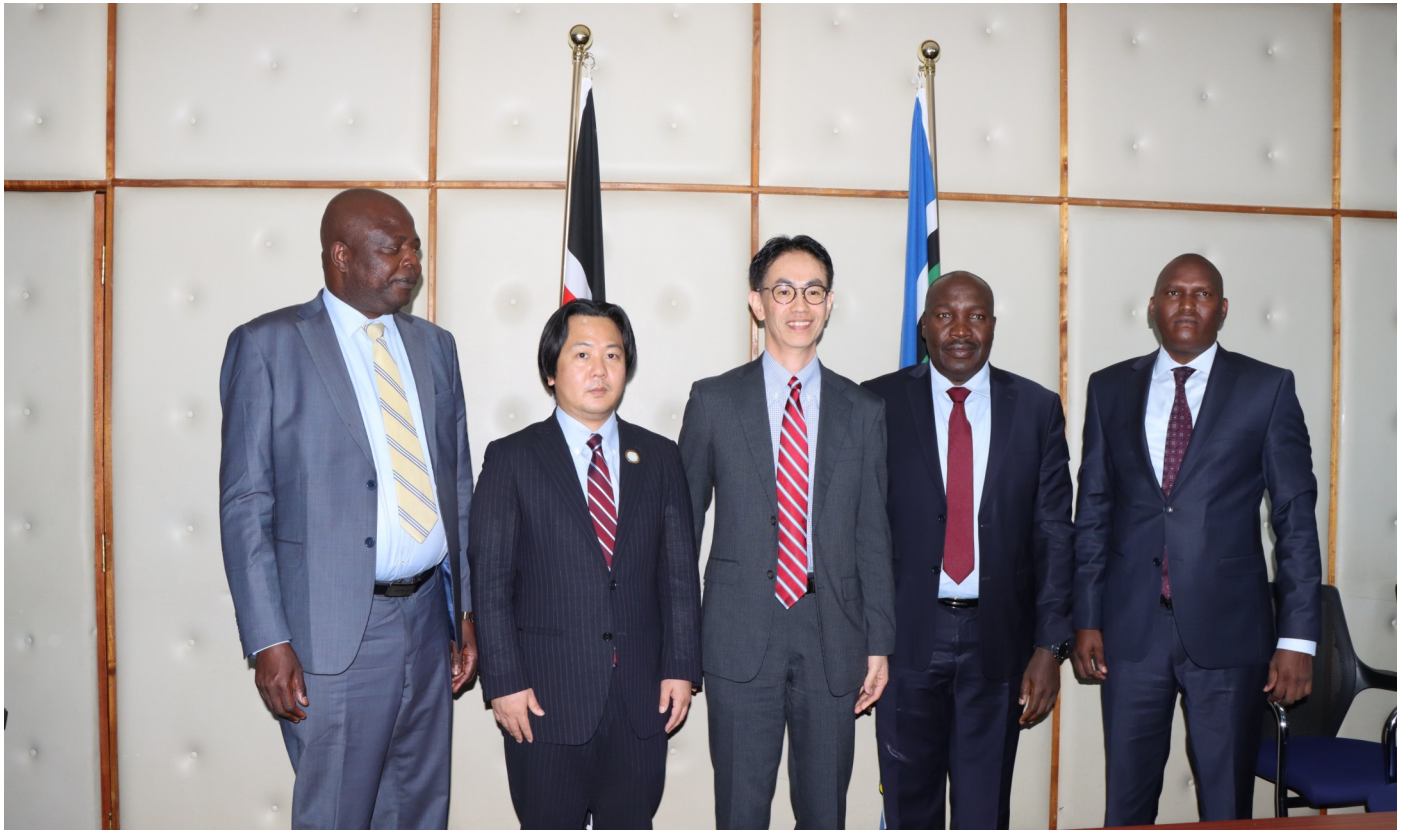


May 25 -31 2024

KEWI Poised to Expand Sanitation Services Following Pilot Stage Success



From right: KEWI CEO Dr. Leiro Letangule EBS, Principal Secretary, State Department for Water and Sanitation Mr. Julius K. Korir, Deputy Vice Minister of Finance, International Affairs, Japanese Ministry of Finance, Mr. Daiho Fujii, African Development Bank Executive Director, Mr. Takaaki Nowoto and Water Secretary Eng. S.O Alima during a courtesy call at Maji House, Nairobi.

