

# Progress made in the Upper Indus River Basin in SDIP-I and ICIMOD's strategy for engagement in SDIP-II



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## Goal

- Improved integrated river basin management, to reduce physical vulnerabilities and improve food and energy security for mountain and downstream communities in the HKH region while recognizing upstream interests.

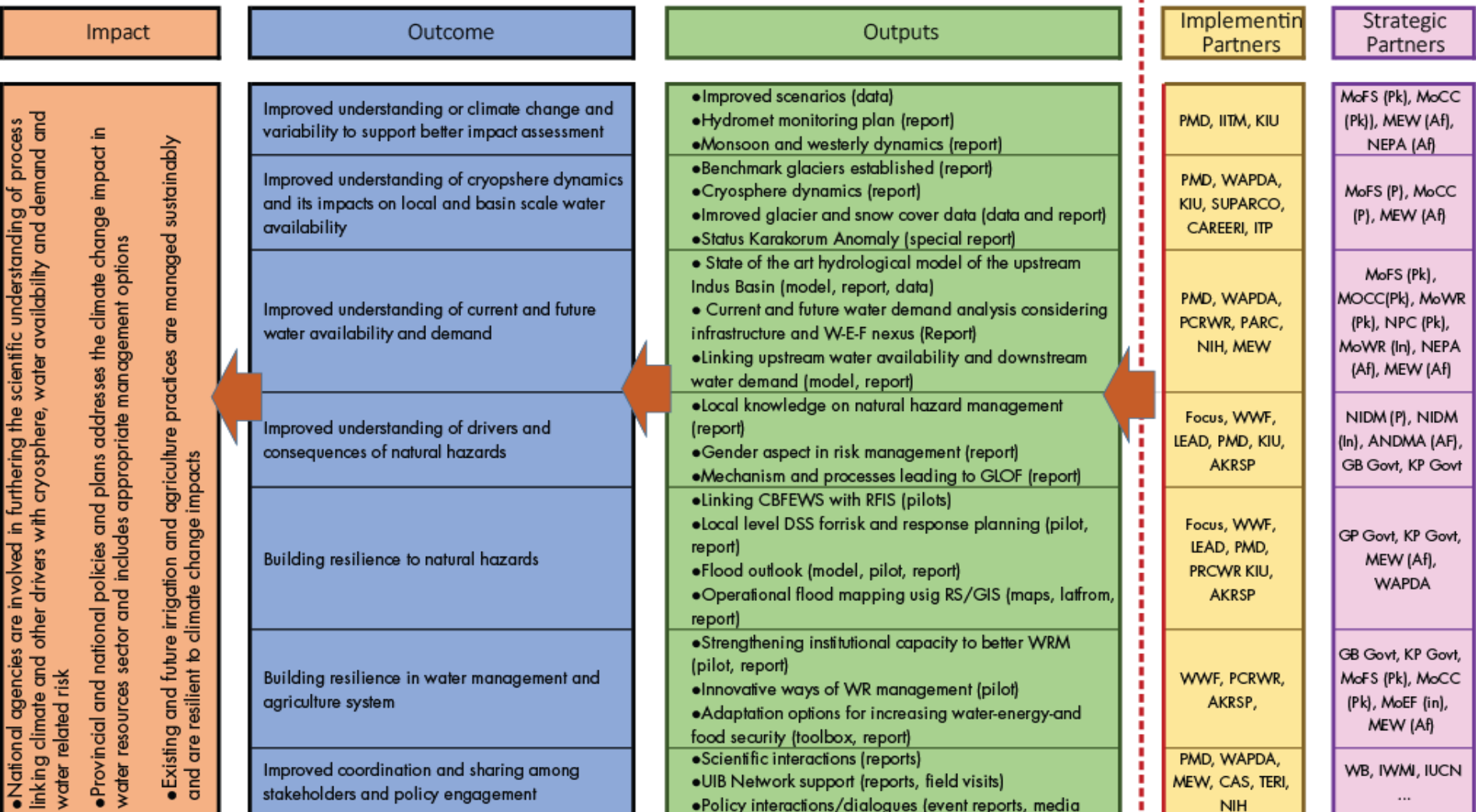
## Outcome

- Actionable proposals for integrated water resource management practices and policies, including measures for risk management and for equitable access to water for energy and food security, formulated, shared, and used at basin and community levels

