The Upper Tana Nairobi Water Fund, Kenya

(GEF, IFAD, TNC, GoK - Ministry of Envn. and Forestry; County Governments of Murang'a, Nyeri, Laikipia and Nyandarua; NCWSC; WRA; NMK; JKUAT; ICRAF; Local NGOs; Farmers and private sector partners)

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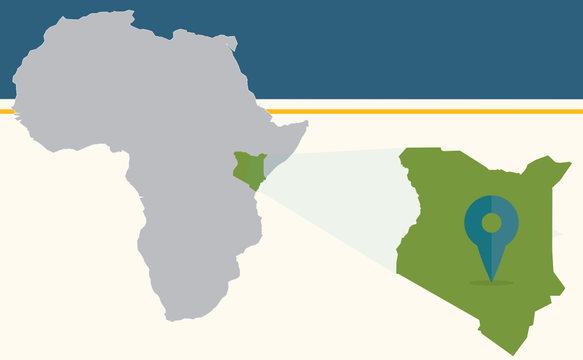

Taming the headwaters of River Tana - Water Fund as a tool for sustainability

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WaterFund Upper Tana-Nairobi

What approach did the team take to achieve the impact

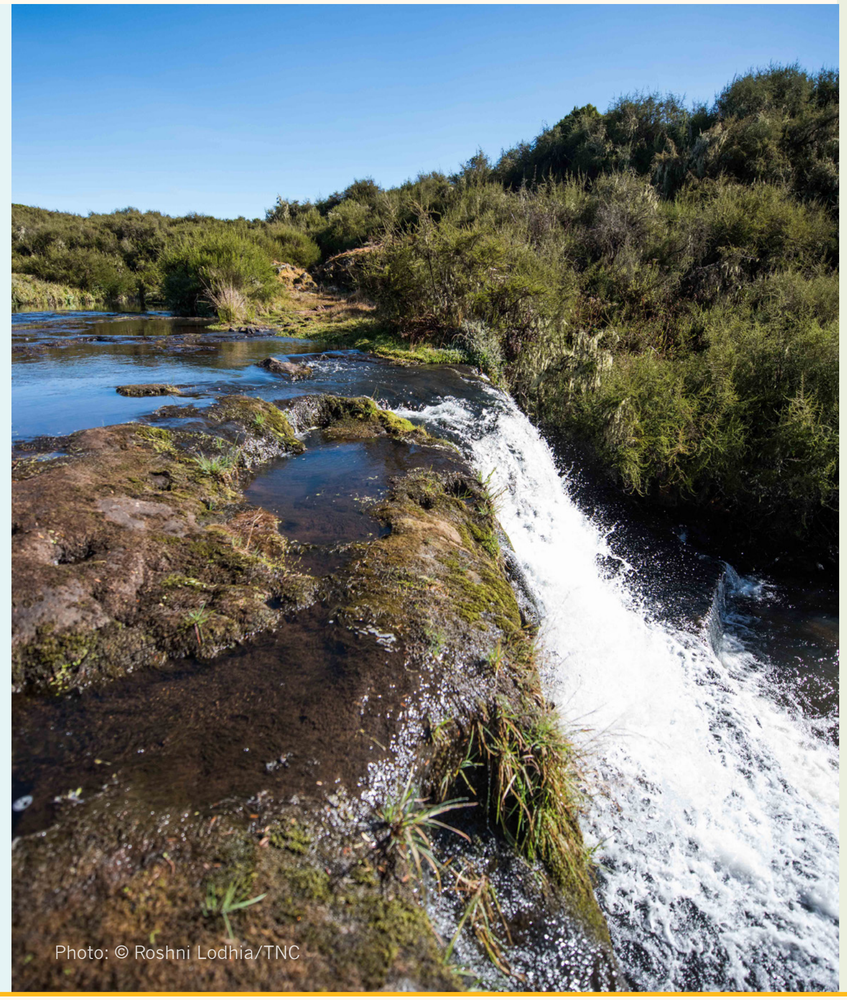
Strong science – Baselines, modelling and scenarios building that informed the proof of Concept/Pilot phase. Lessons learnt from piloting the model backed by a strong M&E system and a robust governance structure.

