



January - March 2023 Jssue







NHINCL

Editor's I	Note
-------------------	------

	An Epitome Of Excellence4	
(Light at The End of The Tunnel5	
	The Dam That Restored Hope6	
	Social Scene7	
	The Timeliness of Chemususu Dam	
	The Mark of Public-Private-Partnerships(PPP)	
	Narok, Waste Water Stabilization Model 10	
	Road Safety Awareness 11	

Cover Photo: PC Signing

EXECUTIVE EDITOR : Eng. Samuel Oruma

EDITORIAL COMMITTEE

CPA Douglas Murei, Editorial Chair
 Carlos Cheluget MPRSK, Chief Editor
 Philip Kimeli, Member
 Lilian Chepchumba, Member
 Caren Lagat, Member

WRITERS 1. Sally Ogeya 2. Pauline Moraa 3. Rachael Njambi

TECHNICAL RESEACHERS

Sally Ogeya
 Kennedy Kurgat

GRAPHIC DESIGNER Pauline Moraa

Carlos Cheluget

It is with great pleasure that I welcome you to the sixth production of Valley Newsletter, as it is important in sensitizing on existing and ongoing projects in the Agency.

Apart from project statuses featured in here, we take this chance to recognize several milestones covered in collaboration with Public Private Partnerships.

This Issue contains insightful information in matters water. An interation with it will inform your perception on the need of dependable water and sanitation in our area of coverage.

We invite you to interact with us through our feedback mechanism.

Happy reading!

indable water and Sanitation Infrastruct

Chairman's Statement



Amb. Boniface Muhia. Chairman. I salute all our readers,

I'd like to recognize the Board of Directors, Management and Staff for the hard work they employ towards making CRVWWDA an epitome of excellence.

This has been an exciting quarter, considering our exemplary score in the Perfomance Contract which has given us zeal to work even harder towards our core mandate.

As an Agency, we take this opportunity to appreciate the President for fronting mwananchis' plight by his indulgence and move towards reviving the stalled Itare Dam Water Supply Project.

It is important to note, our achievement as an Agency marks indelibly when we pool together our strengths as partners, stakeholders and customers towards attaining our mission.

-<mark>Chief Executive Officer's Statement</mark>

Project success means meeting our clients expectations.

This issue of Valley H₂O purposes to give you details of multiple water and sanitation projects that we are currently undertaking.

We take this platfoam to highlight the impact of some of our successful projects among which Kases Peace Dam, and Chemususu Water Supply Project feature. Currently the Agency is on the process of implementing the Last Mile Connectivity, for safer distribution of water in Eldama Ravine and its environs.

Besides, this Issue sheds light on the on-going deliberations towards the revival of Itare Dam Water Supply Project.

we endevour to achieve our mission by delivering dependable water and sanitation infrastructure.



Eng. Samuel Oruma. Chief Executive Officer.

May you find this Issue enliahtenina.

endable water and Sanitation Infrastruc

An Epitome Of Excellence



have a good working team from the Board of Directors, Management and staff in the water sector to ensure that work is done to the best everyone's ability. CS: Alice Wahome

CS Hon· Alice Wahome(L)Agency's Chairman, Amb· Boniface Muhia (C) Director, Dr· Cynthia Kipchillat(C) and Agency's CEO, Eng· Samuel Oruma during the signing of the PC·

on. Alice Wahome, Cabinet Secretary (CS) and Dr. Kiprono Ronoh, Principal Secretary (PS), Ministry of Water Sanitation and Irrigation (MoWSI), congratulated CRVWWDA led by Amb. Boniface Muhia(chairman) for an excellent score at a Performance Contracting (PC) FY 2022/2023 ceremony of all parastatals in the water sector that took place in Nairobi at Maji House.

During the PC signing and awarding ceremony, the CS

highlighted the competency of the team in the water sector that includes Board of Directors, Management and staff that ensure they work within their best ability to make sure that work is done. "We have a good working team from the Board of Directors, Management and staff in the water sector to ensure that work is done to the best everyone's ability.

The CS and PS also encouraged CRVWWDA among other agencies to continue working closely with the Ministry to ensure smooth implementation of projects around our area of jurisdiction and in the country as a whole. They also pledged their full support and the support of the Ministry to ensure seamless operations. CRVWWDA envisions being an epitome of excellence and as such, service delivery is the core of our mandate. We endeavour to offer services to all with equality. Consequently, this excellent performance goes a long way in ensuring accountability, transparency and equal service delivery to all.

