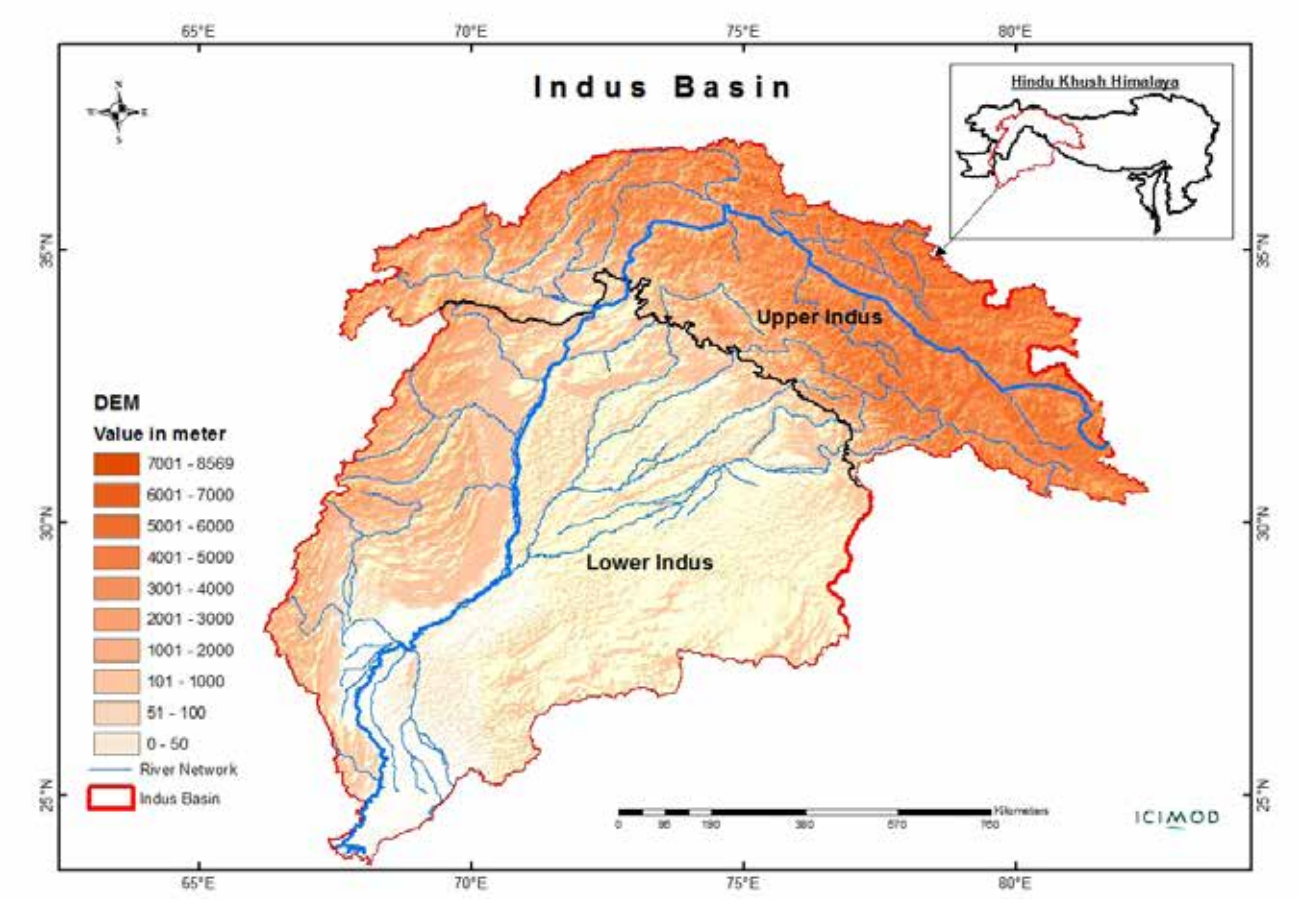
The Indus Basin Initiative

The Hindu Kush Himalaya (HKH) region extends 3,500 km over all or part of eight countries, from Afghanistan in the west to Myanmar in the east. It is the source of ten large Asian river systems, including the Indus. The HKH provides water and other ecosystem services and is the basis for the livelihoods of 236.9 million people in the region. Improved water resource management in mountain areas is essential for the sustainable development of the region and downstream countries.

