



WATER INFRASTRUCTURE SOLUTIONS FROM ECOSYSTEM SERVICES UNDERPINNING CLIMATE RESILIENT POLICIES AND PROGRAMMES ('WISE-UP TO CLIMATE')

As of: May 2021

The project tested, developed and demonstrated approaches for the use of a mixed water infrastructure that combines natural river courses with artificial elements such as reservoirs. It thereby improved water supplies and increased resilience to climate change in the basins of the Tana (Kenya) and Volta (Ghana, Burkina Faso). Furthermore, it supported sustainable development in the areas of poverty reduction, conservation of biodiversity, food security and secured supplies of energy and water. To this end the project partners collated hydrological, environmental and economic data and analysed the political and institutional dynamics of the related decision-making processes. Based on this, tried-and-tested instruments and technologies were then adapted to users' needs with the aid of participatory learning methods. The project disseminated its results, experiences and recommendations by holding training events and maintaining a regional and global exchange of information.

State of implementation/results

- Methodology for Action Learning developed to enable a user-focused adjustment of the models and instruments by researchers and other stakeholders.
- Action Learning workshops with key basin stakeholders performed to present systems modelling project results (Tana Basin) as well as project results from field research on ecosystem mapping (Volta Basin).
- Hydrological modeling (SWAT) completed for the systems model. Comprehensive systems model built, incorporating results from SWAT, that includes inflows and storage, for example hydropower infrastructure (Tana Basin).
- 24 climate change scenarios generated for systems model for each basin.

PROJECT DATA

Country/Countries:

Burkina Faso, Ghana, Kenya

Implementing organisation:

International Union for Conservation of Nature and Natural Resources (IUCN) - Switzerland

Political partner(s):

- Tana-Athi Rivers Development Authority (TARDA)
- Volta Basin Authority (VBA)

Implementing partner(s):

- African Collaborative Centre for Earth System Sciences (ACCESS), University of Nairobi - Kenya
- BC3 Basque Centre for Climate Change
- CSIR Water Research Institute
- International Water Management Institute (IWMI)
- Overseas Development Institute (ODI)
- University of Manchester (UoM)

BMU grant:

€ 5,312,063.94

Duration:

08/2013 till 12/2017

Website(s):

<http://www.waterandnature.org/initiatives/wis-e-climate>





- Ecosystem services mapping completed at community level.
- Valuation framework tested through local level field research.
- Ongoing quantitative research through household surveys.
- In-depth political economy research carried out by local research partners focusing on decision-making processes pertaining to basin development.
- Capacity building strategy developed (Tana Basin).
- Key meetings with stakeholders drafting the 40 year Development Plan for Ghana (Volta Basin).

