





# MINISTRY OF WATER AND ENVIRONMENT



# UGANDA WATER AND ENVIRONMENT WEEK 2023 REPORT

**MAY 2023** 

The Water Resources Institute (WRI), which is part of the Ministry of Water and Environment (MWE) was established as part of implementation of the Water Sector Reforms and is intended to bridge the gap between theory and practice. It will profile the central position of water resources in national development with a vision of ensuring that Uganda's water resources are utilized optimally. Its core business is to be a Centre of Excellence that provides cutting edge applied research and training; delivers continuous professional skills development across all levels in water resources management and development, and serves as a neutral place for dialogue and outreach.

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The UWEWK2023 Report is authored by the Water Resources Institute of the Ministry of Water and Environment

#### **EXECUTIVE SUMMARY**

The sixth Uganda Water and Environment Week 2023 (UWEWK2023) took place from March 12<sup>th</sup> to March 17<sup>th</sup> at the Ministry of Water and Environment (MWE) headquarters in Luzira-Kampala. The event's main theme was "*Water and Environment for Climate-Resilient Development*," aiming to address the challenges in managing water and environment resources in Uganda and contribute to the country's growth path towards the Parish Development Model (PDM), National Development Plan III (NDP3), Vision 2040, and Sustainable Development Goals (SDGs). The event included a systematic review of policy options, linkages, and knowledge gaps to achieve climate-resilient development. UWEWK2023 provided opportunities for sector actors and stakeholders from various Ministries, Departments, and Agencies including academia, development and private sector partners, cultural institutions, civil society, and faith-based organizations, etc., to exchange knowledge and experiences, engage in dialogue, network, and foster new thinking. The event also enabled benchmarking of best practices within the sector while developing solutions to the most pressing water and environment-related challenges facing the country.

The main event was officially opened on 12th March 2023 by the Speaker of the Parliament of Uganda- the RT Hon. Anita Annet Among, whose speech was read by Hon. Dr. Otimu Emmanuel Otaala, the Chairperson of the Parliamentary Committee on Environment and Natural Resources. The event was closed on 17th March 2023 by Mr. Alfred Okot Okidi- the Permanent Secretary-MWE. This main event included mostly: key note addresses, dialogues, debates, panel discussions, trainings, exhibitions and side events on selected topics but mainly around the subthemes to expound on theme and the improved understanding of the linkages between climate resilience and economic growth amidst emerging challenges in the management and development of water and environment resources: Policy, Legal and Institutional Frameworks for Climate-Resilient Development; Climate Resilient Communities, Ecosystems and Infrastructure; Capacity and Partnerships for Climate-Resilient Development; and Innovative Financing Mechanisms. Similarly, UWEWK2023 allowed participants to contribute to Uganda's midterm review of the UN-International Decade for Action on "Water for Sustainable Development" 2018-2028 called Water Action Decade for Water and gain insights into the new innovations taking place at the WRI.

This main event was also hosted on National TVs, live-streamed on MWE social media platforms and online with a total of 2319 participants (Physical-1551 and Online-768) and was shared widely on social media especially on twitter and WhatsApp while the pre-event activities included a 320 kilometer walk from 28th February 2023 to10th March 2023 that was flagged off at the Oil and Gas development area at Kingfisher in Kikuube district to MWE-HQ in Luzira-Kampala. Other activities included: radio or TV talk shows, commemoration of UWEWK2023 in MWE Deconcentrated structures (6<sup>th</sup> to 11<sup>th</sup> March 2023), regional youth debates, marathons, football matches, awareness campaign, clean up exercises, environmental restoration activities, etc.

The purpose of the UWEWK2023 report is therefore to provide a high level summary of the main points to feed into and inform policy and action areas. Notably and going forward, the key message from the participants is that the key messages, lessons learnt and recommendations

from this and the past UWEWKs should be incorporated into work plans and acted upon by the different Ministries, Departments and Agencies (MDAs) to add more value to the Water and Environment Sector and to have a greater impact onto Ugandan and East African society.

Special appreciation goes out to the individuals, organisations and partners for the success of UWEWK2023 and we look forward to a better UWEWK2024.

#### **ABBREVIATIONS**

AAR Against All Risk

ACODE Advocates Coalition for Development and Environment

AFID Accounting for International Development

Al Artificial Intelligence

AIDS Acquired Immune Deficiency Syndrome

CDF Chief of Defense Force
CFR Central Forest Reserve

CMPs Catchment management Plans

COU Church of Uganda
COVID19 Corona Virus 2019

DEA Directorate for Environment Affairs

DHO District Health Officer
DLG District Local Government

DWD Directorate of Water Development

DWRM Directorate of Water Resources Management

EU European Union

EWB Engineers Without Borders
FAO Food Agricultural Organisation

GDP Gross Domestic Product
GIS Global Information System

GIZ German International Development Agency

GOU Government of Uganda

HON. Honorable
HQs Head Quarters

ICC International Criminal Court

ICT Information and communication technologies IRC International Water and Sanitation Centre

IREC International Resource Centre

IUCN International Union for Conservation of Nature

IWA International Water AssociationKCCA Kampala City Council Authority

MAAIF Ministry of Agriculture, Animal Industry and Fisheries

MDAs Ministries, Departments and Agencies

MP Member of Parliament
MPIFA Mpigi Farmers Association

MS Minister of State

MUBS Makerere University Business School

MUK Makerere University Kampala
MWE Ministry of Water and Environment

NBI Nile Basin Initiative

NBS Next Broadcasting services

NDC Nationally determined contributions

NEMA National Environment Management Authority

NDP3 National Development Plan III
NOC National Organizing Committee
NPA National Planning Authority

NWSC National Water and Sewerage Corporation

ODF Open Defecation Free
OPM Office of the Prime Minister
PDM Parish Development Model
PPP Private-Public Partnerships

PS Permanent Secretary

RCC Regional Collaboration Centre Kampala

SDGs Sustainable Development Goals SOPs Standard Operating Procedures

SIWI Stockholm International Water Institute

STEM Science Technology Engineering Mathematics

SW South West

TASO The AIDS Support Organization

TBG Tooro Botanical Gardens

TOC Technical Organizing Committee

TSUs Technical Service Units

UBC Uganda Broadcasting Corporation
UDCA Uganda Drilling Contractor Association

UEGCL Uganda Electricity Generation Company Limited

UFEA Uganda Flowers Exporters Association

UJCC Uganda Joint Christian Council

UK United Kingdom

UMA Uganda Manufacturers Association

UN United Nations

UNAPII Uganda Nutrition Action Plan
UNCDF UN Capital Development Fund

UNDP United Nations Development Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

UNHCR United Nations High Commissioner for Refugees

UNICEF United Nations International Children's Emergency Fund

UNWMZ Upper Nile Water Management Zone
UPDF Uganda Peoples' Defense Forces

URCS Uganda Red Cross Society
UTC Uganda Technical College
UWA Uganda Walkers Association
UWA Uganda Wildlife Authority

UWEWK Uganda Water and Environment Week

UWS Umbrella Organization for Water and Sanitation

VHS Village Health Services
WfP Water for Production

WAI WASH Alliance International
WASH Water, Sanitation and Hygiene
WMD Wetlands Management Department
WMO World Meteorological Organization

WMZ Water Management Zones WRI Water Resources Institute

WRPRD Water Resources Planning and Regulation Department

WSDF Water and Sanitation Development Facility

WSS Water Supply and Sanitation

WSUP Water and Sanitation for the Urban Poor

WWF World Wildlife Fund

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# 1 INTRODUCTION

This is a general report on the 6th Uganda Water & Environment Week 2023 (UWEWK2023) and it includes information on the Pre-Event, Main Event, and Post-Event Activities. UWEWK2023 was organized by the Ministry of Water and Environment through the Water Resources Institute, with support of partners and sponsors.

