Kenya: Data application for national planning

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Water Resources Management in Kenya

Kenya is classified as ‘water scarce’ country due to it’s limited freshwater endowments, and

Adequate legal framework for Water Resources Management has been put in place..

The National Water Master Plan 2030 provides a long-term framework for the management and development of water resources in line with the National strategy for social and economic development taking into account environmental and ecological standards, international obligations, inter-basin water transfer, and basic water demands, Irrigation development to increase agricultural production, and hydropower development.

The National Water Resources Strategy (2020-2025) is anchored on fundamental principles derived from a number of national and international legal obligations for the management of water resources. The strategy recognizes water as finite and vulnerable resource and as economic good; recognizes the distinctiveness and interdependence of the two levels of government, respects national values of governance, integrated planning and resource management, the polluter-pays-principle and also equity and inclusivity in the management of water resources.

National water policy 2021 aims to strengthen sustainable water resource management in the country. accelerate delivery of water supply services and to promote development of water harvesting and storage infrastructure.

Water Sector Reforms journey started way back in1999 which culminated to the enactment of Water Act 2002.

The reforms led to establishment of Water Resources Management Authority (WRMA) in Water Act 2002 and its successor, Water Resources Authority (WRA) in the Water Act 2016 mandated with protecting, managing and regulating the water resources in the country.

The Act transferred responsibilities for Water Resources management to units at Basin and Sub-Basin Level through the Basin Water Resource Committees (BWRCs), and Water Resources Users Association (WRUAs).

Despite all the policies and regulations in place, the five major water towers continue to face severe degradation due to uncontrolled and unsustainable environmental exploitation. The notable drivers of environmental degradation include high rates of population growth, use of inappropriate technology, unsustainable consumption and production patterns, high rates of poverty and the adverse effects of climate change.

Above all, important Water resource data for key decision making is inadequate in some cases or lacking in others

SDG 6.6.1 Pilot Project

The UN 2030 Agenda is based on global sustainable development goals and covers the five critical pillars: people, planet, prosperity, peace and partnerships. It contains 17 goals and 169 targets that provide broad guidelines for sustainable development. The 17 Goals are all interconnected, and the aim is that these should be achieved by 2030.

The Government of Kenya, has domesticated the integration of the SDGs into national and county policy and planning frameworks

Kenya is honored to have participated in the pilot project: ***"Integrating freshwater data into sector-wide decision making to improve the protection and restoration of freshwater ecosystems".***

The pilot project aimed to promote evidence-based decision making and actions that protect and restore freshwater ecosystems, thus accelerating progress towards SDG target 6.6.

The activities undertaken in the pilot project included training of our professionals on freshwater ecosystems and participation of our decision makers to raise awareness.

SDG target 6.6 seeks to halt the degradation and destruction of water-related ecosystems and to assist the recovery of those already degraded.

SDG indicator 6.6.1 tracks changes in different types of water-related ecosystems, enabling decision makers to determine the extent of ecosystem change over time

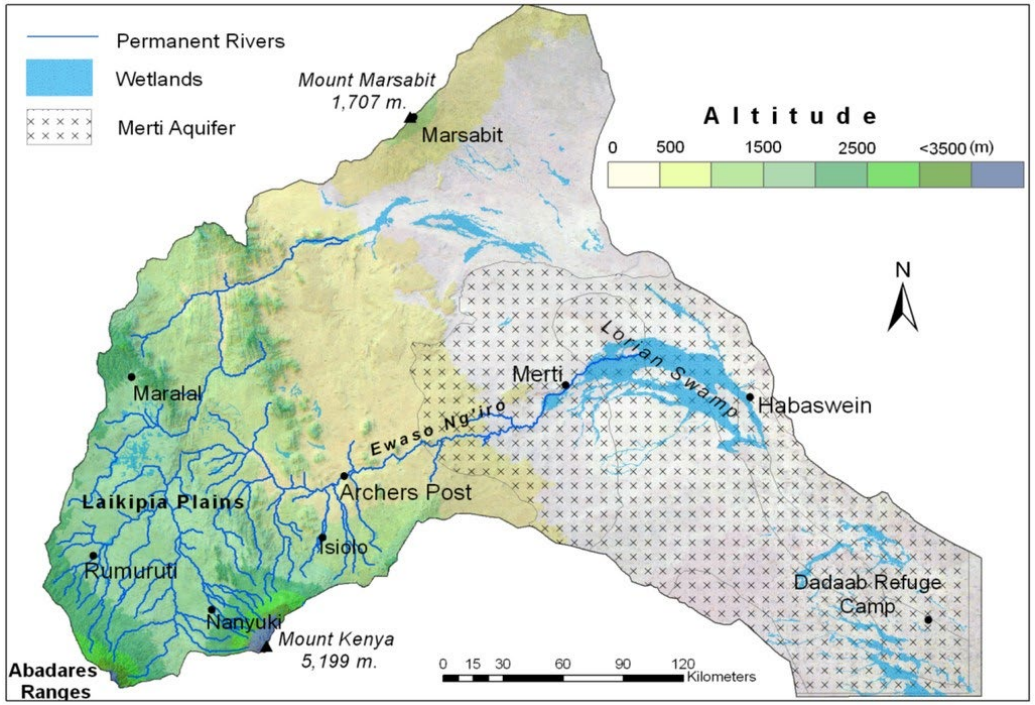
The overall objective of the pilot project *Integrating freshwater data into sector-wide decision making to improve the protection and restoration of freshwater ecosystems* is to assist countries in achieving SDG target 6.6.