ICIMOD's River Basins and Cryosphere programme aims to generate and disseminate evidence-based scientific research and gender-responsive practices, and build capacity to catalyse policies, strategies, and development programmes critical to water resources management and disaster risk reduction in the HKH region. The Indus Basin Initiative is one of six initiatives in the River Basins and Cryosphere Programme.

The Indus Basin Initiative

The transboundary Indus River basin in Afghanistan, China, India, and Pakistan is among the world's most significant in terms of human dependency on water resources and agricultural livelihoods. The upper basin consists of mountainous terrain of the Hindu Kush, Karakorum, and Himalayan ranges.



Initiative Objective

The Indus Basin Initiative aims to build resilience to climate change impacts by improving understanding of climate change, cryosphere, and water resources, and strengthen regional cooperation and networks to develop water management solutions. To do so, it supports the development of better adaptation strategies by research institutions, governments, and civil society organizations, who, in turn, support strategic thinking and interventions for enhanced community resilience in the basin.

Initiative Priorities

- To improve understanding of past and future climate trends
- To improve understanding of the impact of climate change and associated changes in the cryosphere and the cryo-hydrological regime
- To improve understanding of the impact of hydrological change on agriculture and socio-economic conditions of downstream vulnerable populations
- To support the development of better strategies as well as gender-sensitive policies and adaptation options
- To support strategic thinking and interventions that lead to enhanced community resilience in the Indus river basin

The Indus River Basin

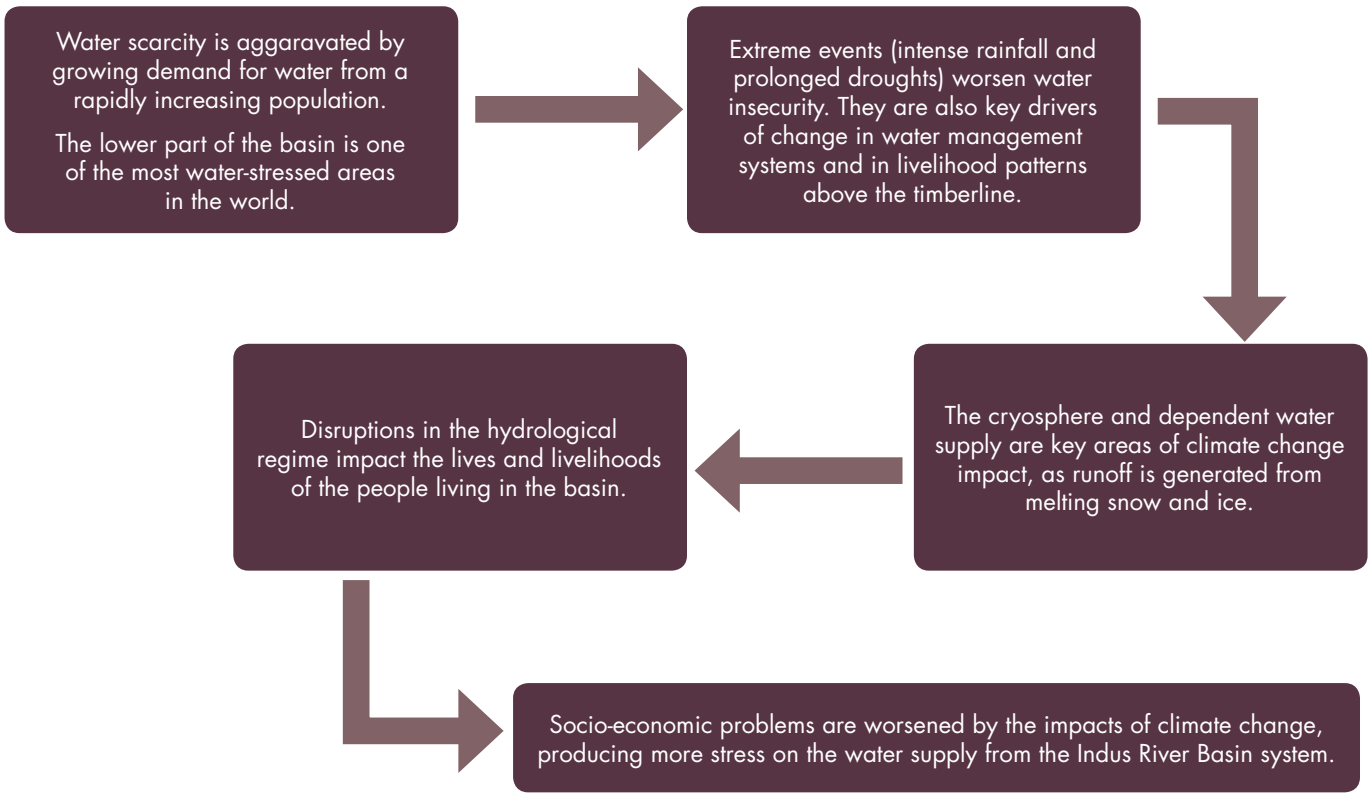
- Originates at Lake Ngangla Ring Tsho in the Tibetan Plateau
- Supports around 268.42 million people
- Is the main source of water for agriculture, energy production, industrial use, and human consumption
- Is densely populated (257 people/km^2) and has an approximate water availability of 1,329 m^3 per head (2011)
- Irrigates 33 million hectares of agricultural land in the basin through 15 tributaries
  - Ravi, Beas, and Sutlej in India
  - Swat, Chitral, Gilgit, Hunza, Shigar, Shyok, Indus, Shingo, Astor, Jhelum, and Chenab in Pakistan
  - Kabul River in Afghanistan
- Has an estimated total hydropower potential of 100,000 MW, of which around 18% has been developed.