#### 1.1 Background

The Uganda Water and Environment Week (UWEWK) is an annual weeklong event organized by the Ministry of Water and Environment (MWE) through the Water Resources Institute (WRI) since 2018. Its goal is to contribute to the Sustainable Socio-economic Transformation and the Ugandan National Development Plan and Vision 2040. The most recent main event, the 6th UWEWK, was brought forward to Sunday, March 12th to Friday, March 17th, 2023 from the originally planned week of Sunday, March 19th to 24th March 2023. This was to accommodate Uganda's participation at the UN 2023 Water Conference for the Midterm Comprehensive Review of Implementation of the UN International Decade for Action on "Water for Sustainable Development" (2018-2028) held in New York City, USA from 22 to 24 March 2023.

UWEWK has grown to become the flagship program for advocacy, information sharing, and learning in the water and environment sphere since its inception. The event's format allows for engagement and information exchange on water and environment management and development across different sectors of the economy. The UWEWK promotes a multi-sectoral and integrated approach that connects all sectors to water and environment, and has attracted high-level political participation, as well as providing a platform for sector professionals, private sector, CSOs, and academic communities to present papers, exchange knowledge, and build partnerships. UWEWK2023 also serves as a commemoration of the annual International Forests Day (March 21st), World Water Day (March 22nd), and World Meteorological Day (March 23rd).

#### 1.2 UWEWK2023 Goals and Objectives:

The overall goal of the Uganda Water and Environment Week (UWEWK) was to improve understanding of the linkages between climate resilience, economic growth, and improved livelihoods of communities. This is aimed to address emerging management and development challenges associated with water and environment resources in Uganda through a systematic review of linkages, policy options, and knowledge gaps.

The specific objectives were to:

- i) Highlight the role of inclusiveness in water and environment systems for climate resilient communities and ecosystem.
- ii) Identify policy, legal and institutional approaches for enhancing water and environment security for climate resilient development.
- iii) Explore opportunities for developing and strengthening capacity and multi-stakeholder partnerships for climate resilient developments.
- iv) Deliberate on innovative financing for climate resilient socio-economic development.

#### 1.3 Themes and Sub-themes

The UWEWK2023 focused on integrating water and environment security and climate resilience into development activities as key to achieving long-term sustainability, achieving SDGs related to water, sanitation, pollution, ecosystems and communities, among others, in the context of climate change by promoting knowledge exchange, exploring nature-based solutions for climate resilience, fostering South-South partnerships, and mainstreaming diversity, equity, and inclusion across different sectors and communities.

#### 1.3.1 Policy, Legal and Institutional Frameworks for Climate-Resilient Development

The sub-theme aimed to enhance the understanding of the interrelationships and dependence of policy, legal, and institutional frameworks to cushion the sectors against climate change impacts while promoting equitable, efficient, or effective social-economic growth and development. It emphasized the need to tap into development programs such as the Parish Development Model to support the integration of climate resilience into growth and development planning, and to examine current legal and regulatory instruments to make adjustments that favor combined uses of natural resources. Additionally, institutional set-ups may be adopted to allow for cross-sectoral and joint planning on the use of natural resources for climate resilience.

## 1.3.2 Climate Resilient Communities, Ecosystems and Infrastructure

The sub-theme emphasizes the significance of nature-based solutions, which can integrate communities, nature, and heritage while balancing green and grey infrastructure. It also highlights the advantages of community-led interventions that can deal with climate change and socio-economic issues, promote sustainable agriculture, and ensure water and food security in vulnerable communities. The use of ecosystems through bottom-up and complimentary approaches is necessary for building climate resilient solutions, considering the inter-linkages between local communities and ecosystems to avoid risking infrastructural assets and balancing the economy's dependence on climate-sensitive sectors such as tourism and agriculture.

# 1.3.3 Capacity and partnerships for climate-resilient development

The sub-theme is focused on strengthening resilient systems by improving capacity building for institutions and partnerships across various sectors, social groups, and communities. This involves addressing gaps in policy, data and information, technology, mindset change, collaboration among stakeholders, and limited sustainable practices. By improving these areas, institutions and partnerships can better prepare for and respond to climate and disaster risks, leading to more effective and efficient implementation of climate-resilient interventions.

In addition, there is a need for access to modern technology, knowledge base, and public facilities that support access to programs supporting formal or informal education and training. This will provide individuals and organizations with the necessary skills and knowledge to implement climate-resilient water, sanitation, and environmental interventions. Institutions, agencies, and donors can provide the necessary support to facilitate access to these programs, ultimately contributing to the development of more resilient systems in Uganda.

# 1.3.4 Innovative financing mechanisms

This sub-theme discussed innovative funding approaches and strategies for climate resilience, combining traditional finance sources and specialist climate finance. It also explored investment opportunities for water and environment security, moving away from recurrent government expenditure and towards alternative financing methods such as insurance policies, commercial loans, and equity. There was also focus on finding efficient and productive ways to develop and manage water, environment, and natural resources to inform planning and prioritization of climate resilience strategies and plans for infrastructure development. To enhance climate and disaster resilience finance, decision-making on financing resilient infrastructure must be risk-informed rather than focused on disaster-solving. Uganda requires a policy framework for financing to ensure the sustainability of Water, Sanitation, Hygiene, Environment, and Climate Change programs. It is necessary to balance pre-disaster and post-disaster investment and consider pre-disaster investment in financial strategies for climate resilience.

#### 1.4 UWEWK2023 Methodology

The approaches used for UWEWK2023 included among others:

#### 1.4.1 Physical and Online Attendance

UWEWK2023 was a successful event that attracted a diverse range of attendees from various sectors and backgrounds. The participation of experts from international and national organizations enriched the discussions and knowledge-sharing sessions. The use of online and physical attendance options, as well as live television coverage, ensured wider access to the event and its valuable insights. The attendees were experts from Ministries, Departments and Agencies of the Government of Uganda, Private Sector/Business Organisations, Development Partners, Civil Society Organisations, Elected Representatives (Parliament, Local Governments, etc.), Community leaders, Academia & Research, Media, students, religious and cultural Organisations, Members of the Diplomatic Corps, UN Agencies, among others.

#### 1.4.2 Moderation and Facilitation

The success of UWEWK2023 can also be attributed to the quality of moderation and facilitation provided by seasoned professionals. With extensive experience and knowledge in managing divergent discussions and creating consensus, they were able to guide the various sessions towards productive outcomes. The diverse range of keynote speakers and panelists also ensured that attendees received insights and perspectives from experts across different sectors, including national economic policy, public sector, water and environment, investment and finance, academia, politics, media, civil society, private sector, and elected representatives from parliament and local governments.

Through their contributions, the speakers and panelists highlighted key issues, trends, and opportunities related to Uganda's water and environment sector. They also shared their experiences and best practices, providing valuable insights that could inform policies, strategies, and interventions. Overall, the expertise and diversity of the speakers and panelists added immense value to the event and ensured that attendees left with a deeper understanding of the challenges and opportunities facing Uganda's water and environment sector.