BY PIUS KIMANI

Kenya Water Institute (KEWI) Chief Executive Officer Dr. Leiro Letangule has expressed his confidence and preparedness of the institute in undertaking the scaling up improvement of the sanitation services and promotion of water saving sanitation technologies in peri-urban and

rural areas of Kenya at community, school and household levels. This follows a resounding success of the pilot phase of the implementation of the sanitation and technology transfer projects that are at their last stages of completion.

Making his remarks during a courtesy call to the Principal Secretary, Ministry of Water, Sanitation and Irrigation

HIGHLIGHTS

- 4 KEWI and Gatsby Africa Forge Ahead with Phase 2 of NRW Centre of Excellence Initiative
- 6 KEWI Embraces Competency-Based Education and Training
- 7 Innovation Meets Tradition at the Meru Agricultural Show
- 9 Building Resilience: Climate Change Adaptation in Kenya's Water Sector

KEWI Poised to Expand Sanitation Services

Following Pilot Stage Success

(MWSI), State Department for Water and Sanitation Mr. Julius K. Korir accompanied by a delegation from Japan and African Development Bank (AfDB), Dr. Letangule expressed his optimism in KEWI capabilities of rolling out the projects and trainings across the country to ensure that the ripple effect of the benefits of the projects have been felt.

“We have achieved a 100 percent success in fulfilling the Training of Trainers, Development of training materials and Training of women and youth components of the project. With the implementation of pilot projects, knowledge management and publicity components at more than 80 percent complete, having 20 ToTs and not less than 500 copies of training materials developed, printed and bound, we are at a vantage position of ensuring that the knowledge and skills collected are replicated across other areas of the country,” reiterated Dr. Letangule.

The team is on an inspection mission of the sanitation projects on improving public health and enhancing technical skills of youth through sanitation technology transfer. The projects funded by the people of Japan through AfDB includes construction of Safe Toilets (SATO), Green Toilets

System (GTS) and faecal treatment plant are getting implemented by the ministry through KEWI.

Dr. Letangule assured the delegation that the institute was keen on leading from the front in regards to coming up with innovations that would help address sanitation issues across the country.

“We continue to conduct research and come up with innovative ways of enhancing sanitation across the country, not only with the SATO and GTS but, also other emerging technologies that would enhance sanitation,” he added.

Addressing the delegation, Mr. Korir lauded the efforts shown by KEWI in implementing key government projects and noted that KEWI through the support of the ministry was in a position to take up the second phase of the project.

“We are at 80 percent complete and as we successfully wind up this phase, we are looking at how we can now scale it up and extend it to other counties in the country,” he said. The current projects are piloted in Kajiado, Kitui, Tharaka Nithi and Kisumu counties. Mr.



Mr. Fujii inspecting a Green Toilet System (GTS) facility at Arap Moi Primary School.

Korir notified the delegation that the ministry was keen to see the rollout of the projects in other areas though the institute.

“As we seek to expand KEWI presence in North and South Rift Regions, we are also keen to ensure that this technology is replicated in those areas since KEWI will lead in disseminating the knowledge and spearheading the implementation of the projects,” he added.

The meeting between the financiers and the ministry officials underscored the importance of high-level governmental support and collaborations for successful implementation of the project. The engagement with the principal secretary emphasized the commitment of both stakeholders to advancing Kenya’s water and sanitation infrastructure ensuring that the project aligns with national priorities and policies.

KEWI Poised to Expand Sanitation Services Following Pilot Stage Success



Mr. Fujii (in striped tie) joins Arap Moi Primary School pupils in a celebratory dance at the school

to advancing Kenya's water and sanitation infrastructure, ensuring alignment with national priorities and policies.

