



Special edition: Water

Availing Water for Economic Enhancement



The County Government of Laikipia has made strides in availing water for production for the people. There is a master plan for 20 years which has been broken down to the first five years. This will ensure enough water for food and fodder, and also ensuring a healthy people, while also creating job opportunities to at least 50,000 people

Inside Laikipia County Water Master Plan for 20 Yrs

The County Government has developed the Laikipia County Water Masterplan.

This document provides the blueprint that will guide water resource development and supply for the next 20 years.

In this Master plan the government has identified a strategy for the next five years in which there are specific initiatives including the rehabilitation of 231 dams and pans, development of 130 boreholes, five mega dams, and 15 privately developed dams as well as increasing bulk water supply schemes across the county.

The Government seeks to connect 40,000 households to water and facilitate the irrigation of 50,000 hectares. All these dams and projects are spread across the 15 wards.

The aim is to provide enough water for the residents for consumption and production. Being a rather semi-arid area, waiting for rains will not provide a lasting solution. The water will help residents in growing crops for consumption as well as for trading which will ensure a healthy popu-



lation that is economically stable.

There will also be enough water to grow fodder for the livestock. As a result the border conflict that happens every year as people fight for grazing ground will be a thing of the past. Support from the government for establishment of feedlot system will help the pastoralists fatten their animals through minimized live-

stock movement.

The government also plans to co-invest with private sector to establish 40,000 - 60,000 acres of fodder crops.

Availability of adequate clean water will ensure hygiene and thus eliminate water-borne diseases. Thus ensure Laikipia continues being the county with the best quality of life.

Focusing on Water for Laikipia

Laikipia County is situated in a predominantly semi-arid area. The county's typical climate sees two warmer seasons a year and two rainy seasons a year. January to February is the first hot, short dry season, and July through October makes up the cooler, longer, dry season. The long rains are experienced between March and May and short rains in October and November with slight variations of two to three weeks. Due to these climate conditions water can often be a scarce resource as rivers and reservoirs are heavily dependent on rain.

Despite this, the right to clean and safe water in adequate quantities as well as a clean and healthy environment are rights enshrined in



Governor Ndiritu Muriithi leads a team in laying pipes for the Solio Water project

the Constitution of Kenya. The Constitution further mandates the County Governments to provide these services as described in The Fourth Schedule. These two mandates are the foundation on which the Department of Water, Environment and Natural Resources is established, whose

function is the provision of water and sanitation services to approximately 532,301 people in Laikipia County.

A majority of this population live away from towns and urban centers. The County Government's paramount focus has been to provide households located in remote regions of the 15 wards in the county with access to water.

This week we feature the Department of Water, Environment and Natural Resources and share insights on the team and the work they do to ensure that the people of Laikipia access clean water and live in a clean environment.



Using water from Ndathimi dam to do irrigation

How Solio has Transformed after Implementation of a Water project



A transformed land in Solio using Solio Water Project

Solio Water Project was initiated in January 2019 and substantially completed in March 2020 with operations kicking off in June 2020. The project draws its water from the Honi River in the Aberdares and convey it via a 31km gravity main to the seven villages that comprise the Solio Settlement Scheme. The project was co-financed by the Laikipia County Government and the Water Sector Trust Fund, with NAWASCO providing the technical supervision during project implementation and operations.

Since its completion, the project has derived a number of positive impacts. The project has seen im-

proved access to water and improved water quality for over 1,978 households, nine schools and two health centres. Milk production has also increased from 15,000 litres to over 60,000 litres per month and farmers are now receiving monthly income. In addition, pig farming has

picked up due to availability of good quality and reliable water.

Youth engagement in productive farming activities is also on the rise. One youth, a graduate in village 4, is now self-employed through several initiatives such as farming of onions, arrowroots, exotic fruits and bird rearing. There is improved revenue and nutrition for households practicing kitchen garden.

On average, farmers practicing kitchen gardening get between Ksh.8,000 - 10,000 a month in addition to household feeding from the same.

Improved hygiene in schools and better learning environment has also been realized for students due to availability of water for cleaning of classrooms, kitchen gardens.



How Solio villages looked before implementation of Solio Water Project

Residents Praise Makurian Osirua Water Project



Makurian Osirua Water Project is a major achievement for Laikipia, supervised by the Department. The project supplies water to 7,600 citizens in six villages before terminating at Kiwanja Ndege town.

The project, which commenced construction in early 2021, conveys water through a 36km long transmission line from the Timau River. The project is co-financed by the Kenya Devolution Support Programme (KDSP) and Laikipia County Government through NAWASCO, who also supervise pro-

ject implementation.

Through this project, the communities in Chumvi and Makurian now have access to good quality and reliable water, and is expected to realise added benefits such as food and fodder production, which will transform the lives and livelihoods of this community. The project is complete and residents are thankful for the water that is now near them.

They say they have never seen such development in their area, citing that it has saved them from making long walks in search of water that is not even clean enough.

Courtesy of this project, the residents enjoy all year round clean water without long movements



Kinamba Water Project Bringing Economic Benefits

Kinamba Water Project, in Githiga Ward, is set for completion by September 2022.

Once completed the project is expected to serve about 2,000 households with clean water for domestic and commercial use.

The project comprises four boreholes and a 29km reticulation network to serve the citizens of Kinamba town and its environs. The project was co-financed by KDSP and Laikipia County Government through Nanyuki Water and Sanitation Company (NYAHUWASCO) who are also supervising its implementation.