# 1.4.3 Coordination and Management

The UWEWK2023 was organized and coordinated by the Water Resources Institute of the Ministry of Water and Environment in collaboration with various partners, including government ministries and agencies, development partners, academic institutions, UN agencies, private sector institutions, CSOs, and NGOs. This partnership approach ensured effective management and coordination of the event.

A National Organizing Committee and Sub-Committees was established (see 6.4 below) with varied stakeholders, including representatives from government ministries and agencies, development partners, academic institutions, UN agencies, private sector institutions, and NGOs. The committees worked together to support the technical and logistical aspects of the event, ensuring that it runs smoothly and achieves its objectives.

#### 1.4.4 Time Allocation

To enhance the effectiveness of the dialogue sessions, a short video was shown before each keynote address to provide a better understanding of the actions being taken on the ground. During the panel discussions, each panelist had a designated time slot to share their views on the theme and to address any concerns or questions from the viewers or listeners. Additionally, all parallel sessions, short course training, virtual field visits, and side events were 2-3 hours long, including the discussions, to ensure that participants had ample time to engage in meaningful conversations and exchange ideas.

# 1.4.5 Partners and Sponsors

Partners of UWEWK2023 were identified and considered as co-conveners, key-sponsors, and sponsors based on their level of support for the event. As sponsors, partners received preferential treatment, such as appearing on publicity materials and media mentions, which enhanced their visibility and recognition in the water and environment sector in Uganda.

#### 1.4.6 Expression of Interest and Exhibition

The UWEWK2023 called for expressions of interest from individuals, institutions, and partners, offering options for both physical and online registration. Deadlines for attendance, submitting abstracts, papers, exhibition interest and registration invitations were provided and opportunities to register and participate in the event either in-person or online was provided.

#### 1.4.7 Communication and Publicity

Publicity campaigns, including use of both print and electronic media, social media platforms and promotional materials prior to the event were held. Recording of video clips of field visits to selected sites in line with the theme and subthemes showcasing the role water and environment for climate resilient and socio-economic development of Uganda was undertaken.

Eventually, documentation and videos of UWEWK2023 results were published and shared widely on both hard copies and electronic versions; with the final copies uploaded to the MWE/WRI website, these include:

- i) UWEWK2023 Report,
- ii) Water and Environment Magazine,

- iii) Daily Water Fronts which is a daily publication that documents what transpired each day as a way of keeping the memory of the event alive; both hard copies and electronically.
- iv) Social media postings, etc.
- v) There was a live National TV broadcast on Uganda Broadcasting Corporation (UBC) and NBS-TV; especially the opening ceremony, keynote address and dialogue, etc.
- vi) Other avenues were also explored such as the use of MWE- Regional offices, Local and Central Governments, Religious and cultural organisations, etc. to publicize the event.



# 2 PRE-EVENT UWEWK2023 ACTIVITIES

The Pre-Event activities for UWEWK 2023 were mostly planned to generate as much publicity and visibility for the UWEWK 2023 as possible and these lasted for ten days from 28<sup>th</sup> February to 10<sup>th</sup> March 2023.

## 2.1 National and Technical Organizing Committees

The Ministry of Water and Environment through the Water Resources Institute led the planning, coordination, management and organization of UWEWK2023 under a constituted National Organizing and Technical Organizing committees with a given Terms of Reference (See 6.3). These were mostly experts from Ministries, Departments and Agencies (MDAs) of the Government of Uganda (GOU), Private Sector/Business Organisations, Development Partners, Civil Society Organisations, Academia and Research, religious and cultural Organisations, among others. The establishment and workings of the National Organizing Committee (NOC) and Technical Organizing Committee (TOC), although part of the pre-events were formed three months prior to the Main Event. The National Organizing Committee included:

- i) The Technical Organizing Committee which played a critical role in planning and executing the various sessions, ensuring that they align with the event's theme and objectives. The committee was responsible for identifying and selecting keynote speakers and panelists, as well as developing the agenda and format of the event.
- ii) The Secretariat, on the other hand, provided administrative and logistical support for the event, including registration of participants, management of venues and facilities, and coordination of media and publicity. Through the establishment of these committees, UWEWK2023 benefited from the expertise and experience of a diverse range of stakeholders, ensuring that it was a successful and impactful event.

#### 2.2 UWEWK2023-MWE Regional Structure Activities

The decentralized activities of UWEWK 2023 were carried out in the 6 de-concentrated regional structures of MWE. These are considered a relevant approach to broaden the scope and impact of the UWEWK. These include radio or TV talk shows on Water and Environment issues, regional youth debates, marathon, football matches, and awareness campaign and clean up exercises or restoration activities which were organized by regional de-concentrated structures of the MWE in various locations to deal with key pressing issues in those regions. Some of the particular activities included the following;

- UWEWK regional activities in 6 regional de-concentrated structures of MWE.
- ii) Regional Youth Debates in 5 regional de-concentrated structures of MWE (Gulu, Mbale, Fort Portal, Mbarara and Kampala)
- iii) Water and Environment Week Marathon in Fort Portal and Nile Run in Jinja

# 2.2.1 Albertine Regional UWEWK2023 Activities

The Albertine Regional UWEWK2023 activities were organized by the MWE structures in the region and its partners. These started with planning and preparation meetings in February and March 2023 before evolving into other activities as described below but mostly under the described sub-themes:

## i) Public Awareness Campaigns

This included publicity campaigns on both print and electronic media, and promotional materials before the event. Other aspects used were acting through drama groups in schools and debates clubs. While the radio talk shows, Ads, social media platforms, and media drives created positive feedback from the audience.

## ii) Walking for Water, Environment and Climate Change

The MWE in collaboration with the Walkers Association of Uganda arranged a 320 km walk from king fisher in Kikuube district to Kampala. This has been captured to detail in section (2.3).

# iii) Public Awareness and Sanitation Improvement Campaign in selected Districts

On Saturday 4th March 2023 in Hoima Town, there was a Sanitation and Hygiene promotion to better health in Hoima City. This was done by MWE in collaboration with the Hoima City Council which organized the cleaning of Hoima city and led by the Mayor of the city. Other delegates included the Speaker of Hoima City Council, RWSRC-5, Team Leader-AWMZ, MWE staff and the walkers. The activity was done successfully and the public was reminded that every human being had a right to clean environment and this should be respected as such. It was emphasized that it was every bodies' responsibility to ensure cleanliness in Hoima City. Yet again, there was clean up and garbage collection on Thursday 9<sup>th</sup> March at Kamwenge Town Council Offices by the community, the local government leadership and the implementing partners.

#### iv) Football Match towards Improvement of WASH

On Sunday 5th /3/2023, there was a football match at the Boma grounds which attracted a large number of spectators and players towards improvement of WASH as a means to raise public awareness and improve sanitation. The games were held with wide representation, sensitization and a plastic tank were to be donated to Kamengo primary school on the 6<sup>th</sup> March so as facilitate better WASH practices. The school administration and encouraged them to sustainably utilize them for improved health of their pupils. Equally, another match was at Harugongo Primary School towards improvement of WASH under what was termed the Sanitation Cup. On Tuesday 7th march was a campaign on Sanitation and Hygiene Campaign at Harugongo sub-county and their leadership. The team cleaned the trading center which created good awareness for better sanitation and hygiene. The activities were massively attended by over 300 people.



