

Climate · Hydrology & Water Resources · Agriculture · Forests & Biodiversity · Migration

OVERVIEW

The Peruvian agricultural sector faces numerous weather-related risks. The El Niño

phenomenon, in particular, causes heavy rainfall 2-3 times per decade, while agriculture suffers from a lack of rain in La Niña years. Farmers suffer from weather-related crop losses that could worsen with climate change. Accurate forecasting of weather events, such as El Niño, is therefore essential to ensure the country's food security and to stem rural exodus. The B-EPICC project addresses Peru's understanding of, and adaptation to, these weather events in six thematic areas with numerous activities planned until the end of 2023.

The project Brazil East Africa Peru India Climate Capacities (B-EPICC) is hosted by Germany's Potsdam Institute for Climate Impact Research (PIK). Its aim is to strengthen resilience by enhancing capacities in climate adaptation science and practice together with four partner countries: Brazil, Ethiopia, Peru and India.



In the first project phase (EPICC, 2018-2021), close contact was successfully established with various ministries, authorities and agencies based or working in Peru. In the present, second project phase, this cooperation is to be further expanded with the aim of supporting Peruvian partners particularly in the implementation of its "National Adaptation Plan" (NAP).

Project partners in Peru have included: MINAGRI, MINAM, SENAMHI, ANA, ENFEN, INEI, CIIFEN, PUPC, UNALM, IOM







CLIMATE

In Peru, B-EPICC's climate portfolio focuses on El Niño forecasting, with annual predictions concerning this weather phenomenon. Early prediction could significantly improve disaster risk management.

HYDROLOGY AND WATER RESOURCES

The main research objective in B-EPICC's hydrology portfolio is to understand the hydrological processes of Andean and Amazonian basins and their sensitivity to climate change for better water resources management. Foci include:

- the water-food-energy nexus under climate change conditions
- · analysis of hydro-climatic extremes
- consequences and adaptation possibilities stemming from land use change

AGRICULTURE

In this portfolio (first phase only), the project sought to supplement existing agricultural information systems with agricultural crop risk assessments for changing climate conditions, extreme weather events and El Niño/La Niña phenomena.

FORESTS AND BIODIVERSITY

Existing climate impact information systems are augmented with descriptions of reforestation recovery, forest structure recovery, and biodiversity recovery. The aim is to incorporate regeneration strategies into stakeholder climate adaptation or conservation strategies.

MIGRATION

In the migration portfolio, the focus has been on how climate change impacts and extreme climatic events shape population movements (or lack thereof), as well as potential conflicts, in Peru. The second project phase focuses on stakeholder training around this topic.

CAPACITY BUILDING

Cross-project capacity building activities link the individual scientific outputs produced in the project, foster stakeholder involvement and serve to transfer the generated knowledge into application. Activities include:

- stakeholder and training workshops
- · co-produced policy development
- guest expert stays at PIK
- ClimateImpactsOnline: Further development of the web portal based on user needs