The Deputy Vice Minister of Finance for International Affairs, Japanese Ministry of Finance, Mr. Daiho Fujii, hailed the efforts made by the project's implementing partners. He noted that the project would be well-received by the communities and remain sustainable once the target groups are fully enlightened about its benefits. "Communities and people just need to know how to react and how to share knowledge and

understanding among communities," he said.

The delegation, which also included a team from the AfDB led by the executive director, Takaaki Nowoto, inspected the ongoing construction works at the sanitation project sites in Kajiado County. The team visited the faecal sludge treatment facility near completion at Oololaiser Water and Sewerage Company premises and the Green Toilet System at Arap Moi Primary School. These site visits allowed the team to observe firsthand the progress being made, evaluate the

quality of the construction, and ensure that the project is on track to meet its objectives.

The team will also visit and inspect the construction works in Kitui County as part of their broader mission to ensure that all project sites meet the required standards and are progressing as planned. The inspection in Kitui County will further provide the delegation with a comprehensive understanding of the project's scope and regional impact, reinforcing the commitment to enhancing sanitation infrastructure across different areas.

Gatsby Africa and KEWI Forge Ahead with Phase 2 of NRW Excellence Centre Initiative



KEWI Deputy Director Research, Consultancy, and Technical Services, Mr. Nelson Kwamini and Gatsby Africa Program Director, Mr. Abdi Wario Bonaya during the official handover of NRW equipments at KEWI.

BY FAIZAH JEPKORIR

Kenya Water Institute (KEWI) Deputy Director, Research, Consultancy, and Technical Services, Mr. Nelson Kwamini, and Gatsby Africa Program Director, Mr. Abdi Wario Bonaya led their respective teams in signing of contracts to mark the commencement of the second phase of their collaborative Non-Revenue Water (NRW) project. The

significant step underscored a mutual commitment to enhancing water efficiency and sustainability for water management in Kenya.

The signing ceremony, held at KEWI headquarters, also featured the official handover of crucial equipment for the KEWI NRW Centre. This phase aims to bolster the Centre's capacity and effectiveness through a series of strategic initiatives. One

major focus will be the initiation of training programs for selected Water Service Providers (WSPs). The NRW Management Centre of Excellence will start with the first cohort, providing them with advanced skills and knowledge to tackle NRW issues effectively.

In addition to training, the project will procure a state-of-the-art mobile NRW laboratory. This mobile unit

Gatsby Africa and KEWI Forge Ahead with Phase 2 of NRW Excellence Centre Initiative



Officers from KEWI and Gatsby Africa inspect some of the NRW equipments at KEWI Nairobi.

will enable on-site analysis and rapid response to NRW challenges, thereby enhancing operational efficiency. Furthermore, additional equipment will be acquired for the NRW Centre, ensuring it remains at the forefront of technological advancements in water management.

A vital component of this phase includes the implementation of comprehensive marketing strategies aimed at establishing the NRW Centre as a premier hub of excellence. The goal is to attract widespread attention and engagement from stakeholders across the water

sector. Moreover, the project will embark on collaborative research initiatives with IHE Delft, a globally recognized water education institute, to foster innovative solutions and sustainable practices.

Mr. Wario, emphasized the project's commitment to long-term sustainability. "Our goal is not just to address current NRW issues but to build a resilient framework that will support continuous improvement and innovation in water management," he stated.

Mr. Kwamini, echoed this sentiment, highlighting the importance of the partnership and the anticipated impact on

Kenya's water infrastructure. "By enhancing the capabilities of our NRW Centre and fostering strong collaborations, we are paving the way for a more sustainable and efficient water sector," he remarked.

The second phase of the NRW project represents a significant milestone in the quest to improve water resource management in Kenya. With the strategic initiatives set in motion, the project is poised to make substantial contributions to reducing non-revenue water and enhancing the overall sustainability of the water sector.

KEWI Embraces Competency-Based Education and Training



Deputy Director Academic Affairs Mr. Eric Wamiti during a previous Training of Trainers workshop.