Figure 1: Demonstration of tree planting in Hoima



Figure 2: Participants planting trees in Nyamwamba Catchment area



Figure 3: A photo moment between Nyakasura School, St. Mary's Seminary and the Judges



Figure 4: Participants at the cleaning exercise in Hoima



Figure 5: Marathon winner going to receive the certificate of appreciation from Hon. Ruhonda.



Figure 6: Players from both sides at Harugongo P/S reading themselves for the football match.

# v) Schools Tree Planting and Debates

On Monday 6th/Mar/2023, a debate held among primary school pupils at Nyabukara at the Kabalore Youth Center Offices. These were on the environment and WASH which contributed a lot to their knowledge and also provided feedback to the ministry. On Friday 10<sup>th</sup> March, there was another debate tournament among University students on the privatization of water supply and distribution in Uganda, major polluter nations and the obligation to open their boarder to refugees, the need for full environment compensation in Albertine region due to oil and gas activities before fully making operational the East Africa crude oil pipeline.

# vi) Tree growing to restore various degraded catchments

On Monday 6th/Mar/2023, there was an awareness rising on the environmental conservation and tree planting along River Katokoma. This attracted the school administration, Implementing Partners from Kabarole district and pupils who appreciated the great need for this campaign and did this by example. These children are the ambassadors of improved environmental protection in the near future around their communities and across the world.

# vii) Save River Mpanga Marathon

A marathon was organized on Sunday the 12<sup>th</sup> March 2023 at the Boma Grounds in Fort Portal to save river Mpanga. The campaign brought a lot of participants and opened up a wider space and opportunities for collaborations. This event was attended by the area MP, Kabarole district and Fort-Portal City administrators, the general public, Tooro Kingdom, MWE and partners, etc. Centenary Bank Fort Portal Branch donated 500 trees to be planted at the banks of the River Mpanga while the organizers of the function were awarded certificates to all those organizations that contributed to the success of this campaign. The winners were Mr. Mugenyi Ray for the 5km while Mr. Byamusha Focus was winner for the 10km.

#### viii) Dialogue and Exhibition in relation to climate resilience

On Wednesday 8/3/2023, there were environmental protection campaigns through sensitization, dialogue, exhibition in relation to climate resilience and tree growing to restore various degraded catchments at the banks of River Nyamwamba / Rukoki meeting ground. There was also a successful demonstration of tree planting along the river banks of Nyamwamba especially along the area where car washing was done mostly. There was also a dialogue and a lot of drama shows that demonstrated proper ways of catchment protection. The activity created a lot of demand and the community requested for additional projects of the same nature along similar rivers in Kasese. There were exhibition from the beneficiaries of the livelihood project along River Nyamwamba and the intervention had started taking shape.

# Summary Outcomes, Key Messages and Recommendations from the Albertine Regional UWEWK2023 Activities

 The leaderships strongly advocated for the use of laws and regulation to quickly promote sanitation and hygiene but they also noted the massive deforestation and a call for massive re-afforestation.

- The community requested for better systems of solid and liquid waste management especially the big concern and challenge noted was plastic waste and there was a call for timely intervention.
- There was a lot of lobbies done towards protection of river Nyamwamba and Mpanga. Most leaders came up with a call for action towards this initiative e.g. a call to the administrators from Kabarole district and Fort-Portal City to come up with an ordinance to stop washing vehicles in R. Mpanga.
- There is need for an increased investment in creation of models and documentation of best operational practices that can be used for demonstrations during exhibition exercises at different platforms.
- The ministry was required to design response mechanisms specifically for the district directly located in the oil project areas since it is understood that the oil production will come with heavy risks.

# 2.2.2 Eastern Regional UWEWK2023 Activities

The Eastern Regional UWEWK2023 activities were held from 6<sup>th</sup> to 13<sup>th</sup> March in partnership with Aidenvironment, National Water and Sewerage Cooperation (NWSC), World Wide Fund for Nature (WWF), International Union for Conservation of Nature (IUCN), Oxfam Uganda, Food for the Hungry Uganda, Mbale Cooperate Club, Mbale City and included the following: Media campaigns (talk shows and spot messages), Field visits to selected areas, football matches, clean-up exercise, tree planting and youth debate (details in 2.3.2) among others.

# i) Media Campaigns

The eastern region UWEWK 2023 celebrations were kicked off with a radio talk show at Step FM a radio station. The panel consisted of staff from the Ministry of Water and Environment (MWE) de-concentrated offices in Mbale together with a partner in Aidenvironment. The radio talk show focused on raising awareness about the background of UWEWK and the planned activities for UWEWK2023.

# ii) Field visit to farm plots with flood control structures, in Bubutu Town Council, Bududa district and Doko irrigation scheme in Butalejja district

The field visit organized by MWE had participants from the Local government officials from the districts of Butaleja, Bududa and Manafwa lead by the LCV Manafwa as the team leader. At the farm plot, Bubutu hotspot committee took the group through the implementation process that included: description of the situation before construction of the structures; formation of the hotspot committee that is leading the construction of flood control structures; description of construction of flood control structures and their purpose; and the gains realized as a result of having the structures in place.



Figure 7: A team visit flood control structure at farm pot Bukutu in Manafwa district

Later the team guided by the site manager, Water for Production East and the chairperson of Doko rice growers' association, and the district community development officer representing the Chief Administrative office of Butalejja visited and toured Doko Irrigation scheme. Some of the places visited included: the two intakes, all the three categories of canals (Primary, secondary and tertiary) and the rice plots. Lastly, the chairperson of the rice growers' association shared the achievements realized since the scheme was constructed and the challenges they are still facing. After the speeches, a ceremonial tree planting exercise was conducted and then the team headed out for a tour around the scheme under the guidance of the site engineer.

## iii) Football matches and awareness campaign

Two football matches were organized on Wednesday 8<sup>th</sup> March 2023 coinciding with International Women's day. The first match was the women's match between MWE ladies and National Water and Sewerage Corporation (NWSC) Mbale branch Ladies. This was also partly organized in commemoration of the International Women's day. Additionally, a men's match Mbale cooperate club (MCC) and MWE men proceeded the ladies'. Alongside the matches, messages in respect to the mandate of MWE, the services offered by MWE and how they can access more information about the institution were relayed through a public address system. About two hundred people turned up for the matches. This activity greatly improved the bond between MWE, NWSC and MCC.



Figure 8: Plate showing pictures from the two football matches

#### iv) Awareness campaign and clean-up exercise in Mbale city

The awareness campaign in the Eastern Region consisted of matching through Mbale city to MWE regional offices followed by a series of speeches, interactions and interviews between MWE staff, NWSC and communities on issues of water and environment

resources management and development, WASH and water source protection. The communities were also sensitized on the importance of proper management of solid waste, the water week celebration and the water and environment sector as a whole. This continued to the second that was concluded with clean-up exercise at Kikindu market located near Islamic University in Uganda-Mbale branch. The cleaning was done by MWE staff, NWSC-Mbale, NEMA, Partners (Food for the hungry & Oxfam Uganda), Staff from Mbale city and Mbale district local government and city communities.



