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KENYA WATER INSTITUTE KEWI Fountain Of Water Knowledge

WEEKLY Newsletter

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KEWI Participates in International Training on NRW Management-Leakage Control, in Tokyo, Japan

Eng. Everlyne Nyakundi (standing, 3rd from left) among other participants in a group photo during the training in Tokyo, Japan.

BY: ENG. EVERLYNE NYAKUNDI

The Kenya Water Institute had the privilege of participating in the International Training Program on Non-Revenue Water Management, held in Tokyo, Japan, from November 6 and is expected to end on November 21, 2024.

This program is offered to engineers engaged in water supply works in the aspect of planning, design, construction, operation and maintenance to provide a comprehensive learning experience on NRW reduction and to implement leakage control measures in their countries, mainly in the form of utilizing the experience and technology of the Tokyo Metropolitan Government.

This provided KEWI opportunities for direct dialogue with Japanese private companies that will introduce their leakage-control technologies, as well as individual consultations with lecturers to develop action plans. Participants also visited actual facilities and related

HIGHLIGHTS

MAIN

KEWI Participates in International Training on NRW Management-Leakage Control, in Tokyo, Japan

plants of Japanese water supply utilities, directly experience their technologies, and interact with experts.

The main objective was to obtain and upgrade knowledge and technical skills on NRW management focusing on leakage prevention measures which has made Mega City Tokyo achieve a reduction in the Leakage Ratio from 80% to 3%. This was also aimed to understand the main concepts and technologies related to NRW management and to develop a concrete action plan to promote NRW management in home country.

Practical training at Kobota Ductile Iron Manufacturing Plant.

This will see KEWI further train and offer consultancy services to water service providers in Kenya, and Africa at large, on NRW Management control technologies.

The institute was represented by Eng. Evelyne Nyakundi, and among countries that were represented included, Kiribati, South Africa, Uganda, Kenya, Timor-Leste, Zambia, Yemen.

Eng. Everlyne Nyakundi having some consultations with a Private Company in Japan.

RESEARCH

Benefits of Training Trainers on Non-Revenue Water Management

Training trainers on NRW management and leak control offers several key benefits, particularly for water utilities and organizations focused on improving water distribution systems. Here are some of the main benefits:

Knowledge Multiplication: The knowledge and skills gained in NRW management and leak control can be disseminated across larger groups, creating a multiplier effect. This ensures that more individuals are equipped with the necessary skills, improving the overall competency of the workforce.

Sustainability of Training Programs: Trainer-led programs can be continued and scaled within an organization without requiring external resources for every training session. This leads to cost savings and sustainability in the long term.

Increased Efficiency and Effectiveness: Trainers who are skilled in NRW management and leak control can train others to identify, prioritize, and address leaks effectively, reducing water loss and improving the efficiency of water distribution systems. This leads to better resource utilization and a more reliable water supply.

Consistency and Standardization: Having a core group of trainers ensures that training across various departments or locations remains consistent, helping to standardize NRW management practices and leak detection methods. This is crucial for the implementation of effective leak control measures.

Building Local Capacity: Training local staff as trainers fosters a sense of ownership and responsibility for water resources. Local trainers are more familiar with the specific challenges faced in their regions and can tailor training to address these issues more effectively.

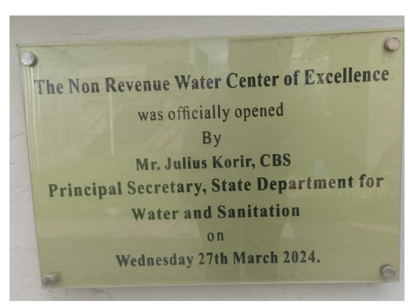
Improved Leak Detection and Repair Skills: Proper leak detection and repair are essential to reducing NRW. Trainers can pass on these crucial skills to others, which helps in minimizing the economic losses associated with undetected leaks and the costs of water treatment.