Accompanying the Chairman was Dr. Cynthia Kipchillat (Director representing Baringo) and Eng. Samuel Oruma (CEO).



CS· Water Hon· Alice Wahome signs the (PC) FY 2022/2023

ndable water and Sanitation Infrastruc

Light at The End of The Tunnel



CRVWWDA CEO Eng. Samuel Oruma and several staff pose for a picture with the joint inter-ministerial technical taskforce is Excellency the President, Dr. William Ruto committed to revive all the stalled projects, Itare Dam Water Supply Project being among them, in an effort to achieve full water supply coverage across Nakuru, Kericho and Bomet Counties. In December last year Her Excellency Susan Kihika, Governor Nakuru County, conducted an inspection of the aforementioned project to do due diligence of the works that had previously been done.

During the visit, the Governor pledged the full support of the County Government during implementation and operationalization, when the project is back on its feet. "This project would have been a game changer to the residents of Nakuru and its environs and it is my commitment, on behalf of His Excellency the President, to ensure that it is revived among other stalled projects" the Governor said.

Consequently, this year, the Chairman Amb. Boniface Muhia and CEO Eng. Samuel K. Oruma hosted a joint inter-ministerial Technical Taskforce, formed to evaluate, tour and assess the progress of the work which had been done in this project.



The joint inter-ministerial technical taskforce meeting at the Agency during evaluation of initial works of Itare Dam

We thank the President Dr. William Ruto for his plans to revive Itare project to the residents of Kuresoi. The project will be beneficial in terms of water supply, employment of our youth, and supply to our livestock and plants".

Mwananchi

The team that was hosted at the Agency's offices, Nakuru, was expected to develop a report and recommendations to the President on the way forward regarding the revival of the multi-billion project, meant to supply water to residents of Nakuru, Kericho and Bomet counties.

During the tour, the team acknowledged the works that had been done and maintenance of the project, they also interacted with residents around the project who are eagerly waiting its revival.

"We thank the President William Ruto for his plans to revive Itare project to the residents of Kuresoi. The project will be beneficial in terms of water supply, employment of our youth, and supply to our livestock and plants", said a resident of the area.

The residents pledged their full support in protecting the project from vandalism and other offences.

The team subsequently appreciated and highlighted the responses and recommendations from the residents in their report that is to be presented to the president among other projects across the country.

The stalled, Itare Dam Water Supply project has a capacity of upto 100,000m3 of water per day. The project components include construction of a 28 million m3 surface water storage, 57m high dam and a treatment works of 105,000m3 per day. This project was highly recommended for revival.

ndable water and Sanitation Infrastruc-



A section of Kases Peace Dam

aria, a mother of four, enjoys fetching water from *mifugo*. *Kurudi wakati kiangazi itapungua*, " said Maria in the newly completed Dam that is located less than a kilometre from her home. I walk behind them as they speak and laugh in their mother tongue. I cannot help but imagine the reason for their joy. This is one of the many water projects that were implemented by Central Rift Valley Water Works Development Agency to improve access to clean and safe water for in both the rural and urban set-up. The Agency implemented the project back when it was Rift Valley Water Works Development Agency and mandated to serve West Pokot that Kases Peace Dam lies.

Before the construction of the Dam, Maria and other women used to walk for miles to fetch water from several seasonal rivers. Unfortunately, during the dry season the rivers dry up forcing the residents to relocate with their livestock to Uganda in search of greener pastures, literally. This relocation caused communal conflicts over resources.

a rough Swahili language.

According to Maria, the women used to fetch water in Uganda which is about 20 Kilometres away. With young children on their backs the ladies would cross over to Uganda to fetch water using their 20 litters plastic jerrican.

"We used to leave for Uganda as early as 5 am and come back at around 6pm. Unfortunately, the one jerrican could not sustain my family of 6," said Maria.

Construction of the Kases dam on the Kenya-Uganda border by CRVWWDA brought hope to the communities of Kases, Males and Pcholio in West Pokot County, Kenya. Dabbed the "Peace Dam", the facility has a storage capacity of 1.2 million liters Cubic with ability to benefit over 8,000 people. According to the local authorities of the two Countries, plans are underway to initiate the small-scale irrigation program.