# The River Basin Programme



# Indus Basin Initiative



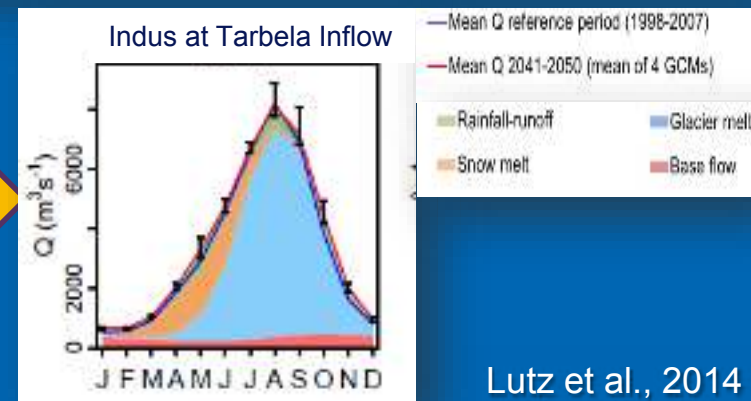
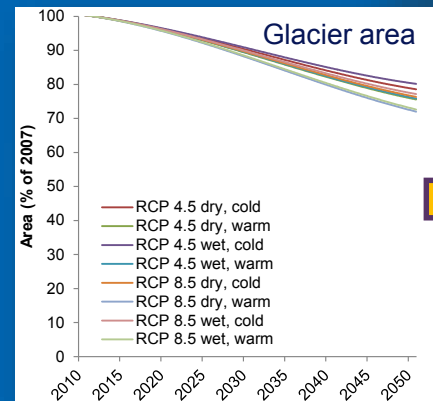
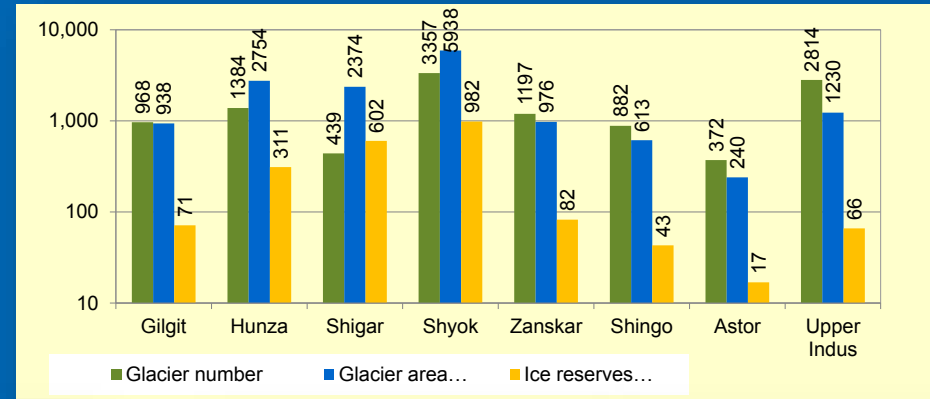
# Indus Basin Initiative

- Understanding of CC and variability
- Cryosphere dynamics and impacts on local and basin scale water availability
- Drivers and consequences of natural hazards
- Resilience to cc and natural hazards
- Resilience in water management and agriculture
- Improved coordination and sharing among stakeholders
- Strengthened policy engagement

# Indus Initiative in SDIP Phase -1

# Knowledge development

- Cryosphere dynamics and impact on water availability
- Glacier debris dynamics: links to Karakorum anomaly
- Precipitation variations: innovations in filling data gaps (using glacier mass balance)



Lutz et al., 2014

# Enabling environment through innovation

1. Community based GLOF monitoring
2. Local level water management
3. Improved agricultural practices
4. Access to household energy
5. Partnership: WWF, KIU, FOCUS, PCRWR, GB Govt





# Facilitate dialogue, coordination and sharing

- Upper Indus Basin Network
  - Coordination of research
  - Joint planning
  - Standard monitoring protocols
- Indus Basin Knowledge Platform
- Indus Conference



# SDIP Phase 2

- Develop basis and mechanisms for regional cooperation
- Creation and use of critical new knowledge
- Promoting best practices, capacity development and Innovations

## Component 1

### **Develop basis and mechanisms for regional cooperation**

- Scientific knowledge used for policy and regional cooperation
- Regional Science Network in Upper Indus Basin (UIB)
- Regional multi-scale system for disaster risk reduction (DRR)
- Establish and enhance gender resources and network

## Component 2

### **Creation and use of critical new knowledge**

- Understanding climate change and its implications on rivers, natural hazards, hydropower and consequences for livelihoods particularly women and girls.
- Solutions for food, energy and ecological security in high mountain agriculture given impacts of climate change.
- Improved understanding of groundwater sustainability and spring rejuvenation: narrowing the gap between science, policy and society
- Knowledge base for developing solutions for gender and inclusive development

## Component 3

### **Promoting best practices, capacity development and Innovations**

- Benefit sharing from hydropower projects at local level for the mountain people
- Flood resiliency building - spatial planning and advocacy tools
- Innovations in water sector, improving water management and livelihoods
- Basin-wide gender responsive knowledge systems that provide development solutions for empowering women and disadvantage groups

Thank you

ICIMOD

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