Tana and Athi Rivers Development Authority (TARDA)

WORLD WATER DAY 2023 CELEBRATIONS IN SAMBURU COUNTY

Theme: 'Accelerating Change'

Diving into sustainability: TARDA's innovative solutions for sustainable water management

MESSAGE FROM THE CHAIRMAN, PATRICK GICHURU GICHOHI, CBS

Water is the lifeblood of our planet, and it is essential for the health and wellbeing of all living things. However, as our population grows and climate change continues to impact our planet, the need for sustainable water management practices has never been more urgent.

Two key functions of the Tana and Athi Rivers Development Authority (TARDA) as outlined in its establishing Act include advising the Government on apportionment of water resources, as well as protecting, and utilising water resources within the Tana and Athi Rivers basins.

The two basins are the first and second largest in the country, cutting across 19 counties, and with an estimated population of 20 million people.

Surface water from the Tana and Athi Rivers catchments (Thika, Ruiru, and Sasumua Dams) constitute over 90 percent of water supplied to Nairobi. The importance of protecting the water catchment areas of the Aberdare and Mt Kenya, which are the primary sources of both Tana and Athi Rivers, cannot therefore be overemphasised.

The theme of this year's World Water Day is ***"Accelerating Change"***, and TARDA's activities have aligned with this, where developing and protecting the water resources for the Tana and Athi Rivers is concerned.

In utilising water resources in Kenya, TARDA has implemented some notable sustainable projects within the Tana and Athi Rivers basins.

In the energy sector, TARDA implemented the Masinga and Kiambere Dams in the 1970s and 1980s along Tana River, which added 200MW of hydroelectric power to the national grid. The dams also serve as water storage by ensuring availability of water for HEP generation even during prolonged dry periods. The two dams further provide clean drinking water to the surrounding communities in Kitui, Mwingi, and Masinga through their respective water supply companies.

Under Agriculture and Food Security, TARDA has utilised the waters of the Tana River, through the Kitere Intake and Canal to implement the Tana Delta Irrigation Project (TDIP). The project has the potential to increase rice production in Kenya by up to 28 percent by producing approximately 84,000MT of rice per year on 12,000Ha of land.

The revitalisation of this project as one of the focus areas to increase national food production under the Government's Food Security Agenda will enable 17 rural villages that depend on the 46km Kitere Canal to access water, thus improving their livelihoods by providing water for domestic consumption, irrigation, and livestock.

The availability of water in these villages with an estimated population of 35,000 persons will greatly improve the socio-economic well-being of the communities. In addition, the irrigation project has the potential to create over 30,000 direct and indirect employment opportunities, thereby facilitating sustainable growth of the region around the irrigation scheme.

These initiatives are a testament to what is possible and so much more. Together, we can create a more sustainable and water-secure future for our country.

This World Water Day, let to us join the rallying call to promote sustainable water management practices and create a more water-secure future for our country. Let's all intentionally commit to being the change we want to see in the world, and work together to protect and conserve our precious water resources.

At TARDA, we believe that everyone has the power to make a difference in the world. We are committed to promoting sustainable water management practices and ensuring that water resources are protected for generations to come.

Tree planting in South Kinangop.

MESSAGE FROM THE MANAGING DIRECTOR, LIBAN ROBA DUBA

TARDA recognises the fact that every living organism requires water to survive. As the world commemorates World Water Day, the Authority remains committed to contributing towards the achievement of SDG Goal No. 6 by ensuring availability and sustainable management of water resources within the wider basins of Tana and Athi rivers.

These two basins have been experiencing severe water shortages as a direct result of climate change. The prolonged droughts have negatively affected the energy and agricultural sectors as well as the country's sensitive fresh water ecosystems. Reduced water flows from Aberdare and Mt Kenya water catchments have led to a drastic fall in Masinga and Kiambere dam water levels, which have had further negative effects on HEP generation, provision of domestic water, and food production through irrigation.

To address climate change-related water challenges, TARDA has been implementing a Drought Mitigation and Water-Harvesting Programme since 2008, whose objective is to build adaptive capacity and resilience of communities to climate change by implementing various water projects.

The programme has improved access to water through construction of weirs, water pans, storage tanks, and pipelines to provide water for irrigation and domestic use. In Kinangop, Nyandarua County, TARDA has constructed three water weirs and intakes that provide water to approximately 480,000 residents.

Providing access to water has restricted human activities within the Aberdare forest to forage and collection of water, thereby contributing towards the conservation of this important water tower. In addition, TARDA has implemented similar water projects in five counties – Nyeri, Kiambu, Laikipia, Tharaka Nithi and Tana River – benefiting an extra 600,000 people.

TARDA's role in the protection and sustainable utilisation of water resources is vital in the achievement of SDG Goals 1, 2, 7, 13, and 14 on reducing poverty, zero hunger, clean energy, climate action, and life below water. All these goals are heavily dependent on sustainable and integrated management of water resources.

Preserving our waterways: TARDA's commitment to sustainable catchment conservation

The Aberdare Ranges and Mt Kenya are the sources of the Athi and Tana Rivers. Mt Kenya, which forms the upper catchment of Tana River and Ewaso Ngiro North River, is responsible for 40 percent of the country's water supply. Some of the major rivers originating from Mt Kenya to form the Tana River are Sagana, Ragati, and Gura.

The Aberdare Ranges constitutes the upper catchment of the Tana and Athi River systems that in turn support the livelihoods of approximately 20 million Kenyans.

Chania, Kiburu, and Sasumua tributaries originate from the Aberdare ranges and flow downstream to join both the Tana and Athi Rivers. These two catchments have been exposed to degradation and climate change, leading to reduced flows and drying up of some tributaries that form the Tana and Athi Rivers.

To protect these water catchment towers, TARDA has been implementing a Catchment Restoration and Livelihoods Enhancement Programme for Mt Kenya and Aberdare Ranges.

Towards this end, and as a contribution towards the current Presidential Directive to plant 15 billion trees by 2030, TARDA has established six tree nurseries throughout the basins, which have provided tree seedlings for afforestation and reforestation in the catchment areas.

The Authority has planted over 100,000 trees in the Aberdare Ranges and is working closely with the County Government of Nyandarua to intensify catchment conservation activities.

TARDA is planning to expand catchment conservation activities to Mt Kenya catchment by increasing the tree nurseries to 21 and planting over 16 million trees within the catchments.

To improve access to water and discourage over-abstraction from the water towers, TARDA will implement a water harvesting and storage programme by constructing 19 water pans and earth dams, drilling and rehabilitating boreholes, and establishment of eight smallholder irrigation schemes to improve the livelihoods of residents living around the Aberdare and Mt Kenya catchments.

TARDA is confident that the protection and sustainable utilisation of water resources is possible through the concerted efforts of all stakeholders, including the communities, County Governments, Government Agencies, and NGOs. Collective planning for our water resources will cushion us against the future shocks of climate change and unprecedented population increase, thereby giving our future generations a chance to live in dignity.