

FAQs: The Nairobi Water Fund

What is the Nairobi Water Fund?

- It is a fund put together through a public-private partnership that will be used to protect the water supply of the Tana River Basin by investing in conservation in the upstream area where numerous streams and rainfall form the river's source.
- The Fund aims to raise a US\$15 million endowment that will support long-term investments in upstream water conservation measures such as agroforestry, drip irrigation, terracing, and erosion-control measures such as grass strips and buffers of vegetation protecting riverbanks.
- Studies show that investing US\$10 million in conservation activities in the watershed over ten years should generate more than twice that amount (\$21 million) in long-term benefits to the people and businesses that rely on the basin's water.

Why is the creation of the Nairobi Water Fund in the Upper Tana River significant?

- The Tana River is critical to the Kenyan economy, serving 9.3 million people. It provides 95 percent of Nairobi's water; and half of Kenya's hydropower-generated electricity.
- The decline of the watershed undermines food security in Kenya, as it supplies water to a million farms in one of the country's most productive regions.
- The health of the watershed is deteriorating. 65% of farmers questioned say the productivity of their land has declined even though they use more fertilizer than five years ago. Almost 80% say rainfall has decreased in recent years.
- Research from the International Center for Tropical Agriculture (CIAT) shows that quarrying, open dirt roads, deforestation and other upstream farming activities on unprotected slope land have led to massive erosion. In one of the Tana watersheds, quarries account for one quarter of all sedimentation.
- Soil sediment in the water is lowering water supply and water quality, and increasing the cost of water treatment and electricity generation.
- Some 60 percent of Nairobi residents already lack a secure water supply. With the supply of clean water shrinking, people are finally looking at fresh water as a valuable good that deserves investment.

What is the regional significance of the Nairobi Water Fund?

- As the first water fund on the continent, it will provide a model for other African countries facing similar challenges.
- The fund builds on a successful experience in other regions. Through work by the Nature Conservancy, 32 such funds provide secure water supplies for nearly 50 million people.
- The challenges to water security are likely to grow as climate change leads to less water in the dry season and heavier deluges in the rainy season. This is further worsened by population growth trends that reduces the per capita water available. Action is needed now to ensure the region's future water security.

Who is involved?

- A steering committee representing public and private organizations has spearheaded the fund. It is comprised of: [The Nature Conservancy](#); Nairobi City Water and Sewerage Company (NCWSC); Kenya Electricity Generating Company; [International Center for Tropical Agriculture](#) (CIAT); Tana and Athi Rivers Development Authority; the water technology company Pentair; East Africa Breweries; Coca-Cola; Frigoken Horticulture and Kenya's [Water Resources Management Agency](#).

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How does the Fund work?

- Major public and private water users contribute to the fund to finance upstream land and water conservation projects that benefit people across the basin.
- As currently conceived, the fund is structured to include both a “revolving fund” and an endowment.
- The money in the revolving fund is spent directly on conservation projects, and is periodically replenished through fees collected and/or through donor contributions and downstream beneficiaries from the private sector.
- The money in the endowment is invested to generate interest, and the interest is re-invested in upstream conservation projects.

How will the Fund’s success be monitored?

- As the Water Fund’s research partner, the International Center for Tropical Agriculture (CIAT) in conjunction with Kenya’s Water Resource Management Authority will provide evidence on the effectiveness of different conservation measures.
- CIAT has already produced data and digitized maps to guide investment decisions and provide a baseline to evaluate future impact. For example, it has modeled current land use against potential land use changes, such as changing from horticulture to coffee, and predicted the impact on soil erosion and water sediment of such changes.
- CIAT will continue to carry out research to guide and evaluate land management options – such as measuring the effectiveness of terracing and grass strips – so they can be tailored to specific areas of the watershed.
- Automatic data recorders at several monitoring sites along the river reaches will measure the amount of sediment in the river, providing a continuous stream of data to assist with monitoring and evaluation.

What does the business case for the Fund show?

- The business case is based on scientific research that identified where funds should be invested and which conservation measures would have the greatest conservation impact and financial return.
- It found that investing at least US\$10 million in environmental management for the Upper Tana River over a decade will:
 - Reduce sediment concentration in rivers on average by over 50%.
 - Decrease annual sedimentation in the Masinga hydropower reservoir by 18%.
 - Increase annual water yields across the priority watersheds by 4%, and up to 15% during the dry season in some locations.
- Calculated over a thirty year period, these environmental improvements will lead to:
 - More than US\$2 in benefits for every US\$1 invested.
 - US\$3 million a year in increased yields for farmers.
 - An additional US\$600,000 in a year for KenGen as a result of increased power generation and avoided shutdowns.
 - Savings of US\$250,000 a year for Nairobi City Water and Sewerage Company (NCWSC), including through lowering the costs of filtering water and disposing of sludge.
 - More than half a million people relying on local stream water will have better water quality, with a potential decrease in waterborne pathogens.

What is the scale of the project now?

- Fund financial supporters have already funded a two-year pilot phase, which is enabling 5,000 farmers to adopt conservation measures.
- The Water Fund will initially focus on 3,329 square kilometers that is part of the

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wider Upper Tana watershed, which itself covers 17,000 square kilometers and is home to 5.3 million people.

Will the work expand or be replicated?

- The success of the Fund will depend on expanding public and private financial support to capitalize a US\$15 million endowment that will enable soil and water saving interventions to continue in the long-term and over an expanded area.
- As the benefits of the Fund are demonstrated, it is likely that similar funds will be developed and supported in countries across the continent and beyond.
- Worldwide, the cost of land degradation has already reached US\$490 billion. The Water Fund model provides a vehicle for investing in the protection of ecosystem services that benefit farmers, the environment and businesses.