Figure 9: Awareness campaign and cleaning up of Mbale City to mark the UWEWK2023

# v) Outcomes of eastern regional UWEWK2023

The celebration of the pre-event UWEWK2023 eastern region was successful. The feedback from the participants and sponsors has been good. Below are some of the achievements registered:

- The public and new staff learned more about what the sector does, MWE in particularly;
- The events improved enhanced network among stakeholders in the sector;
- There is improved interest in the event among stakeholders and partners; most of them
  promised to take a more active role in next year's UWEWK activities e.g.: Oxfam and Food
  for the Hungry promised to do more next time;
- Steady Improvement in coordination among key players in the water and environment sector in the region

#### 2.2.3 Karamoja UWEWK2023 Activities

The MWE structures in Karamoja and partners organized a number of activities to mark the pre-UWEWK2023 event with the overall intention to increase visibility and awareness about UWEWK, sensitization of water and environment conservation but also to provide accountability and reporting by MWE, among others. These activities were spearheaded by the Water for Production Regional Center-Karamoja alongside other MWE structures (Rural Water and Sanitation Regional Centre-2, Dress Project of Kyoga Water Resources Management Zone, Umbrella of Water and Sanitation-Karamoja, National Forestry Authority (NFA)-Moroto and Water and Sanitation Development Facility-Karamoja. Some of the activities included:

#### i) Media Campaigns and Exhibition

Initially there were meetings held between representatives of MWE, District, Municipality, Development Partners, CBOs, etc. After which, there were various media campaign activities that

were done to promote UWEWK activities including the hosting of a radio talk show (Ateker FM), publicity campaigns (road drive), including use of electronic media, social media platforms and promotional materials prior to the event. There was also community mobilization on ground through meeting the lower local government (Loputuk Sub County and Moroto municipality).

# ii) Home Improvement and Street Cleaning of Moroto Municipality

There was a home improvement sanitation campaigns and street cleaning of Moroto Municipality, Moroto and Loputuk Sub County. These included participants from Moroto district Local Government, MWE staff, NGOs, the Police and Pupils from Loputuk Community Demonstration School. The purpose extended to community sensitization on the proper hygiene and sanitation management, hygiene and sanitation mobilization to avoid contracting WASH related diseases, etc.

# iii) Stakeholders Engagement in Loputuk Sub-county

There were activities aimed at interventions and dialogue to promote face washing & environmental hygiene in 120 villages (Moroto, Amudat, Nakapiripit, Nabilatuk) with high trachoma prevalence. Village Health Teams (VHTs) and the local leadership mobilized their communities who comprised of men and women, community leaders (LC 1, LC 2, Parish counselor), as well as sub county officials, representatives of NGOs, Development Partners and health facility staff. The summary of the meetings are in the table below:

Table 1: The number of participants during the community dialogues in Rupa/Loputuk sub county.

S/no	Date	sc	Parish	Village	М	F	т
1	3/3/2023	Rupa	Pupu	Lokemerkapel	10	21	31
2	3/3/2023	Loputuk	Nachogorom	Apetaoi	6	30	36
3	6/3/2023	Rupa	Rupa	Lorukumo	11	22	33
4	6/3/2023	Loputuk	Lotirir	Nangorikipi	25	17	42
5	7/3/2023	Loputuk	Nachogorom	Nataparakocuc	15	14	29
TOTAL			-		81	157	238

# iv) Borehole and Valley tank Inspection.

There were valley tank (capacity of 10,000m3) inspections at Kalokutakori village in Kalokutakori Parish of Katikekile sub-county in Moroto District. The valley tank had water source protection by planting such as Acacia and Traveria trees, planting vetiver grass, sisal, and milk bush.

Secondly, there was the inspection of the borehole inspection at Kosomaita. This is a facility with a depth of 66 meter deep and the yield of 3000m3/h to serve a population of 780 approximately.

The purpose of the inspection was to ascertain issues on repairs and functionality of the boreholes.





Figure 10: UWEWK2023 preparatory meeting in Moroto District Figure 11: MWE and partners during the radio talk shows



Figure 12: The chief cleaner-Deputy Mayor-Moroto, together with pupils cleaning Moroto municipality



Figure 13: Community of Apetaoi in a stakeholders' engagement activity.



Figure 14: The valley tank was found empty because it had dried up



Figure 15: The borehole needed an animal trough and source protection

#### Verification of Open Defecation Free Villages, v)

The MWE and regional WASH stakeholders inspected Natali in Loputuk Sub County in Moroto and verified villages free from open defecation by coping model villages that were declared ODF free and the strategy employed was by improving sanitation in the region by having toilets constructed and well maintained. Unfortunately, the village was found not ready to be declared free from open defecation because some households were still found without toilets and some 'landmines' were found around the villages. The district representative was said the implementation of the by-law.

## vi) WASH and UWEWK2023 Celebration at Boma Ground, Moroto

The UWEWK2023 pre-event in Karamoja was eventually crown by speeches, games, exhibitions and a football match. This was attended by MWE staff, Moroto District Local Government staff, Moroto Municipal staff, WASH Development partners, school children, religious leaders and the general community of Moroto Municipality. The aim was to share information and progress among the different WASH players and partners specifically the available technologies implemented by different partners in the district and the region at large.

- vii) Football games were organized (between the Police and demonstration primary school) to attract the community at the Boma grounds. This was to mobilize, train and sensitize the communities on how to discover germs in the water and food, how to protect the water source and how to utilize the toilet so as to safely manage human excreta.
- viii) Presentation of a song and poem (WASH the Great) from pupils emphasizing on hygiene and sanitation such as cleaning the compound, washing utensils, clothes, protection of water source, avoid open defecation and littering the latrine, among others.

#### ix) Tree planting in Kosomaita

A tree planning exercise was planned by C&D and NFA for institutions i.e. schools, government or public offices, health centers and the surrounding communities but could not be implemented due to the prolonged draught in the Karamoja Region. It has been rescheduled for the next rainfall season.



Figure 16: Open defecation inspection or "Shit Walk" in Natali village in Loputuk parish



Figure 17: Training and demonstration on how to set and use toilets during the football games





Figure 18: Welthunger Hilfe illustrating how water is purified and is clean and safe for drinking

Figure 18: Welthunger Hilfe illustrating how water is purified and Figure 19: Prayers pose for a group photo before the match

# Summary Outcomes, Key Messages and Recommendations from Karamoja UWEWK Activities

- The communities pointed out that they had issues with the motorized schemes in the regions because they
  keep breaking down very frequently but also vandalism of solar panels and spare parts. This was further
  worsened by the communities demanding for incentives to maintain them but also the limited availability of
  equipment to construct latrines.
- Insecurity was still noted as rampant leading to low turn up and lack of interest in the dialogues and follow-up
  on actions developed with a plan to identify hotspots of insecurity and seek guidance from SC leadership and
  authorities, also have access to real time updates of insecurity incidences.
- Hunger is widespread and the communities migrate to look for a source of livelihood which eventually creates insecurity and hostilities from neighboring communities.
- The prolonged drought has caused the drying of many valley tanks and dams in the region, but equally, there was overuse if the valley tanks because the population of the animals in the area served by this valley tank is greater than the capacity of 10k liters so there is need to have a bigger valley tank around the area.
- There is need for more water source protection in those valley tank areas with more grass despite the inspection
  revealing that the water source protection was well done although there is a fear of silting of the valley tank by
  the road works taking place might cause.
- The boreholes did not have the animal water trough while the condition of the borehole was not good as it was already damaged with limited drain off channel
- There was also no water source protection undertaken for the boreholes and therefore a call was made to the partner, Sub County, local communities and beneficiaries to plant trees and fence the borehole.
- Many villages were still not ready to be declared free from open defecation and the local district representative
  were advised to implement the by-law besides dialogue and construction of sanitary facilities.
- Due to reduced funding caused by COVID-19, the number of partners in WASH had dropped to about 20 in the Karamoja
- There was a call to partners to create more awareness activities on cooking energy reduce charcoal burning
  and instead advocate for use of sorghum stock. Other calls were on increased catchment management
  activities, alternative rainfall harvesting methods like the (use of polythene bags), exploitation and reinvestment
  of the rich mineral such as gold, marble, granite, diamond, cobalt and equally advocate for education services
  to develop Karamoja.
- All partners in Karamoja were asked to strengthen their coordination with the local government. This should be with a clear plan, display the right figures for the different duties, open budget conferences, performance reports,

- challenges and way forward for accountability purposes and for purposes of being accountable and transparent to one another.
- There was a call for capacity building through a refresher trainings be conducted to equip Water User Committee, community and local councils on their roles and responsibilities for the sustainability of these point water sources and schemes.