Partnerships – national, county and other government agencies; academia and research institutions; business, development partners, local NGOs and farmers.

ICT - developed and capitalized on technology for instance extension support services through SMS platform to reach farmers remotely and at scale, automating monitoring systems e.g. rivers and linking to visualisation tools for decision support - real time.

Institutional platform - co-creation of governance structures and mechanisms for scaling implementation - integration and collaboration NOT competition or duplication; pooling and recognizing all forms of resources - in cash, in-kind, human capital etc.

Catalytic funding - government allocated seed funding to the endowment fund that was instrumental in attracting private funding to the endowment fund that was instrumental in attracting private funding.



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What impact did the effort have and on/for whom?

Institutional capacity development – Key government agencies were capacitated to measure and track global environmental benefits - land degradation and biodiversity status tracking. Impact tracking models have been established and are currently being employed in the region to measure water fund activities on land and biological resources.

Kenya Water Resources Authority supported to automate 33 river water monitoring stations in the watershed. Continuous and reliable time-series data is recorded for timely decision-making and forecasting.

Policy frameworks – the model established a governance structure that draws stakeholders from the private and public sectors to formulate policies and strategies for effective management of natural resources.

Four policies to harmonize interventions at County levels developed on: Invasive and alien species; Mining and quarrying; Rural roads and stormwater management; and, Wetlands, and riparian land management.

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Impact on farmers: The human well-being of the beneficiaries was measured before and after the implementation of project activities using the Multidimensional Poverty Assessment Tool (MPAT). Endline results indicate that human **well-being improved by 6% in the first 5 years of the project**. An additional impact assessment survey (n=1000) indicated that **crop production increased, on average, by 50%**. With increased production and income, the ownership of **non-farm assets also increased by 23%**. This indicated the project significantly contributed to reducing the poverty level and improving food and nutrition security for the farmers. Farmers practicing innovative rainwater harvesting technologies can grow crops around the year even when rainfall is inadequate.

Impact on nature: **77,000 hectares of land put under improved and sustainable soil and water management practices**. As a result, water quality and quantity have been observed to improve across the watershed. The flow of water to the main **Nairobi water supply reservoir increased by 45% over a 5-year average**. There is **14.3 Mm3 more water flowing into the dam annually**. Water quality has also improved - see the turbidity graph in the draft note (shared separately).

Reduced turbidity in raw water led to fewer chemicals being used to treat water before supplying to the cities. **The volume of chemicals used was reduced by 13% compared to a similar period before the project interventions**. Thus there is much more water being treated for the unit of chemicals used.

Photo: © Roshni Lodhia/TNC

What were the main ingredients that led to the impact?

- **Establishment and institutionalization of the Water Fund management platform**. This involved identification of private sector companies in Nairobi and linking them with public sector institutions to create a public–private partnership to establish the Water Fund as a charitable trust incorporated under Kenyan law and governed by a board of trustees.
- **Mobilization of funds from both public and private sector institutions to support tangible activities in the upstream catchments**. This included support from international stakeholders including GEF, IFAD, county governments, business, and farmers.
- **Increased investment flows to upstream catchment land users/landowners** that support sustainable land management and integrated natural resources management implemented by farmers and other land users in the watershed.
- **Incentivising farmers in priority conservation areas directly through in-kind training**, provision of free conservation materials and nutritious fodder grasses, subsidized dam liners for water harvesting, subsidized seeds, and linkages to markets.
- **Capacity building** of farmers, farmer groups, community, county, and national institutions using Research institutions, universities, and extension services from NGOs in collaboration with county governments (Murang'a, Nyeri, Laikipia and Nyandarua).
- **Farmers were trained on best practices** in crop agronomy, soil conservation, water harvesting and farming as a business.
- **Establishment of robust knowledge capture**, management and learning systems that track progress made and share lessons both at local and national levels.
- **Strong emphasis placed on monitoring and evaluation frameworks** to support the Water Fund in decision making and allowing for an adaptive management approach to the targeted incentive schemes, inform upscaling, policy integration and replication of lessons learned.