BY BRITNEY MOKEIRA

In a progressive move to align education with industry demands, the Kenya Water Institute (KEWI) adopted Competency-Based Education and Training (CBET). This approach, approved under the TVET Act 2013 and Technical and Vocational Education and Training Authority (TVETA), emphasizes practical skills and real-world application, ensuring graduates are well-equipped to meet the labor market's needs.

At KEWI, CBET focuses on giving students the specialized skills needed in the workforce. CBET places a higher priority on practical skills than

traditional education methods, which place more emphasis on theoretical knowledge. This guarantees that graduates are competent in their field and have the knowledge to solve real-world problems.

Deputy Director Academic Affairs, Mr. Eric Wamiti, highlighted the importance of the CBET curriculum at the institute, stating, "Our programs are closely aligned with industry needs, preparing students to tackle challenges such as water scarcity, pollution, and infrastructure development. This practical focus ensures our graduates are job-ready and effective from day one."

KEWI offers Diploma Level 6, Certificate Level 5, and Artisan Level 4 courses, all officially approved by the Technical and Vocational Education and Training Authority (TVETA). These programs involve extensive practical training, including fieldwork, laboratory experiments, and simulations, allowing students to handle real-world challenges confidently.

By adopting CBET, KEWI can swiftly adapt its programs to incorporate the latest industry developments, ensuring that graduates remain at the forefront of their field. This

flexibility, combined with a focus on measurable outcomes, ensures a high standard of education and training.

The institute's commitment to CBET represents a critical investment in the future of its students and the water sector. As Kenya faces increasing water scarcity and environmental challenges, the role of competent water professionals, nurtured through CBET, will be indispensable. KEWI's innovative educational approach underscores its pivotal role in shaping a sustainable and secure future for Kenya.

Innovation Meets Tradition at the Meru Agricultural Show



Ms. Florence Njeri, a lecturer at Chiakariga Campus demonstrates a point to eager students who visited the institutes stand at Meru ASK Show.

BY LESENEN TEI LEPARKOLWA

The Kenya Water Institute (KEWI) Chiakariga Campus made a significant impact at the Meru National Show, themed "Promoting Climate-Smart Agriculture and Trade Initiatives for Sustainable Economic Growth." The event, led by Meru County Governor Kawira Mwangaza, showcased KEWI's pivotal role in advancing sustainable water management practices crucial for economic growth.

KEWI, renowned for producing top-tier human capital, emphasized its commitment to sustainable practices through innovative water management solutions at the show. The event provided an ideal platform for KEWI to demonstrate its contributions to climate-smart agriculture

and sustainable development.

At the show, KEWI presented advanced irrigation techniques, water recycling systems, and sustainable watershed management practices. These innovations are essential for boosting agricultural productivity and resilience amid climate change, perfectly aligning with the show's theme. The KEWI booth drew significant attention from farmers, industry professionals, and policymakers, who engaged in interactive sessions and demonstrations highlighting the latest advancements in water management.

KEWI's participation underscored its leadership in promoting water sustainability and supporting Kenya's economic development vision. Research,

a cornerstone of KEWI's mission, was prominently showcased, with ongoing projects focused on efficient water use, climate resilience, and sustainable agricultural practices. By sharing their findings, KEWI aims to influence policy and practice for sustainable water resource management across Kenya.

Beyond technical demonstrations, KEWI engaged the community through educational outreach on water conservation, climate-smart agriculture, and the economic impact of effective water management. This initiative aims to foster greater awareness and understanding among participants, reflecting KEWI's commitment to advancing water management technologies and educating communities on sustainable practices.

As Kenya pursues sustainable development, KEWI remains at the forefront, driving innovation and providing expertise in efficient water resource management. The successful participation of Chiakariga Campus at the Meru National Show reaffirms its position as a leading institution in climate-smart agriculture and sustainable economic growth, dedicated to developing future leaders through robust research and education initiatives.