Enhanced Stakeholder Engagement: Trainers can act as ambassadors for NRW reduction within an organization, engaging senior management, staff, and local communities in the importance of managing water loss. This improves organizational commitment and accountability toward reducing NRW.

Improved Decision-Making: Properly trained trainers are equipped to deliver advanced NRW management techniques, such as leak detection technologies, data analysis, and performance monitoring. This leads to more informed decision-making at all levels, ensuring that resources are allocated effectively to reduce water loss.

Adaptation to Changing Technology: As leak detection and NRW management technologies evolve, trainers can stay up-to-date with new techniques and tools. By training others on the latest technologies, the organization can continuously improve its NRW reduction efforts.

Cost Reduction: By reducing NRW through effective leak control and management, utilities can save money on water production, treatment, and distribution. Properly trained staff can implement preventive measures, resulting in fewer costly repairs and operational inefficiencies.



A Bold Vision Towards a Water-Smart Society

BY: OTIENO FREDRICK

Hydrological variability, rapid urbanization, shifting land use practices, and ever-increasing demand for water are presenting unparalleled challenges in the management of water resources. Incidentally, the preceding exigencies are also intricately linked to context-specific factors such as economic inequality, and conflicts. On conflicts, significant progress has been made by strengthening water governance. The recent introduction of Water Police Unit under the critical infrastructure protection unit is one such initiative.

There is growing consensus in favor of a shift towards a water-smart society. A water-smart society acknowledges the value of water and institutes measures to enhance its security, sustainability, and resilience. Water security is attained by adopting approaches and practices that reduce water scarcity and pollution while sustainability is entrenched by integrating renewal and resource recovery in wastewater management. Water resilience is achieved by ensuring that supply systems are robust to withstand climate and demographic variations.

In recent times, the idea of a water-smart society has been conceptualized in terms of a four-part system innovation model. First, it recognizes the value of water by instigating a conscious inclination to use and reuse water until nutrients and resources are retrieved and water is restored as close to the desired state as possible. Secondly, it promotes the adoption of smart meters, sensor-based irrigation systems, advanced analytics, supervisory control and data acquisition (SCADA) systems, pressure management, leak detection, and pump optimization.

Similarly, it enhances the development of robust utilities that are capable of handling both green and grey water, and finally, broad stakeholder involvement to strengthen water governance. Thus, water-smart society approach emphasizes the forgoing values of water and integrates them into a systematic and inclusive planning and decision-making process.

In Kenya, the pursuit of water-smart society is driven by numerous players in public and private sector. For instance, the Kenya Water Institute, mandated by the KEWI Act No. 11 (2001) contributes to the fore-stated imperatives through training, research, consultancy, and outreach. With strong partnerships that extend to 91 regulated water service providers, 9 water works development agencies, and several private water utilities, the Institute's role in accelerating the country's renaissance toward desired water and sanitation coverage and water-smart objectives remains on course. The institute recognizes that lasting cooperation with a broad ecosystem of industry and private players, and local and international stakeholders are essential for effective management of water resources. The Institute endeavors to promote synchrony and cooperation to enhance performance of water utilities, user associations, and strategic partners in a lasting and effective manner so as to foster collective action to solve water challenges.

Moreover, concerted effort with players in the tech industry are ongoing to embed smart technologies across the country. This is a welcome move, but more still remains undone.

Towards Graduation: Dealing with the Threat of Missed Examination Marks

BY: PIUS KIMANI

Kenya Water Institute (KEWI) is set to hold its 36th graduation ceremony in a fortnight, and the journey to graduation involves several factors and phases. One of these is sitting for examinations, which assesses prospective graduands' readiness for the job market. Exams play a crucial role in the learning process, helping students identify their strengths and weaknesses.

A past Graduation Ceremony. Missing marks has been cited as one menace that spoil the party for prospective graduands.