Initiative Components

- Develop the basis and mechanisms for regional cooperation through which to build regional dialogues, improve communication, and conduct advocacy.
  - Generate and share scientific knowledge for diplomacy, policy, and regional cooperation
  - Enhance the Indus Regional Flood Information System (RFIS) and the Indus Basin Flood Outlook for regional cooperation in flood management
  - Strengthen the Regional Science Network in the Upper Indus Basin (UIB)
  - Establish and enhance gender resources and networks
- Create and use critical new knowledge and integrated knowledge products to address food, water, energy, and climate change issues for upstream and downstream basin populations.
  - Improve basin monitoring and scenario projections
  - Develop scenarios and projections for determining water availability
  - Innovate gender sensitive solutions around the water, energy, and food nexus

- Promote best practices, capacity development, and innovations to create an enabling environment.
  - Test and promote innovations on agricultural water management to strengthen adaptive capacities at the community level as alternatives to existing cryosphere-dependent irrigation systems that are vulnerable to climate change
  - Enhance awareness and adaptive capacities of communities in disaster preparedness through low cost innovative community based flood early warning system (CBFEWS) demonstrations

Impact of Climate Change on Indus Basin Communities



Initiative Activities

The Initiative generates and exchanges knowledge on agriculture water and hazard management. It has improved understanding of present and future water availability and use in the basin, and strengthens the resilience of riparian communities in the basin through drought information and early warning about upstream flood situations.

The Initiative seeks to ensure increased water, food, and energy security in the Indus basin to benefit the poor and vulnerable, particularly women and girls. To do so, it has launched the water management package of practices; the Upper Indus Basin Network (UIB-N); CBFEWS; and the Drought Monitoring System and Chenab flood outlook in collaboration with government and non-government partners in Pakistan.

Sustainable Development Investment Portfolio

The Indus Basin Initiative is supported by the Australian Government's Sustainable Development Investment Portfolio (SDIP) of the Department of Foreign Affairs and Trade (DFAT). The SDIP is a portfolio investment approach by DFAT that aims to address water, food, and energy security in South Asia through better regional cooperation, policy reforms, technology transfer, and capacity-building targeting the poorest and most vulnerable, particularly women and girls. The approach and focus of the SDIP Phase II align with those of the River Basin and Cryosphere Programme, each complementing the expected outcomes of the other. SDIP Phase I supported the Indus Basin Initiative from 2013 to 2016; SDIP Phase II is being implemented between 2016 and 2020.

Initiative Partners

- Gilgit-Baltistan Disaster Management Authority (GB DMA)
- Gilgit-Baltistan Forest, Wildlife and Environment Department (GB FWED)
- Karakoram International University (KIU)
- Pakistan Council of Research in Water Resources (PCRWR)
- Pakistan Meteorological Department (PMD)
- Water and Power Development Authority (WAPDA)
- Pakistan Agricultural Research Council (PARC)
- World Wide Fund for Nature, Pakistan (WWF)
- Aga Khan Agency for Habitat
- Future Water

For further information contact

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