

Project Summary

Projekt Background

Global warming is causing the retreat of several glaciers across Asia, increasing the overall weather variability and weather extremes affecting water-dependent ecosystems and infrastructure with potential immense downstream repercussions on livelihoods, food security, and public safety in human settlements. The Indus basin is expected to be heavily affected by these developments. In order to plan for appropriate measures it becomes crucial to have a better understanding of global warming impacts on water, energy, and transport projects in this region. The impact of this initiative will be the better alignment of development projects sponsored by ADB or the Government of Pakistan to risk management and adaptation requirements supporting the water and hydro-energy sectors in the Indus river basin.

Project Objectives

Output 1: Gap-analysis on the state of knowledge (hydro-meteorological data analysis, modelling, impacts, risk analysis) in Western Himalayas, and ADB's water and hydro-energy project/programs area in particular: (i) review of current impact and adaptation knowledge, and modelling and impact scenarios data for select loan-related glacial and river basins; (ii) inventory and review of current and planned climate impact and adaptation research, and risk management capacity; and (iii) identification of priority risk management and adaptation activities to be undertaken.

Output 2: Partnership(s) formalized with national and regional institutions (GCISC, MoE, IUCN), and other partners);

Output 3: A practical Mountain Glacier and Downstream Water Risk Management Framework & Adaptation Guide to begin addressing climate impacts on ADB's hydroenergy and water sectors project and programs portfolio in Pakistan and Afghanistan.

Output 4: Desk and field rapid climate impacts and risk screening of ADB's project portfolio and pipeline in the water and energy sectors in Afghanistan and Pakistan;

Output 5: Potential Climate Change Adaptation Phase II activities scoped, costed and discussed with host government and other partners.

Project Activities

- Knowledge review
- Stakeholder workshops
- Desk and field screening of ADB projects
- Development of Risk Management Framework and Adaptation Guide

Services Provided

- Overall direction and coordination of the TA team;
- Management of the relationship with the government;
- Identify current and planned activities from different stakeholders;
- Formulate a Risk Management Framework/Adaptation Guide;
- Undertake a preliminary desk-top climate risk screening of ADB's existing loan(s) in the water and hydropower sectors;
- Undertake sample field screening of loan(s) sub-project(s) in Indus water and/or hydropower sectors;
- Prepare a draft phase II project proposal in the appropriate format.

Pakistan

Glacial melt and downstream impacts on Indus dependent water resources and energy

Client

International Centre for Integrated Mountain Development (ICIMOD)

Duration

09/2009 - 05/2010

Personnel

- 1 Team leader/Climate Risk Management Specialist (2,5 PM)
- 1 PM international STE
- 11 PM national STE

