

Basin Focal Project Volta (PN55)

Objectives

Analysis of poverty, water availability and agricultural water use to help understand how agriculture and water in the Volta basin support livelihoods.

- 1) Provide a whole-basin assessment of water availability, poverty, food security, and water productivity;
- 2) Ascertain the extent to which water-related institutional and technical interventions might contribute to poverty reduction, resilient livelihoods, and environmental conservation.

Where: Volta basin

Method/Activities

- Assess present distribution of rural poverty, of farming systems with their productivity and water productivity;
- Analyze opportunities and risks, under the double pressure of demography and possible climate change; modeling of water resources to identify sensitivity of water allocation to development and climate scenarios;
- Identify research gaps and planning for implementation.

Key Achievements

- A ready to use WEAP water allocation software has been developed for the Volta basin and presented to the Volta Basin Authority (VBA). The application is designed to help in analyzing the impacts of different water allocation strategies at the basin and sub-basin scale under possible impacts of climate change.

Conclusions

- Poverty remains strongly rural and linked to economies that are reliant on rainfed agriculture. Rural poverty occurs because of low agricultural productivity, limited market access and price variability. Various technical solutions to these problems are already available and identified but their socio-economic acceptability and implementation need further research and effort.
- Population density, generally low, is under pressure to increase to a projected 50-60 million by 2050. The ratio of rural: urban population will decrease dramatically from 2.3 now to 0.5 in 2050. The main forces of change are a combination of demography with increasing urbanization, and impacts from climate change.

Value/relevance for the BDC

- This project is of generic relevance to the Volta BDC. It has provided a 'baseline' of present rural poverty, farming systems with their productivity and water productivity in the Volta Basin, and identified researchable or breakthrough implementation issues which promise major impact and change in the near future or longer term future (2050).
- Researchable or implementation issues on water resources and management, and rainfed cultivation respond directly to the Volta BDC. Project V1, *Targeting and scaling out*, intends explicitly to build on the achievements of the Volta Basin Focal Project.
- Priorities identified by the BFP under Irrigation, Fisheries and livestock, and Institutions and socioeconomics respond less explicitly to the BDC but they are of high relevance to both BDC and general Volta Basin development.