Con. Pg 7

"Mzee hapana ako hapa. Amevuka kutafuta chakula ya

ole water and Sanitation Infrast

The Dam That Restored Hope

Cont. From Pg. 6

"We used to get scared while fetching for water. We were forced to go in groups for safety purposes. But still, there were incidences where people were attacked and raided. Occasionally, young girls would gate raped by ill motive people and sometimes even killed in their search for water," said Maria. "Whenever these conflict between us and our neighbours broke out, we the women would be attacked, raped and even killed as we fetched water. We were soft targets because the bandits targeting our community knew that we had to fetch water as we needed the resource," she added.

With the irrigation program soon rolling out, the residents are sure to have plenty supply of water for their livestock and kitchen garden.

"We continually risked our lives and overcame various hurdles to access the water that was not even safe for consumption, said Maria. "We were often treated for waterborne diseases".

The Kases Peace Dam joins other water reservoirs built for pastoralist communities to consolidate peace initiatives along the Uganda-Kenya border. While such a facility is expected to end conflicts, they are far from resilient to the droughts that hit Kenya and Uganda.

Between 2014 and 2015, the Kobebe Dam reservoir at Moroto in the Karamoja region of Uganda dried up completely and the structure cracked. The Kobebe reservoir, built in 2010, was serving more than 5 million animals per day from both countries with its storage capacity of 2.3 million meters cubic.

"I can say without a doubt that our lives have been changed in a big way, thanks to the construction of this Dam," states Maria.

The multimillion project consists of a central trench excavation, a dam reservoir, earthed embankment and a spillway. As part of Corporate Social Responsibility Pro, the Agency drilled a water Borehole to enable the community have access to tap water.



CRVWWDA hosts Old Mutual for a finacial management sensitization



General Manager- Corporate Services registers his visit to Britam's Group Markerting activation held at the Agency:

The Timeliness of Chemususu Dam



Mogotio, Ministry of Water Kiosk

irage on tarmac, high temperatures and clear fields defined our tour to Baringo County over the month of December 2022. Popular empty Jerrycans on peoples' hands and donkey carts led us to a shopping center where the scarce commodity was available. Clearly, the dry season was officially on and the usual struggle for water was evident.

On a sudden stopover in Mogotio, an interaction with Faith at Mogotio, Ministry of Water Kiosk depicted how timely the water point was. "Had it not been this water kiosk, we would be walking longer with our children in search for water. Even the rivers that we used to depend on could dry up in this season", she said.

Few meters from Mogotio Ministry of Water Kiosk, business is at its peak at Cheptoo's food point. Water is being off loaded from a donkey cart, Cheptoo is happy of availability and accessibility of water to run her business. She exclaims' that the water kiosk couldn't have come earlier! *"We now look forward to water in our taps to improve the quality of sanitation in this area"*, she said.



Chemususu Water Supply and Distribution Project in Eldama Ravine mirrors success with thousands of beneficiaries ranging from hospitals, schools, market centers and homes in some parts of Eldama Ravine, Mogotio and Rongai Towns.

The project that is being implemented by Central Rift Valley Water Works Development Agency is aimed at finding a long-term solution to water scarcity by ensuring clean water is reliable, accessible and portable.

The Water Supply and Distribution Project; Chemususu, has a new water Treatment Plant with a capacity of above 28 million litres per day that's been operational for over 2 years.



Chemususu Water Treatment Plant

The project has warranted the construction of 24 ground reservoir tanks and 3 steel elevated tanks across the region that has enabled a constant supply of water to 24 out of 30 water kiosks that have been constructed under the project.

As the Water Supply and Distribution Project nears its completion, focus points to how water will be accessed in people's households. Thousands of beneficiaries will soon run water from their taps as their wishes have been considered.

The Agency is on the process of implementing the Last Mile Connectivity, that's meant to make distribution of the water to designated users safer.

The completion of this last bit of the project targets to connect institutions and thousands of households in Baringo and parts of Nakuru County to water suppy.

The success of Chemususu Dam shall impact lives positively as well as make the beneficiary towns commercial hubs.

Emining water kiosk

The Mark of Public-Private-Partnerships(PPP)



Agency's GM· CPA Douglas Murei, (R) hands over the water bowser to MD SIBOWASCO Mr· Micheal Ogoll

n the quest to provide dependable water infrastructure, CRV-Water has been open to partnerships with its stakeholders in the fight against climate change under the Drought Mitigation Program.

The program that is segmented into; long-term and shortterm basis seeks to make life better and restore humanity by ensuring that water gets to places experiencing short rain seasons in the country.

The Agency makes this possible by executing the shortterm drought mitigation plan that entails distribution of water storage tanks to schools and institutions and sponsoring Water Tracking Program as a temporary measure to quench people's thirst of water.