## 2.2.4 Northern Regional UWEWK2023 Activities

MWE structures in the Northern region and partners organized a number of activities related to the above sub themes and these included:

# i) University Debates.

The university debates took place on 6<sup>th</sup> March 2023 at Gulu University main campus. The overall winner was Gulu University-Main Campus with Gulu University-Kitgum Campus coming 2<sup>nd</sup>, Lira University coming 3rd and Muni University was 4<sup>th</sup>. The best debater was Sitaraya Caroline Peace from Muni University. Other participants included: Andema Desmon Angulibo, Sitaraya Caroline Peace (Muni University), Amanya Belinda, Namunane Enock (Gulu University Main Campus), Onen rwot Brian, Yeko Shanura (Gulu University Kitgum Campus), Bua Emmanuel and Ssebuffu Eddie Mervin (Lira University), Akoragye Elizabeth and Ngula Emmanuel (Gulu College Of Health Sciences). Others were Ssepuuya Mujib, Rubangakene James, Onencan Richard, Mutatiina Derrick, and Ayella Nobert Mao.



Figure 20: Participants from Northern Region commemorating UWEWK2023 in Gulu City

# ii) Radio Talk Show.

The Ministry of Water and Environment North and Gulu City council organized a Radio talk show on MEGHA FM Gulu on 6th March 2023 to raise awareness on the UWEWK2023 planned activities and the partners supporting the activities. The panelists included the RCC Gulu city, Team leader – UNWMZ and Rep for AIDENVIRONMENT

# iii) Women's Corporate League Day Celebrations at Lira UTC Grounds.

A Women's corporate league to raise awareness on UWEWK2023 in general and the role of women in environmental management were organized. This was also supported by Lira Regional Referral Hospital that had a health camp at the games to ensure safety of the participants but also to raise awareness on health environment and hygiene. The final results saw Lango Queens being crowned winners while UTC Lira was runners up. There were a total of 5 participating teams which included Lira Regional Referral Hospital, Ministry of water and Environment Team 1 and Team 2.

#### iv) Fieldwork to OITINO Micro catchment area.

The leadership of Gulu City Authority, Gulu District, MWE, stakeholders and partners of UWEWK2023 held a community meeting in Oturoloya cell to interface and assess the level of progress of the livelihood interventions program supported by the Natural Resources Stewardship Programme (NatuReS) of GIZ.

# v) Cleaning exercise for Gulu City and Exhibitions at Kaunda grounds

The participants converged at Gulu City Council yard from where the cleaning started, through to Gulu City main road, Market road, the market and a walk to Kaunda grounds. While at Kaunda grounds, there were exhibitions of services being done. Here, the guest of honor and chief cleaner- the Mayor Gulu City inspected the stalls and teams from various partners who presented their activities. During the event GIZ and partners handed over a plastic recycling machine to private sector actors for the recycling of plastics in Gulu city, an initiative to help these private sector turn plastics into usable Items like chairs, bricks, pavers, etc. to fight and protect the environment.



Figure 21: The University and Institutions Campus Debates at in Gulu City



Figure 22: Women Football Corporate League to celebrate UWEWK2023



Figure 23: Fieldwork to OITINO Micro catchment area.



Figure 24: Staff of MWE demonstrating catchment restoration to participants.



Figure 25: Participants and residents participating in a cleaning exercise of Gulu City



Figure 26: Handing over a dummy cheque by IUCN & the official launch of IGAs funds

# Summary Outcomes, Key Messages and Recommendations from the Northern Regional Water and Environment Week Activities

Media coverage is wide enough to fight climate change by shaping public's opinion.

- There is lack of evidence based data to assist authorities in the region in predictions to enable early warning. This also includes limited awareness on SDG's and other global opportunities to ease access of funds.
- Since destroying the environment affects humanity as much as genocide and climate change is going to make it worse, the ICC should consider it a crime to damage the environment.
- Gulu city faces water supply challenges during the dry seasons and therefore the government intervention through Oitino Dam is welcome. NWSC should be assisted to develop a source protection plan for Oitino water works and supervise its implementation.
- The participants urged government to demand public accountability on Ministry of Water and Environment activities and ensure that the public is aware of the achievements made.
- Gulu City Council to enact and implement an ordinance against bush burning which is a big challenge to the
  farmers and the region at large since there is rampant burning of trees and bushes in the area which is
  destroying some alternative livelihood activities like bee keeping, vegetables growing and planting of Bamboo.

# 2.2.5 South Western Regional UWEWK2023 Activities

MWE structures in the South Western Region mostly through the Victoria Water Management Zone and partners organized a number of activities that related to the above sub themes as presented below. Overall, the intended purpose of increased visibility and awareness about MWE and UWEWK2023 and provide accountability and reporting by MWE, among others was achieved.



Figure 27: Participants from SW Region commemorating UWEWK2023 in Mbarara City

#### i) Press Conference and Radio Talk shows

Through radio talk shows, press conference and adverts, public awareness about UWEWK2023 especially the pre-event activities in the South Western region was raised. This was done by nearly 30 participants from the de-concentrated structures of MWE, Catchment Management

Committee members, NEMA and partners (e.g. Development Partners, NGOs, Academic institutions, etc.), among others.

# ii) Sanitation Improvement Campaign around Mbarara City

There was a water resources conservation and sustainable use through matching around Mbarara city from MWE regional offices to Kijungu market led by UPDF band. Afterwards, there was a cleanup of the market in Kijungu, sanitation campaign through emptying of community pit latrines by cesspool emptier and sensitization on plastic waste dispersal by using plastic waste bankers and tree planting at Calvary Primary School. The gathering was later addressed by The Mayor Mbarara city, Representative of the permanent Secretary MWE Mrs. Lucy Iyango (Commissioner Wetlands Department), The Resident City Commissioner-Mbarara, and Chairperson Kijungu Market.

# iii) Water and Environment Conservation Debates among Academic Institutions

There were debates among the youth on environment conservation issues with awards being given to the best students, clubs and schools/ universities in and around Mbarara City. A Representative from the Ankole diocese was the Guest of Honour and the event was also graced by Mr. Byaruhanga Ignitious (Senior Presidential advisor on wetlands) and the vice chancellor of Bishop Stuart University. Mbarara University, Mary Hill High School and Uganda Marty's primary merged the winners for university, secondary schools and primary schools respectively. The topic for debate were all on water resources and environmental management and efforts that have been developed as of to date, other topics included; is Water conservation a necessity of the present to secure the future?

