B-EPICC IN ETHIOPIA – 2022/2023
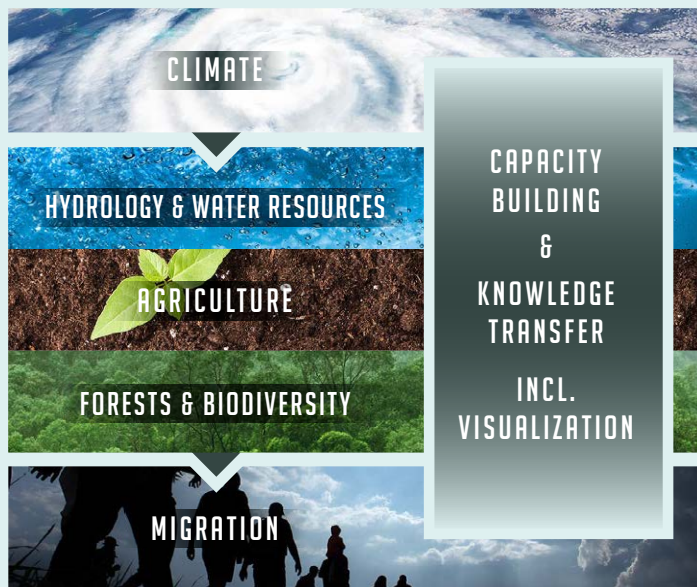
Climate · Hydrology & Water Resources · Agriculture · Forests & Biodiversity · Migration

B-EPICC
BRAZIL EAST AFRICA PERU INDIA
CLIMATE CAPACITIES

OVERVIEW

In recent decades, droughts and floods in Ethiopia have contributed to rural exodus and large migration movements, while exacerbating the country's food security problem. In addition, climate change could negatively impact food security by making stronger El Niño events more likely and by causing both an increase in mean average temperature and extreme heat events. Studies on non-traditional security risks such as climate change and corresponding adaptation strategies are therefore becoming increasingly important. B-EPICC addresses Ethiopia's adaptation to extreme weather events in six thematic areas with multiple activities 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.

CLIMATE
HYDROLOGY & WATER RESOURCES
AGRICULTURE
FORESTS & BIODIVERSITY
MIGRATION

CAPACITY BUILDING & KNOWLEDGE TRANSFER INCL. VISUALIZATION

In Ethiopia, close cooperation with the Ethiopian Ministry of Agriculture and other relevant government entities working on biodiversity and forests like the Ethiopian Forest Development (EFD) is planned.

Other partners in Ethiopia are to include the following: EWNRA, National Meteorological Agency, CCAFS, CGIAR, GIZ, IOM, UNHCR, FarmRadio

CLIMATE

In Ethiopia, B-EPICC's climate portfolio focuses on forecasting and prediction of phenomena such as monsoon and El Niño. Research is also being carried out on the early prediction of the Indian Ocean Dipole (IOD), which is currently not predictable early on and also has an effect on precipitation in Ethiopia. Early prediction could significantly improve disaster risk management.

HYDROLOGY AND WATER RESOURCES

B-EPICC's hydrology portfolio focuses on the water-food-energy nexus under climate conditions, seeking to work with local stakeholders on modeling and policy development. The focus is on the SWIM modeling system, which allows for testing, modeling and forecasting at different scales.

AGRICULTURE

In this portfolio, existing agricultural information systems are supplemented with risk assessments for the cultivation of agricultural crops. Platform-independent program modules are used to better assess mean cropping risks and yield prospects for the current production year. The mean cropping risks for the current climate and the current climate projections, quantified with the help of yield models, are made available to political decision-makers. Specific aims include:

- a module bundle to complement agrometeorological information systems for Ethiopia
- assessment of the vulnerability of agricultural systems to climate impacts at the subnational level to identify focus regions for climate adaptation

FORESTS AND BIODIVERSITY

In this portfolio, 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

This portfolio seeks to identify how climate change interacts with factors including land and forest cover, as well as agriculture, and further with migration and conflict potential. A major risk report including illustration of migration hot spots will be prepared and policy development supported.

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
- climate information display prototypes developed and access facilitated

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