



## CASE STUDY

# Uganda: Supporting climate resilient livelihoods and ecosystems through catchment management through EURECCCA Project

An assessment of climate and water issues in major catchments in Uganda carried out by Global Water Partnership Eastern Africa (GWP EAF) and the Ministry of Water and Environment in Uganda, brought to the fore major challenges associated with impacts on flood risks and livelihoods. GWP EAF supported Uganda in developing a USD 7.75 million project to address these challenges – the first project supported by the Adaptation Fund. The 4-year project integrated climate concerns in catchment management and addressed land and ecosystem degradation while increasing the resilience of communities to the risk of floods and landslides in Awoja, Maziba and Aswa catchments in Uganda.

## Background

The project was implemented in 3 catchments namely: Awoja found in Kyoga Basin in Kyoga Water Management Zone; Aswa found in Aswa Basin in Upper Nile Water Management Zone and Maziba found in Kagera Basin Water Management Zone. The catchments are home to some of the most vulnerable people in the country, many of them small-scale farmers or herders in the regions' highlands, wetlands, and savannas. The three catchment areas characterise a spectrum of livelihoods and states of catchment health, ranging from densely populated high slopes and degraded areas dominated by crop farming to semi-arid mixed agriculture. Use of the land and water in these catchments has intensified over the past 50 years, with cultivated fields climbing to the top of mountains and creeping to the edges of rivers and lakes. The criteria for selecting the three catchment areas was based on the relative degree of vulnerability to climate change, in terms of exposure to the risk of landslides and floods and vulnerability due to challenges such as land degradation, water scarcity, population pressure and poverty.

The three catchments are one of the areas in Uganda that have been the most affected by the impacts of climate variability and change, most especially flooding. About 52 flood events have occurred since the 1990s. Infrastructure including roads and bridges has been destroyed. The floods in lowlands have destroyed and covered agricultural food crops such as sweet potatoes, maize and beans.

Under the Water, Climate and Development programme, GWP EAF carried out an assessment of priority climate and water issues in eastern Africa in the early 2010s and identified these conditions in Uganda's major catchments as needing urgent attention. It also identified a promising basis for action in catchment management planning, an approach that had been adopted by Uganda as a means of promoting integrated planning, development and management of water and related resources to address the various

environmental and socio-economic challenges including climate change. However, the catchment management plans developed to date neither sufficiently considered the inter-linkages between water and land management nor took climate change fully into consideration. In addition, the involvement of subregional and local management structures as well as extension service workers had been limited.

The project was developed to address these gaps through establishing frameworks for climate resilience catchment management, implementing concrete adaptation actions for resilient and sustained ecosystems, agricultural landscapes and other livelihoods as well as building climate change adaptive capacities of institutions and communities while managing knowledge.

## **Actions taken**

GWP EAF proposed to Uganda's Ministry of Water and Environment to integrate climate resilience in catchment management and to develop a programme that would help manage floods and landslides across agricultural landscapes, contribute to diversification of livelihood strategies and strengthen management and institutions from local to national scales. It also looked for a partner that could work with GWP EAF and with the Ministry to access climate funding. The right partner was found in the Sahara and Sahel Observatory (OSS), an accredited climate finance broker for both the Green Climate Fund and the Adaptation Fund. GWP Eastern Africa, working with OSS, supported Uganda's lead ministry in preparing an integrated catchment management project proposal compatible with community needs and enhancing climate resilience.

The design of the Enhancing Resilience of Communities to Climate Change through Catchment Based Integrated Management of Water and Related Resources in Uganda (EURECCCA) programme built on Uganda's existing framework for integrated water resources management. It aimed to integrate climate change adaptation in the catchment management plans for Awoja and Maziba catchments, and develop a similar plan for Aswa that addresses linkages between land use and water resources. The programme was further designed to facilitate engagement among the Ministry of Water and Environment, Ministry of Agriculture Animal Industry and Fisheries, local government staff, catchment management committees, communities, civil society organisations, and the private sector, all to increase resilience of ecosystems, agricultural land, and community livelihoods to climate change. Building the capacity of extension services and institutions at local catchment levels, water management zones levels, and national levels to better support local stakeholders was also a key goal of the programme. In each of the three selected catchments, particularly vulnerable hotspots had further been identified – in the highlands, the midlands, and the lowlands – to ensure that the programme addressed the need for catchment management at an appropriate scale.

As part of project implementation, GWP East Africa provided strategic guidance through the project steering committee. Recognizing that developing approaches that work for reforestation, restoration of ecosystem services, and taking up of new livelihood options require intensive learning, GWPEA also supported capacity building and knowledge management under the project implementation, especially focusing on rural extension services. This work included a capacity needs assessment, delivery of training modules, training of trainers, and documentation of good practices and lessons learned.

## **Outcomes**

The project benefited greatly from working with different institutions, considering that the project offered opportunities for researchers, scientists, community mobilizers and managers to come and learn about community based wetland management.

The outcomes of the project are the following:

- 1,479,388 trees were grown to restore over 2,199 hectares of degraded and deforested land
- 18 women groups were trained and skilled to produce 12,375 cookstoves
- 337.6km of wetlands were demarcated leading to 562.7ha of restored wetlands
- 250.2km of riverbanks were demarcated leading to restoration of 721.3ha of riverbanks
- Constructed several water harvesting and flood control structures that has led to restoration of land and utilisation of land upstream
- Identified all the project affected persons and supported them to form 11 Water and Environment Cooperatives
- Formed the persons into groups based on Income Generating Activities like Apiary, fish farming, animal rearing, cookstove production, shear nut butter value addition etc. Training is ongoing
- Conducted ToTs for key resource persons in different topics related to the project
- Set up 3 demonstration centres to demonstrate water harvesting and flood control, ecosystem conservation and Income Generating Activities
- Formed 3 catchment and 9 sub catchment management committees to oversee project implementation and supported to have 50 meetings.

It took a “village” to ensure that EURECCCA achieves its objectives. The project has widely taken root but still needs support of the various stakeholders to sustain what has been achieved. We need to continue monitoring and evaluating the implemented interventions in order to measure the project impacts, some of which might be seen in a long time

## **Lessons Learned**

To successfully interface with the communities and especially the people who supported the achievement of the activities, we utilized a participatory approach to mobilize and rally support. Using the local leadership as entry point helped in leveraging the support for the communities. This enabled us to develop awareness packages based on information gathered from the participatory interventions.

Where community members are poor, it is imperative that an alternative livelihood be incorporated to help achieve conservation goals. The concept which was introduced by the project went a long way in sustaining a reasonable number of community members. It has also addressed the issue of sustainability of the activities beyond the project life span.

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**Related IWRM Tools**

Basin Management Plans  
Multi-Stakeholder Partnerships  
Training Water Professionals  
Water and Climate Finance

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