However, the journey to graduation requires all involved parties to work in a seamless manner, including limited learning infrastructure, lack of school fees, and changes in government policies. One of the challenges students faces is missing examination marks, which affect their academic performance and motivation.

This issue persists despite efforts by administrators and stakeholders to address the problem. Factors contributing to missing marks include poor and outdated record-keeping systems, inadequate supervision during examinations by lecturers, and system glitches and technical errors. Some learning institutions have already implemented digital record-keeping systems and provided training for lecturers and administrative staff. The consequences of missing marks are far-reaching, impacting students' academic performance and career prospects. Delayed graduation, which makes students repeat courses or semesters, prolongs their stay in institutions. Additionally, missing marks lower students' overall academic performance, which can affect their future career prospects. This poor academic performance creates a negative perception of the full education system, further undermining its integrity and raising concerns about the quality of education provided by affected learning institutions.

Institutions must address the issue of missing marks to ensure students receive the best academic experience. This can lead to issues such as technical errors, human error during data entry, lost or misplaced exam records, and delays in releasing exam results. Implementing robust processes and systems to address missing marks effectively and timely can minimize negative consequences for students and the institution's reputation. Addressing challenges like volume of records, technical difficulties, and human error can improve the institution's credibility and create a resilient student community.

Investing in modern technology and personnel with expertise in grading systems, data management, and administration is crucial for enhancing the accuracy and completeness of the grading system. Collaborating with faculty members and Information Technology professionals is also essential for enhancing the grading system's accuracy. Regular audits and reviews of grading systems can reduce the chances of missing marks and ensure all stakeholders are working towards the same goal.

Preparations for KEWI 36th Graduation Ceremony Get Underway as Crucial Dates are Announced

BY: PIUS KIMANI

The Kenya Water Institute is set to hold its 36th Graduation Ceremony on 29th November 2024 at its Main Campus along Ole Shapara Avenue, South C, Nairobi.

Through a graduation ceremony notice released by the office of Senior Principal Registrar (SPR), the ceremony which is held annually to celebrate the completion of studies for Artisan, Certificate and Diploma students will be held at the new graduation grounds.

While releasing the notice, the office of the SPR has hailed the forthcoming function as a momentous one, for both the institute and the graduands as it marks a reassuring juncture for all stakeholders who put all their efforts to see that the graduands are equal to the task ahead of them.

"Celebrating this milestone each year is quite a big step and win for both the students and the staff whose coordinated efforts ensure that we release to the job market a dependable community of water stewards and practitioner."

The notice has required that all the prospective graduands to have paid a graduation fee and the payment details presented to the accounts office for issuance of official receipt as this will help facilitate the smooth flow of the exercise.

"Graduands must provide evidence of payment of the graduation fee before collecting the graduation gowns."

The office has, through an earlier memo to all students, further called on all prospective graduands to clear all the pending requirements regarding their fees and industrial attachment reports, so that their names can be included in the final graduation list.

"All students on industrial attachment and have completed 8 weeks in their industrial attachment stations to submit their industrial attachment documents for the assessment..." the memo read.

The event themed "Sustained Quality Training for Socio-economic Transformation in the Water Sector" is expected to be graced by the Cabinet Secretary, Ministry of Water, Sanitation and Irrigation Eng. Eric Murithi Mugaa. A host of other high-ranking guests have also been invited to witness the release of more than 1000 graduands to the job market.

The notice comes at a time when preparations for the day are gathering pace as the event is just 3 weeks away. On the notice, the prospective graduands will be required present their graduation fee payment slips by Monday 25th November 2024 which will also serve as the day when the respective registrar offices in the campuses will issue the graduation gowns.

Once cleared, the graduands will attend a graduation rehearsals on the eve of the graduation day i.e. Thursday, 28th November 2024 and are expected to return the graduation gowns to their points of collection two weeks after the ceremony.