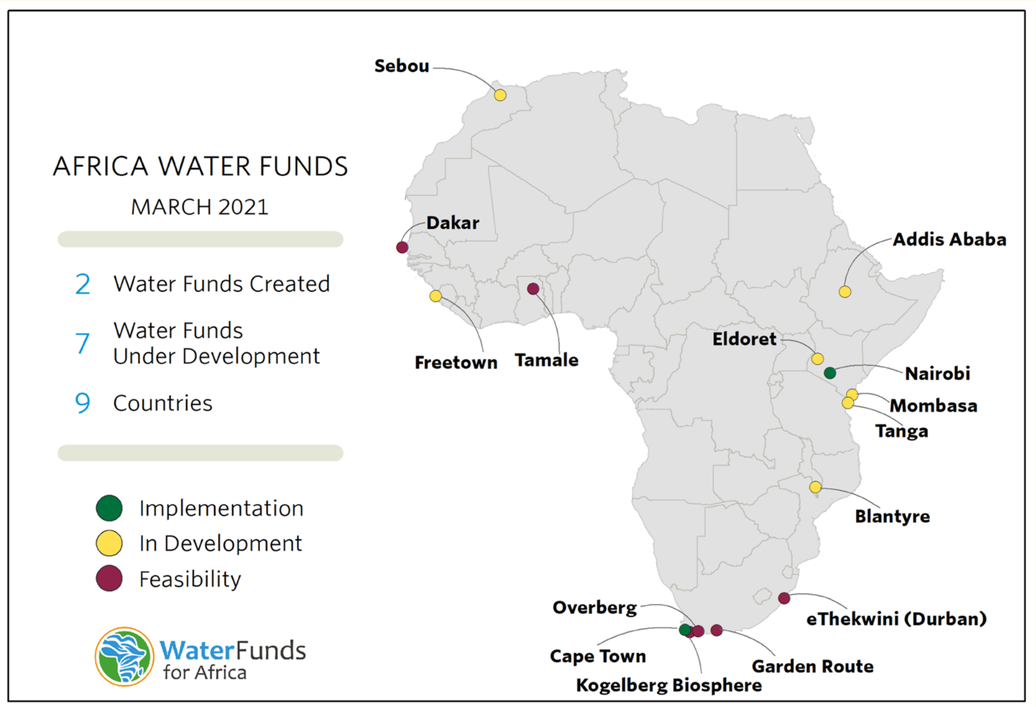
Where or under which circumstances could this effort be scaled?

The **Water Fund Model** can be **adapted and scaled in landscapes/ecosystems where watersheds (water sources) are well defined** or can be defined for protection and conservation and stakeholders upstream (water sources) and downstream (water users at the tap) can be organized to co-create and invest in longterm watershed conservation with a shared vision of improving peoples' wellbeing and ecosystem services.

Overall, in Africa, two Water Funds are under full implementation, 7 are under development, and 6 are undergoing feasibility analysis with key stakeholders.

Initial efforts led by The Nature Conservancy

See Map of the Water Fund sites



A growing partnership

Governments

Sierra Leone. Kenya. Tanzania. Senegal.

Municipality

Freetown. Nairobi. Eldoret. Tanga. Mombasa. Cape Town. Ifran. Dakar. Blantyre. Durban.

NGO's

TNC. CRS. WfP. WWF. WRI. SIW.

Indigenous Institutions

ELDOWAS. EAMCEF, Amanzi ethu Nobuntu

TNC partners, Ethiopia.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What are the main lessons that were learned?

Clarify/establish a shared goal/vision – This is a must do at the beginning of a collective action initiative such as a Water Fund. There are too many people/stakeholders, too many activities, too many priorities!

Invest in creating structured partnerships upfront – this may take time but accelerates and leverages project implementation once trust and buy-in is established amongst stakeholders. Helped us leverage on human resource, data, equipment/vehicular capacity, enlist volunteers (leadership roles, youth technology promoters) etc.

Policy influence timelines - time taken to influence policy changes are longer than design anticipates and much more effort is needed to inform and integrate lessons and new evidence in decision making structures.

Strong evidence base - Sound science and data to establish credible baselines, tracking tools, indicators ect.