The pilot project is implemented by GWP and CapNet, with the support of the United Nations Environment Programme (UNEP) and the United Nations Development Programme (UNDP),

As part of the pilot, Kenya identified and prioritized 'Ewaso Ngiro North River Basin' as high priority ecosystem to be restored and protected

Ewaso Ngiro North (ENN) River Basin

- Ewaso Ngiro River Basin has unique ecological diversity where the River originates from rich Agricultural highlands of Mount-Kenya/Abaderes forests and flows through semi-Arid and Arid lands of Kenya.
- Is regarded as lifeline to the pastoralist communities downstream, wildlife and the entire flora and fauna within it.
- The basin supports livelihoods of approximately four (4) million people in 9 counties covering an area of about 210,000 km2
- Unfortunately is on the verge of drying up due to unsustainable utilization, climate change, recurring drought and other man-made challenges.



Key issues in ENN Ecosystem are categorized in the table below:

Biophysical issues	Climate: Inadequate flood preparedness; Inadequate drought preparedness; Climate change Environment: Poor land use and catchment management; Natural vegetation loss; Biodiversity loss
Socio-economic issues	Demographics: Population growth; Education levels; Poverty Economics: Economic activity; Employment; Livelihoods Standard of living: Water supply and sanitation; Food security; Disaster preparedness
Water resources availability, management, and development issues	Surface water resources: Spatial and temporal variability; Inadequate protection; Poor water quality Groundwater resources: Inadequate protection; Poor water quality Inadequate water resources infrastructure: Bulk water supply and transfers; Limited formal irrigation schemes; Insufficient water supply schemes; Funding for future projects Hydrometeorological: Inadequate monitoring network and monitoring; water allocation and use
Institutional issues	Institutional arrangements: National policies and legislation; National institutions; Basin and sub-basin institutions; County governments; Partnerships and engagements Enabling environment Transboundary and trans-county issues

The priority actions identified for this endangered freshwater ecosystem are as follows:

1. Strengthening of institutional capacity, participation and coordination
2. Improving stakeholders' engagement and coordination
3. Water Quality Management
4. Groundwater Management
5. Hydro-meteorological monitoring
6. Strengthen the enabling environment to support institutions
7. Improve Water Demand Management and sustainability
8. Improve Water Security and Governance
9. Protection and improvement of Catchment Areas and Water Towers

- The draft 5-year Action plan for protection and restoration of ENN ecosystem amounts to Ksh 440m (Approx $3.7M)
- The one thing that comes clearly in water resources management in the country is challenges associated with data: inadequate data, lack of data, data gaps, incomplete data, inaccurate data …….
- The project introduced SDG 6.6.1 Freshwater Explorer Platform (https://www.sdg661.app/) which is free, easy to use data platform that provides accurate, up-to-date, high-resolution geospatial data depicting the extent freshwater ecosystems change over time.
- This will help bridge the data gaps and complement the manually collected data to be used for decision making in water resources in the country.
- Realization of universal access to water in the country might remain a pipedream without proper planning, management and availing of necessary financial resources. The Ministry of Water, Sanitation and Irrigation, Kenya, in developing its Water Policy and Water Resource Management Strategies recognize the need to nurture healthy ecosystems and support sustainable management of land, water and natural resources. Further, it recognizes the importance of data in the management, conservation and regulation of water resources and its place in decision making.

Thank you for your attention