IMPORTANT DATES

Graduation fee payment deadline- 22nd November 2024

Presentation of payment slip- Monday 25th November 2024

Issuance of graduation gowns- Monday,25th November 2024

Rehearsals- Thursday, 28th November 2024

Graduation ceremony- Friday, 29th November 2024

Return of graduation gowns - Friday, 13th December 2024

36th Graduation Ceremony

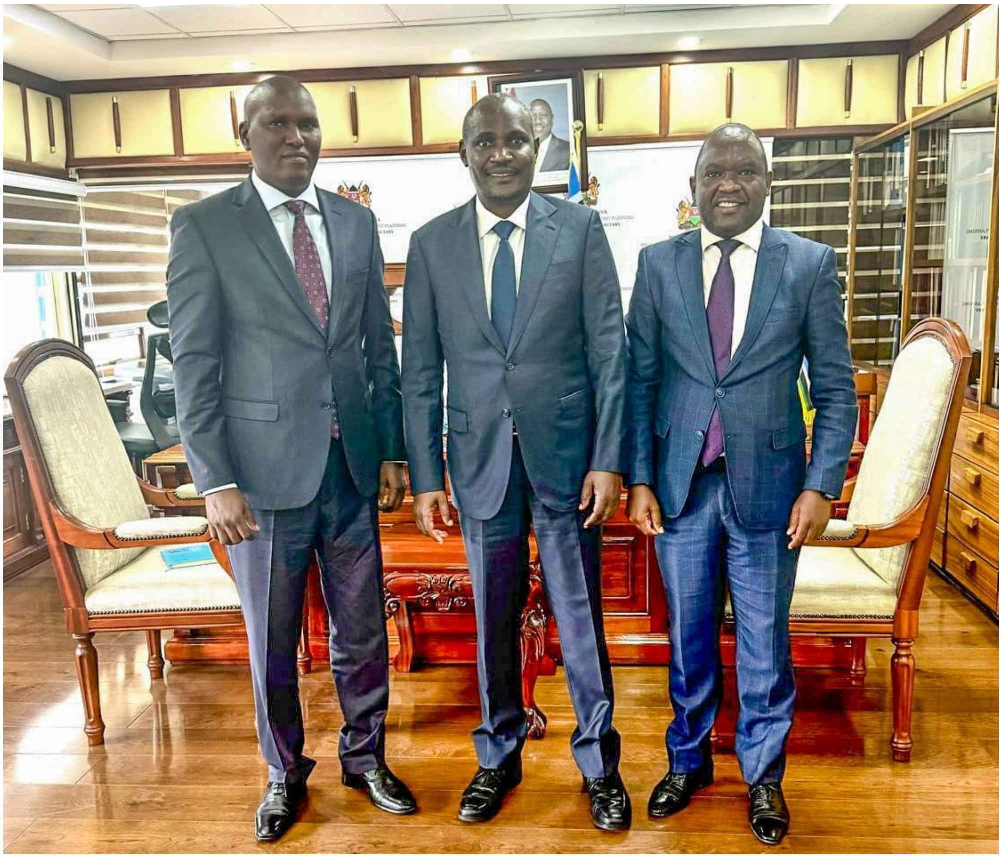
Quote of the Week

"To bring about change, you must not be afraid to take the first step. We will fail when we fail to try. "

-Rosa Parks

Call for Professional Development Program

Round up of The Week’s Events



On 13th November 2024, Kenya Water Institute's Director/CEO Dr. Leiro Letangule EBS, in company of KEWI's Governing Council Chairperson Hon. Patrick Musili Mbangula, paid a courtesy call to Cabinet Secretary National Treasury and Economic Planning, Hon. John Mbadi. They discussed KEWI’s infrastructure development and reinstatement of KEWI’s recurrent budget.