# iv) Environmental conservation, Improved Agriculture and Skills Training

As a team of nearly 40 people, the MWE and stakeholders led by the Manager WSDF-SW and the General Manager of Excel Hort Consult visited a site for quick training program on better modern agriculture especially for the urban poor to utilize the small spaces for food production, especially on apiary, cuniculture, upland fisheries, diary for goats and cows, vegetable gardens. They also demonstrated the use of irrigation systems for vegetable growing throughout the year. The team was also taken through the Agricultural Museum site where different traditional agricultural value addition tools (milking pales, grinding stones, mortars, Knives, calabash, etc.) were displayed. Equally, there was a visit to a garment and fashion house supporting vulnerable girls and boys (with HIV) with skills to make school uniforms and sweaters supported by Directorate of industrial research and UNAIDs.

The Kihumuro hot spot which is one of the most degraded hot spots within the river Rwizi catchment was thereafter visited to show over 40 participants the restoration activities of the buffer zones that have since taken place by students of Mbarara University of science and Technology. This was a result of the Rwizi catchment Management plan that was developed by WME and stakeholders.



Figure 28: Press conference by MWE staff on UWEWK2023 activities



Figure 29: Cleaning exercise at Kijungu market.



Figure 30: solid waste management and tree planting by Calvary Primary School.



Figure 31: Participants visited the skills training center for girls living with  $\mbox{HIV}$ 



Figure 32: Water and Environment Conservation Debates among the schools and universities.

Figure 33: Competing teams take a group photo before a game

# v) Exhibitions by the Different Partners

On the 3rd March 2023, there was an exhibition at Mbarara University pitch that attracted over 400 multi- stakeholders participants as listed in Table 9. The events included speeches from dignitaries, blood Donation Drive, Voluntary HIV Counseling & Testing, Entertainment by Environmental cultural group (Kigezi Drama Actors) who presented drama skits and dances, touring of exhibition stalls, and friendly sports events, etc.

## vi) Friendly Sports Activities and Football Match

After the exhibition show, there friendly matches and other sports activities between groups from, the corporate companies that pincluded; Coco cola industry staff, Bishop Stuart University students, Excel Hort Consult team, Ministry of Water and Environment staff and Kabajurizi league, etc. Bishop Stuart University merged of the games and were awarded 500,000/=.



Figure 34: Invited Guests touring the exhibition stalls



Figure 35: Blood Donation activities that were on going on as part of the day's program



Figure 36: The Kigezi Cultural Group performing at the event



Figure 37: MWE Staff and partners during a Radio talk show at Crooze FM

# Summary Outcomes, Key Messages and Recommendations from the South Western Regional UWEWK Activities

• Since schools and other academic institutions are building ground for future managers and, there is a need to start engaging them now to participate in environment management activities. Fortunately, many academic

- institutions have embraced environment conservation using clubs and starting teaching of environment courses is a positive.
- Participants noted that full recovery of the wetlands is attainable through mindset change, multi stakeholder (e.g. Public Private Partnerships) and the use a step-by-step approach.
- It was duly noted that through collaboration, the was recovery and restoration of the River Rwizi catchment under the concept of integrated water resources management and all users needed to continue under the same arrangement to enable the continued use and manufacture of products.

#### 2.3 National Level Pre-Event Activities

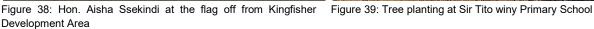
Besides having some Pre-UWEWK2023 events done and managed by the administration structures of MWE in the regions, there are those which are done centrally and directly through the WRI/MWE Head Offices and these included:

#### 2.3.1 A Walk for Water and Environment

The Ministry of Water and Environment together with the Walkers Association of Uganda and other partners organized a 320 kilometer walk for climate resilient development between 28th Feb 2023 to10th March 2023.

The first leg of the walk was flagged off at the Oil and Gas development area at Kingfisher in Kikuube district by the State Minister for Water, Hon. Aisha Sekindi. The walk went through, Kyangwali, Bugoma Central Forest Reserve in Hoima City, Kyankwanzi, Kiboga District, Busuujji, Namayumba, Mityana District through to Wakiso District. As they walked, the walkers made several stopovers for different activities such as ceremonial tree planting, clean up exercises, hand washing demonstration, etc. This was done with different stakeholders such as local leaders, staff of MWE and Local Governments, students, and other participants from the communities, etc. who were engaged in various activities. Key highlights of the walk included among others the planting a variety of tree species totaling to One thousand and thirty eight (1,038) tree seedlings. Also the walkers witnessed the results of the continued restoration of forest cover in the Central Forest Reserves of 550 hectares in Bugoma and 285 hectares in Kangombe by the NFA.







The second leg started upon arrival in Wakiso District on 10th March 2023, here began by the walkers going through the NWSC-Lubigi Treatment Plant in Wakiso District and then to the Parliament of Uganda, and Makerere Business School-Nakawa on their way to the MWE-HQ in Luzira-Kampala. Keynote presentations and speeches were made by Eng. James Maiteki (Senior

Sewerage Service NWSC-Lubigi), Hon. Cyrus Ogon (Chair-Uganda Parliamentary Manager-Forum on WASH), and Hon. Okaasai Opolot (State Minister for Energy), Dr. Callist Tindimugaya the Commissioner WRPRD-MWE, and Mr. Geoffrey Ayeni (The lead Walker), The leadership and students from Makerere Business School, Ndejje University, etc.



Figure 40: RDC awarding members whose community sanitation and hygiene had improved



Figure 41: Walkers being flagged for the last leg to MWE while at Parliament.



Figure 42: MUBS Principle receiving the walkers and making his Figure 43: The walkers at the Lubigi treatment plant. remarks



## Summary Outcomes, Key Messages and Recommendations from the Walk

- There was environmental degradation especially vegetation cover within the Albertine region especially where there is refugee presence. Equally, the high numbers of refugees resulted in land disputes especially in Kyangwali district and some of the settlements are visibly water stressed.
- There was a lot of charcoal and bush burning along the route while poor waste disposal and poor water management in Kiboga, encroachment on the wetland was common in Kubuube and residents of Kyankawazi requested the walkers to attention of the MWE the need for increased water supply.
- There is need for immediate restoration of Bugoma central forest reserve and environmental protection enforcement to curb on the river bank encroachment along the rivers and streams along the route.

- It was noted that the environmental police and other stake holders needed to intervene on the encroachment of Lubigi wetland especially at Buloba while also a need to monitor the destruction of trees along the roads.
- Different stakeholders called upon government to subsidize the cost of renewable energy like gas, solar energy, etc. to save the environment.
- There was also a call from different urban centers and towns for local governments to gazette one day for walking "the green day" to further emphasis the importance of the environment.
- It has been noted that the lack of Institutional coordination at the central level between NEMA and NFA is now being felt at the district/ local governments level which is hindering implementation of government programs.

#### 2.3.2 The National Youth Debate

The Youth Debate held as part of the Uganda Water and Environment Week (UWEWK), served as a crucial platform for young people to engage in discussions centred on the UWEWK 2023 theme of "Water and Environment for Climate-Resilient Development." This overarching theme reflects the urgent need to address the interlinked issues of water, climate change, and environmental management in Uganda.

The youth debates were held under the focus theme "the role of students towards climate-resilient development". The significance of these debates lies in their contribution to promoting sustainable practices and fostering climate-resilient development across the country. Water scarcity, environment degradation, and the impacts of climate change pose significant challenges to Uganda's development aspirations. The choice of the National Youth Debates as a part of UWEWK was strategic and intentional. Recognizing the importance of engaging youth in decision-making processes, these debates sought to empower young minds and give them a voice in shaping Uganda's future. Young people hold immense potential, creativity, and fresh perspectives that are instrumental in developing innovative solutions to water and environment management and climate change. The debates offered an opportunity for students from secondary schools and universities to deepen their understanding of the challenges posed by water scarcity, climate change impacts, and environmental degradation. By researching and preparing arguments on assigned topics, the participants gained valuable insights into the complexities and interconnectedness of water, environment and climate change.