Pioneering Success at KEWI Kitui Campus



A fully equipped computer laboratory at Kitui Campus.

BY MATARA KABURI

“With the continued support of the institute's management, in the face of infrastructure constraints and climate-related challenges, I want to reaffirm my unwavering dedication to the institute's mission and serve as a guiding light, inspiring us to continue our journey towards a water-secure and resilient future for all.”

Kitui Campus is one of the 4 satellite campuses of the Kenya Water Institute (KEWI). It was opened on January 23, 2012, at Syongila ACK Church's rented premises, with a total student population of 72, 8 teaching staff, and 13 support staff. The Campus now operates in its own building on a 10-acre piece of land in the Manyenyoni area and has a student population of over 300, including 25 academic staff and 16 support

staff.

Nestled in Kitui County, the Campus holds strategic significance in tackling the county's water woes. It is adversely affected by recurring droughts that have diminished water supply and rendered many rivers seasonal, resulting in inadequate and unclean water in the wider Eastern province. The Campus stands as a beacon of excellence, shaping the future of water management and sustainability while fostering innovative solutions to the pressing water challenges facing the region.

Over the years, it has fostered strong partnerships with local stakeholders, leveraging their expertise to enrich the learning experience. Through collaborative research projects and industry

placements, students gain practical insights into real-world water issues, preparing them for the challenges of tomorrow.

The Campus, in its contribution to the fulfillment of the institute's overall mandate, offers short-term training programs to the general public,

individuals, and corporate organizations on a wide variety of topics in the wider water sector. It also accommodates customized trainings to meet clients' needs on related topics.

One of its key contributions lies in curriculum development and implementation. Understanding the dynamic nature of water management has spearheaded the integration of cutting-edge courses tailored to the unique needs of the wider water sector. By aligning the curriculum with emerging trends and technologies in water conservation and management, students are empowered to become agents of change in their communities.

Mr. Matara Kaburi is the Principal, KEWI Kitui Campus.

Building Resilience: Climate Change Adaptation in Kenya's Water Sector



Water storage tanks at KEWI Chiakariga Campus. KEWI is adopting innovative technologies of conserving water as an integrated mean of managing this vital resource.

BY DENNIS LEMALI KATEIYA

The state of the Global climate 2023 report by the World Meteorological Organization shows that records were once again broken, and in some cases smashed, for greenhouse gas levels, surface temperatures, ocean heat and acidification, sea level rise, Antarctic Sea ice cover and glacier retreat. As a result, floods, droughts and heatwaves among other calamities have continued to be cataclysmal.

The threat climate change poses to water resources in the

globe, in Africa and specifically in Kenya, is one not to be ignored and requires mitigating measures to be adopted urgently. Changes to the physical climate can have cascading impacts on national development and progress towards the United Nations Sustainable Development Goals (SDGs). Reliance on rain-fed agriculture and limited water infrastructure has exacerbated the devastating impacts of climate change in the region.

However, by prioritizing adaptation and resilience-building measures, such as Integrated water resource

management approaches that put emphasis on collaborative strategies that ensure management of water resources sustainably to maximize economic and social welfare, Kenya and the African continent can safeguard its water security and ensure sustainable development in the face of climate variability.

Promotion of water conservation practices such as rainwater harvesting, re-using of water, efficient and sustainable irrigation practices may go a long way in mitigating climate change impacts. There is also the need to promote behavioral change

Building Resilience: Climate Change Adaptation in Kenya's Water Sector



About 60% of Africa is not covered with early warning services?

2023 was the warmest year on record at 1.45 ± 0.12 °C above the pre-industrial average.

Global mean sea level reached a record high.

The rate of sea-level rise in

among the local community and ensure enough awareness is created on the importance of such practices and the long-term effects of water conservation and demand management.