In February, 2023; the Agency handed over a water bowser to Siaya Bondo Water and Sanitation Company Limited (SIBOWASCO), under the Kenya Towns Sustainable Water Supply and Sanitation Program.



The event that was officiated by the Agency's General Manager-Corporate Services CPA Douglas Murei witnessed the handing over of the 10,000-liter water bowser to the SIBOWASCO Managing Director Mr. Micheal Ogoll. As he flagged it off, CPA Douglas Murei stated that the availability of a water bowser in the water company marks the beginning of easy logistics and safe water delivery to the company.

The water bowser aims to mitigate the water challenges facing the residents of Siaya and Bondo as a result of the prolonged dry seasons.

Water might be available in some parts of Siaya and Bondo town. A challenge only creeps in when need arises to get the precious commodity to households in the drought-stricken areas. Mr. Ogoll further said, *"With the prolonged dry season, residents of some parts of Siaya and Bondo face hardship trying to grab even just a jerrycan of clean water for drinking. The search of the same wastes time with little or no avail at times. This has seen households put the search for water in their daily schedule".*

In the spirit of Public-Private-Partnerships, the Agency partnered with Danco pipes in February, 2023 to donate a10,000-liters plastic water storage tank to Ilbissil Girls Secondary School in Kajiado County.



Students of Ilbissil Girls Sec· Sch receive a tank·

The Agency is proud to be associated with all the stakeholders who are keen on making life better by virtue of actualizing the Agency's agenda through supporting our communities and schools.

The Agency's GM· CPA Douglas Murei flags off the Water Bowser Dependable Water and Sanitation Infrastructure

Narok, Waste Water Stabilization Model

In the quest of finding a solution to sustainable waste water management in Narok County, several waste water treatment technologies were analyzed finding the Four Stage; Biological Waste Water Stabilization ponds most suitable.

In this technique, raw waste water accesses the Anaerobic Ponds through the inlet then follows the important stages as indicated below.

Stage 1. Anaerobic Ponds/ Primary Ponds

Anaerobic ponds are small surface area yet deep ponds that receive raw waste water. The depth of the ponds decreases the influence of oxygen production by photosynthesis leading to anaerobic conditions. Anaerobic ponds allow solid waste to settle down at the bottom as sludge. This settling removes a portion of the particulate organic material. Anaerobic ponds contain anaerobic organisms which are able to break down complex organic waste into basic compounds that are less harmful to the environment. The sludge that accumulates at the bottom of the ponds is routinely removed after few years.

Stage 2. Facultative Ponds/Secondary Ponds

Facultative ponds have large surface area and are shallow. The large surface area allows atmospheric oxygen to dissolve and sunlight radiation to penetrate the water which allows for photosynthetic activity to occur hence producing more oxygen. Also, these ponds contain both bacteria and algae which maximizes the decomposition of organic matter and the removal of other pollutants. Algae produces oxygen through photosynthesis that is used by aerobic bacteria for stabilization of organic matter in the waste water. The sludge comprising the sediment layer in the pond undergoes anaerobic digestion, and may accumulate for several years without requiring removal.

Stage 3. Maturation ponds

Maturation ponds are included for additional removal of organic matter and other pollutants. They are designed shallow with large surface area to allow more oxygen to dissolve into the water thus giving the bacteria enough oxygen to properly function. In these ponds, sludge accumulation is very low. The shallow ponds benefit from high photosynthetic activity arising from the penetration of solar radiation. The shallow ponds allow sedimentation to take action. These ponds are only included in the treatment line when high efficiencies of pathogen removal are required, either for discharge of the treated effluent in surface water bodies, or for use for irrigation or aquaculture. Maturation ponds may be used in combination with a rain water reservoir to form an ecological, self-purifying irrigation reservoir.



Exhaust discharge bay



Anaerobic Ponds





Maturation Ponds







CENTRAL RIFT VALLEY WATER WORKS DEVELOPMENT AGENCY APPROVED ORGANIZATION STRUCTURE

FEEDBACK:

Please direct all enquiries, suggestions, concerns, complaints, or compliments to;

The Chief Executive Officer Central Rift Valley Water Works Development Agency Maji Plaza, Prison Road, Off Nakuru -Eldama Ravine Highway P.O. BOX 2451-20100, Nakuru, Kenya.

Email: info@crvwwda.go.ke
@crvwwda_
Central Rift Valley Water Works Development Agency.
@Central Rift Valley Water Works Development Agency