# W4EE success stories: Building institutions

**KEY SUCCESSES**

+ Establishment of Kenneti Watershed Management Board and integrated water resource management (IWRM) strategy plan
+ Operational hydrological monitoring system with 9 stations
+ Creation and training of sub-catchment area water resource user associations as well as common interest groups
+ GIS mapping of catchment area and installation of the Mike basin model, decision-support tool for IWRM
+ Training of technical staff
+ Study tours to Uganda and Tanzania where basin management is advanced and challenges exist due to seasonal rainfall

**5,086**

Number of participants in village meetings on environmental conservation & protection of the catchment area

**83**

Number of technical staff trained

## A bottom-up, comprehensive approach

One of the most significant achievements of W4EE is the establishment of an institutional framework serving the integrated management of the Kenneti river and catchment area, which relies on ownership at all levels and incorporates not only water but all ecosystem elements such as land, forests, biodiversity, and vegetation. Implementation has been institutionalised from Day 1 with the goal of rolling the approach out across the nation.

A Kenneti Watershed Management Board comprised of key stakeholders meets quarterly to assess independent regulatory control and look at investments in the catchment, taking into consideration the entire ecosystem of the area, including wildlife protection. The Board is connected to water users through an umbrella organisation, which pulls information and concerns from water resource user associations that are organised around sub-catchment areas. These groups comprise traditional leaders and different water users like water utilities, pastoralists, fishermen, and farmers, who monitor the day-to-day and are the first to see when encroachments are happening. Common interest groups have also been created, bringing together water users of the same type such as vegetable farmers and beekeepers. In addition to the opportunity of having their voices heard, these groups receive awareness-raising training on how their activities have an impact up- and downstream and on the functioning of the overall ecosystem. In addition to the inputs from waters users, the Kenneti Management Board also receives critical data from technical support staff enabling decision-making (see reverse).

> "The creation of the Kenneti Watershed Management Board and its supporting foundation – such as the water resource user associations and common interest groups as well as technical expertise within national, state, and local government – is a role model for the management of other water basins in South Sudan. The resulting institutional framework is the first of its kind to create a system that co-opts all social actors to prevent uncontrolled exploitation and better manage and protect this precious resource."
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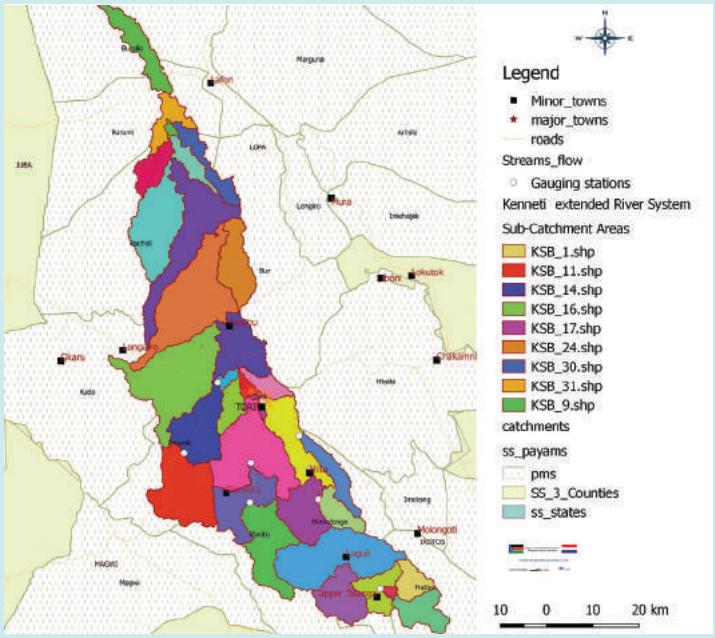
> **Andrew Yunda, Deputy Team Leader, W4EE**




*The GIS mapping of the catchment is key to effective decision-making. For example, it identifies agricultural and other types of zones (some areas are more suitable for certain uses), 'hotspots' such as wetlands, and areas for wildlife conservation. The latter reduces conflicts between wildlife and pastoralists, as it creates corridors for wildlife, crop growing,and pastoralists.*

Kingdom of the Netherlands

*Riparian and wetland communities, especially farmers, have been encroaching on and even draining these crucial natural water reservoirs to reclaim the land for agriculture, taking advantage of the residual soil moisture to grow crops especially in the dry seasons. However, this destroys the natural buffering capacity of wetlands, which protect communities from flash floods by absorbing water during rainfall and then releasing it at a steady rate for downstream users during dry seasons. After consulting with community wetland action groups (pictured here), the Kenneti Wetlands Management Strategy was formulated together with the Torit Ministry of the Environment to address the issue.*

**Training and support to technical staff**

For water resource managers and users to make informed decisions on how to allocate water usage, technical data must be available. To this end, W4EE has developed the capacity of multiple authorities. Some examples include:

- An internationally renowned hydrologist has been providing continuous training to the hydrology division in the Department of Water Resources on data management and water modelling, while community data collectors undergo refreshment trainings to enhance their knowledge and skills in data collection on river flow rates and water levels.
- A GIS facility was established for the coding and identification of geo-referenced Kenneti River sub-catchments.
- The hydromet department now generates climate data, enabling the Agriculture Ministry and farmers to plan crop water requirements.
- A water quality testing facility has been opened.

> "It was not easy in the beginning. There were skeptics who did not understand, and I was one of them! At times it was difficult to support the project, but right in the middle, we started to see. We said to the team, let us go out together and talk to the community .... They started to know the culture of the people ... and the brains of the people began to open .... When you make the grassroots understand, the others will understand. And people understand when they see."
>
> **Orasio Luka Loya, Chairman of the Kenneti Watershed Management Board**

**Raising awareness at the grassroots level**

Having a situation where everyone, from the highest level of government down to the individual, understands they own and are responsible for managing and sharing the resource requires a change of attitude that is positive and responsive. And yet that is exactly what has occurred. The project brought together common interest groups (CIGs) (such as vegetable growers, herders, and fishermen) and provides them with (1) support on maximising financial and economic benefits from the use of the resources and assessment of the value chain (input provider, primary user, transport, and market sellers); (2) training, advice and equipment; and (3) business skill development.

Building community engagement through CIGs can also reverse habitat degradation. As Nyika Charles Jacob from the Ministry of Physical Infrastructure and seconded to W4EE explains, "We begin by understanding their interests, what resources they are using. Can they come together as a group to agree on reasonable use? For example, fishermen must learn about the type of fish in the river, which ones can be caught and at what size, and how they should be caught, handled, and preserved. We teach them about the surrounding habitat and explain how what they do upstream affects those downstream. The same goes for vegetable cultivators along the river, pastoralists, and even beekeepers."

*Outreach efforts have significantly improved communications on both sides. In one village in Otesse, a large piece of farmland had become wasteland due to flooding. The community approached the project to ask what they could do to reclaim the land. A survey was conducted and the community was advised they would need to dig new channels and conduct desilting. Everyone chipped in to do the work, which took several days. After the intensive labour, the village leader explained the importance of communal participation, "I'm very happy we have come here together to open the river. It is not just one person who benefits here, it is the whole community because it's our farmland and from it we will all get food."*