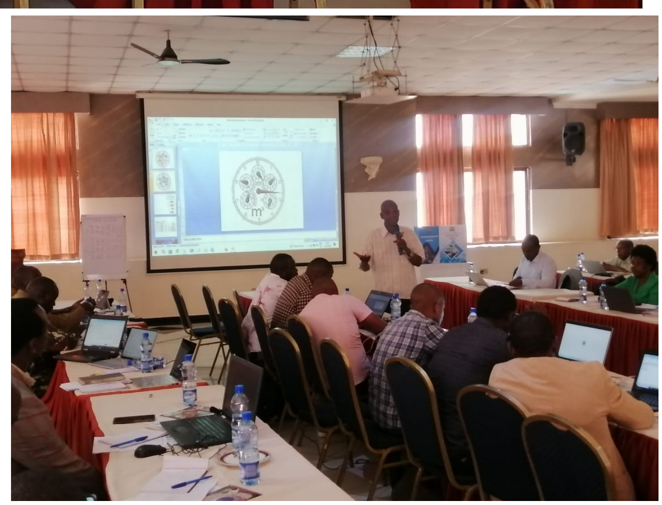
JICA-Kenya’s presentation on water supply and Non-Revenue Water (NRW) in Kenya, and KEWI’s contribution on NRW reduction.

Round up of The Week's Events

Chiakariga Campus Diploma in Water Engineering Technology Students conducting a Jar Test in water sample. The purpose of the test is to determine the most effective coagulant (Aluminium) Sulphate (Alum and Soda ash) and dosage to treat water.

Participants from Mombasa Water and Sewerage Company after a successful completion of Pipework Skills for Water Supply and Sewer Systems Course at the Main Campus.

Round up of The Week's Events



Non-Revenue Water Management Standards Dissemination Workshop held at Waterburk Hotel in Nakuru. The main aim of the workshop was to accelerate reduction of NRW to acceptable levels.

Long - Term Programmes

Diploma in Water Engineering Technology (DWET) Diploma in Wastewater
Diploma in Water, Sanitation Engineering Technology (DWSET)
Diploma in Water Resources Management Technology (DWRTM)
Diploma in Irrigation and Drainage Engineering Technology (DIDET)
Diploma in Information Communication Technology (DICT)-KNEC
Diploma in Water Laboratory Technology (DWLT)
Certificate in Wastewater and Sanitation Engineering Technology (CWSET)
Certificate in Water Resources Management Technology (CWRMT)
Certificate in Information Communication Technology (CICT)- KNEC
Certificate in Water Laboratory Technology (CWLT)
Certificate in Water Engineering Technology (CWET)
Drilling Operations and Management (DOM)
Plumbing and Pipe Fitting (PPF)
Water Operators Course (WOC) in:

- Water Supply
- Meter Reading
- Sewerage Operations

Short - Term Programmes

Use of Earth Observation Tools and GIS for Water Resources Management
Entrepreneurship and Financial Management for Water Managers
Operation and Maintenance of Water Supply Networks
Metering and Installation of Water Supply Networks
Leak Detection & Repair techniques
Drilling Operations and Management (DOM)
Operation & Maintenance of Pumping Stations
Pump Selection, Installation and Maintenance
Plumbing, Pipe Fitting and Solar Water Heating
Instrumentation for Water and Wastewater Systems
Water Governance, Management and Technology
Application of GIS for Water Utilities Mapping
Drilling Operations and Management
Water Quality Sampling and Testing
Microbiological Water Quality Assessment
Integrated Water Resources Management
Non-Revenue water
Water Management
Customer Care

Vision

A Technical Centre of Excellence in Training, Research, Innovation and Consultancy in the water, Sanitation and Irrigation Sector.

Mission

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

Core Values

Good Corporate Governance
Professionalism
Customer Focus
Innovativeness
Inclusivity
Patriotism
Integrity

GET IN TOUCH WITH US

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OTHER SERVICES OFFERED

Water Quality Laboratory Services
Drilling and Test Pumping Services
Ground water Assessment Services
Conferencing Services
Troubleshooting of pumps boreholes and distribution systems
Repair of pumps boreholes and distribution systems

Your feedback is crucial for our improvement

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