Adoption of innovative water-saving and management technologies such as digital water management and smart monitoring reinforce resilience in the face of climate change. By embracing such technologies, there will be a significant reduction in water loss which in turn leads to optimization of water resource use. In addition, building climate-resilient infrastructure such as dams, reservoirs and modern water distribution systems, is essential for ensuring reliable water supply

while simultaneously reducing vulnerability to climate-related hazards. By carrying out climate risk assessments, the government, corporations and even individuals, can incorporate adaptive designs into infrastructural projects that will improve resilience to extreme natural calamities including floods and storms like the ones recently witnessed countrywide.

Also, climate projections and adaptive planning are some of the considerations that ought to be taken into account when developing water governance frameworks and regulations in Kenya to minimize the risks of water scarcity and extreme events.

Did you know that:

the past 10 years (2014–2023) has more than doubled since the first decade of the satellite record (1993–2002).

The government, organizations and citizens altogether, have a role to play in the restoration of degraded eco-systems and protection of vulnerable water catchment areas by integrating nature-based solutions into water management practices. These measures improve water quality, regulate water flow, ensure effective water management strategies and also offer a buffer to communities against climate impacts while promoting Kenya's long-term sustainability of its water resource for future generations.

Geographic Information System (GIS) For Climate Action

BY LILIAN MUTANGILI

Certainly! Kenya has been actively working on climate action, and Geographical Information Systems (GIS), remote sensing and mapping, play a vital role in climate change monitoring, adaptation and mitigation efforts. GIS enables collection, management, and visualization of a wide range of geospatial data related to climate, such as temperature patterns, precipitation, sea level rise, and greenhouse gas emissions sources, dissemination and better understanding of climate-related data, hence informed decision-making by various climate adaptation actors.

GIS plays an enabler role in the development of spatially-effective strategies to reduce greenhouse gas emissions and adapt to the changing climate. As well, the developments in GIS have transformed how

researchers in a variety of fields gather and analyze information about the world around us.

GIS modelling is employed in creating and visualizing climate models that simulate the effects of climate change on various geospatial aspects such as temperature, wind, precipitation, and sea level.

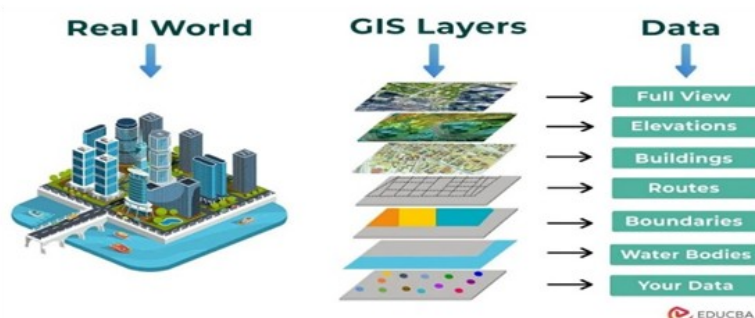
Some of the ways that researchers and governments are using GIS technology for providing information on climate change include but not limited to the following:

- Data Collection and

Management.

- Spatial Analysis Natural Resource Management.
- Early Warning Systems. Community Engagement. Interactive maps and dashboards.
- Monitoring and Evaluation. Risk Assessment and Planning.

GIS therefore provides valuable tools for understanding, monitoring, and mitigating the effects of climate change. By analyzing spatial data, we can make informed decisions to create a healthier planet.



Quote of the Week

"The task of leadership is not to put greatness into humanity, but to elicit it, for the greatness is already there." By. John Buchan

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Round up of The Week's Events



Moments during the Sanitation Projects site visits by a delegation from Japan, AfDB and KEWI at Arap Moi Primary School in Kajiado County.

Round up of The Week's Events



Moments during the courtesy call at the ministry of Water Sanitation and Irrigation by a delegation from Japan, AfDB and KEWI and images of the Sanitation Projects.

Long - Term Programmes

Diploma in Water Engineering Technology (DWET) Diploma in Wastewater
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A Technical Centre of Excellence in Training, Research, Innovation and Consultancy in the water, Sanitation and Irrigation Sector.

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To offer Competency-Based Training, Research, Innovation, Consultancy and Outreach Services in the Water, Sanitation and Irrigation Sector for sustainable development.

Core Values

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