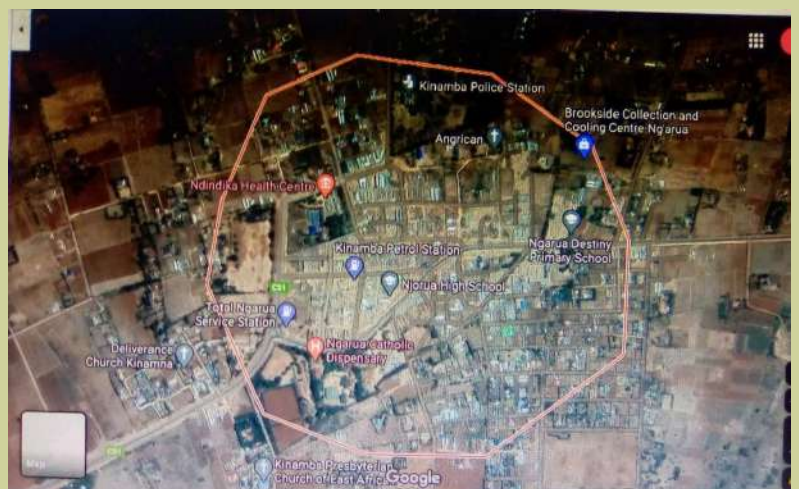
Citizens in Kinamba town are already accessing water and two institutions- LHS Ndindika and Ng'arua Dairy Cooperative Society Limited are benefitting from the project.

Availability of water has began attracting investors in the area who previously shied away from putting their money in a place that has water problems.

Other projects underway include the Wangwaci Dam and Ilpolei Dam projects, both financed through the Infrastructure Bond. Once completed, these projects will provide about 630 farmers with efficient systems to implement irrigated agriculture for improved production.



Water is an economic enabler that interconnects major phases of any economy. Places that lack water lag behind in matters development compared to where there is enough water for consumption and production



Enhancing a Clean and Healthy Environment

Urban households and businesses produce substantial amounts of solid waste that must be collected regularly, recycled or treated and disposed properly in order to maintain healthy and sanitary living conditions. Many cities are increasingly facing solid waste management challenges

In recent years, Laikipia County has witnessed increased economic development, rapid population growth and improvement of living standards. These factors have also attributed to increased quantity and complexity of solid waste

being generated. The bulk of this waste has been noted to end up in open, illegal dump sites, urban streams and wetlands, resulting in blocked drainage systems, contaminated surface and groundwater, which causes several environmental, health and economic challenges.

The Directorate of Environment has been relentless in coordinating cleanliness and improved aesthetics through ward-based clean-ups to clear illegal dumpsites at street corners, shopping centers and open spaces. The county government



owes its success to a combination of sanitation workers and street sweepers also known as *The Green Commandos*, who clean trash and other debris from streets, drains, collect trash and dispose of it appropriately. The workers are equipped with the right set of tools and protective gear to ensure they deliver on this crucial role of ensuring Laikipians live in a clean and safe environment.

The benefits of this integrated sustainable solid waste management approach include natural resource conservation, reduction of the amount of waste to be recycled or transported for land filling, decrease in air pollution and greenhouse production, reduction in production of toxic waste and ultimately reduction in cost related to the collection and disposal of waste



Department's Top Leadership

The Department of Water comprises a team of 61 staff playing various roles. Led by CECM Hon. Peter Matunge it has three Directorates: the Directorate of Water Services, Directorate of Environment, Wildlife Conservation and Climate Change and the Directorate of Mining and Natural Resources.

Peter Matunge holds a Bachelor of Science in Wildlife Conservation and Management from Moi University. He also has served and continues to serve in the County Government in various other roles including as a Member of the County Assembly



representing Ethnic Minorities for three years. He has served as a member of the Committee of Agriculture and Agricultural Resources, as well as Vice Chair to Committee of Health and Medical Services as well as Committee of Rules and Procedures.

He has been serving as the CECM of the department of Water and Environment since 2020.

June Kawira serves as the Department's Chief Officer. She holds a Bachelor of Science in Water Engineering in Kenyatta University and has eleven years' professional experience in design and implementation of water projects. Ms. Kawira is reg-

istered as an EIA Associate Expert with NEMA and an accredited Project Management Professional from the Project Management Institute.



She joined the Department in 2020. Before this she worked as an engineer in a Nanyuki based engineering company, where she honed the skills that she applies to her current position. Her current roles include coordinating staff and resources required to deliver on the Department's objectives. She also reviews the engineering designs and Bills of Quantities for projects implemented by the Department, and is the overall project supervisor.

Godfrey Mambo Wambugu serves as the Department's Director of Water Services and has served in this position for eleven years. He holds a Higher Diploma from Kenya Institute of Water.

The Director's roles include preparing bills of quantity for department projects, checking the adherence of specifications and standards of projects undertaken by or overseen by the department, ensuring works progress on scheduled time, supervising complex water works, preparing wa-

ter supply and sewage works, and evaluating and advising on technical reports.

Kingori D. K. is the Director of Environment, Wildlife, Climate Change and Natural Resources. His educational background is in Environmental Science. He has been serving in his role for seven years. The roles and responsibilities include monitoring, protecting and conserving the environment and natural resources for sustainability.

Chris Kimanga serves as Director, Mining and Natural Resources. He holds a Bachelor of Science Degree in Civil Engineering and is currently pursuing his MBA in Strategic Management. He has over seven years' experience in civil engineering design, supervision and project management.

Kimanga has served as Director for Mining for 21 months. His current roles include prospecting and mapping of mineral deposits in Laikipia County as well as promotion of the mining sector. During his time in Laikipia County, he led the team that identified high quality limestone deposits in Mukogodo West Ward.