The youth debate organized by MWE in partnership with Youth Go Green involved 6 regional debates and National finale held during the UWEWK2023 main event. The Regional and National Youth Debates served as a platform for fostering awareness and mobilizing action. They encouraged young people to become proactive agents of change, advocating for sustainable practices, and influencing decision-makers in water, climate action, and environment management policies

The primary objective of the UWEWK National Youth Debates was to provide a platform for young people to express their views, exchange ideas, and propose innovative solutions to water and environmental challenges in Uganda. Through these regional youth debates, MWE in collaboration with Youth Go Green aimed to empower and inspire the youth to become active agents of change in environmental conservation and sustainable water management.

**Topics and Themes:** Each debate focused on specific water and environmental themes relevant to Uganda. The topics covered a wide range of issues, including water pollution, climate change adaptation, sustainable agriculture, waste management, renewable energy, biodiversity conservation, and more.

**Judging Criteria:** The debates were evaluated based on several criteria, including content relevance, clarity of arguments, research depth, presentation skills, teamwork, and rebuttals. The judges consisted of experts in the field of water, climate change, and environment, ensuring a fair and knowledgeable evaluation process.

**Participants:** The debates were open to both inter-university and secondary school students. Participants were required to form teams, consisting of three to five members, representing their respective institutions. The teams were selected through a rigorous application process and were guided by judges and teachers.



Figure 44: Student debaters during the official opening of the regional youth debate

#### **Regional Debates**

The regional debates were conducted in four regions of Uganda, allowing participants from various areas to engage in the discussions. The regional events were held at the following locations:

- Northern Youth Debate: Gulu University
- Eastern Youth Debate: Mbale Secondary School
- Southwestern Youth Debate: Bishop Stuart University
- Albertine Region Youth Debate: Kabarole District Youth Centre



Figure 45: Plate showing the students who participated in the regional youth debate

- Northern Youth Debate at Gulu University: Gulu University, located in the northern region of Uganda, served as the venue for the debate in this region. The university's campus provided a vibrant and conducive setting for participants to engage in discussions on water and environmental management. The winner of the Northern region youth debate was Gulu University after facing Lira, University, All Saints University, Muni University, Uganda Martyrs University-Lira, and College of Health Sciences Kitgum.
- ii) Eastern Youth Debate at Mbale Secondary School: The debate in the eastern region of Uganda was held at Mbale Secondary School. Situated in Mbale, a city known for its picturesque landscapes, the school provided a suitable backdrop for students to present their arguments and engage in intellectual discourse. the National Teachers College Kaliro won the Eastern Region youth debate tournament after beating Islamic University in Uganda (IUIU) main campus in Mbale. For the Secondary School category, Bukedea Comprehensive Academy was the winner for the eastern region.
- Southwestern Youth Debate at Bishop Stuart University: Bishop Stuart University, located in the southwestern region of Uganda, served as the venue for the debate in this area. The university's campus provided a stimulating environment for students to share their perspectives and insights on water and environmental management. Mbarara University of Science and Technology (MUST) emerged as the winner of the Southwestern Region Youth Debate after beating Bishop Stuart University, and Kabale University among others. The south-western youth debate was hosted by Bishop Stuart University (BSU) in Mbarara city under the theme; "Given a trade-off, this House would direct environmental policies towards mitigation of climate change rather than prevention". Under the secondary school category, Maryhill High School emerged as the winner for the South-western region
- iv) Albertine Region at Kabalole District Youth Centre: The Albertine Region debate took place at the Kabalole District Youth Centre. Situated in the heart of Kabalole District, this venue offered a platform for students from the Albertine Region to discuss water, climate change, and environment-related topics. The university category debate was held under the theme; "This House Believes that major polluting nations should have an obligation to open their borders to climate refugees" was attended by Mountains of

- the Moon University, Uganda Pentecostal University (UPU), Uganda Martyrs University Fort-portal, Team University, and Firika Nursing School. And Fins Medical University emerged was the winner of the university category while for the Secondary School category, Mpanga Secondary School defeated others in the race.
- v) The Central Region Youth Debate took place at Makerere University, which is renowned as Uganda's premier university. This debate served as a significant gathering for students from the central region of the country to demonstrate their knowledge and engage in insightful conversations. Makerere University, emerged as the winner and qualified for the grand finale.

### Overall Winners for the 3<sup>rd</sup> edition of UWEWK 2023 National Youth Debate Tournament

This debate brought together winners and participants from the regional youth debate to compete at higher level. The grand finale took place at the NWSC-International Resources Centre (IREC) on 17<sup>th</sup> March 2023 providing a platform for most outstanding debaters to showcase their skills and ideas. By hosting the debates in different regions and concluding with the Grand Finale, the National Youth Debates ensured representation and participation from across Uganda, fostering a sense of unity and collaboration in addressing water, climate change, and environment-related challenges. The overall winner under the University category was Makerere University while Maryhill High School emerged as the winner for the secondary school category.



Figure 46: A section of the grand finale participants

## **Outcomes and Impact**

The National Youth Debates during the UWEWK generated significant outcomes and had a lasting impact on the participants, audience, and wider community. Some notable outcomes and impacts include:

- Youth Engagement: The debates successfully engaged a large number of young individuals from various educational institutions across Uganda. The platform provided them with an opportunity to voice their concerns, ideas, and solutions regarding water and environmental challenges.
- **Knowledge Dissemination:** The debates facilitated the exchange of knowledge and information among participants. Through research and preparation for the debates, participants gained a deeper understanding of the water and environment-related issues affecting their communities.
- **Skills Development:** The debates enhanced participants' critical thinking, public speaking, research, and teamwork skills. Participants learned to present their ideas

## 2.3.3 Buganda Kingdom Bulungibwansi campaign

Since 2021, the Ministry of Water and Environment has had a Memorandum of Understanding (MOU) with the Kingdom of Buganda through its Ministry Of Lands, Agriculture, Bulungibwansi, Cooperative, Trade, Marketing and Environment (Ettaka, Obulimi, Obulungibwansi, Obutondebwensi, Obwegassi, Obutalen'obuvubi). Since then Buganda Kindom has been involved in several activities with the MWE e.g. UWEWK to preserve, protect and restore Buganda's Environment and Natural Resources.

So on 15th March 2023, MWE and Buganda Kingdom organized UWEWK2023 activities on the Gomba Bulungibwansi and Environment Day which attracted over 600 people who participated at various activities including the cleaning of Kanoni Town council which was preceded by band matching across the town and supported by herbalists, town administrators, school pupils and students. There was also a function where the administrators addressed the participants and plnated trees to show the need for environmental conservation.



Figure 47: Residents of the area prepare for the band match and later function



Figure 48: Residents of Kinoni participating in the general cleaning of the town



Figure 49: Dignitaries including the area Woman MP- Hon. Sylivia Nayebale at the main function



Figure 50: Hon Ssazi Godfrey MP Gomba East planting a tree at the function

## Summary Outcomes, Key Messages and Recommendations from the Buganda Kingdom Event

- There was need for other areas to copy from Buganda Kingdom the need for MOUs with central government for joint conservation of the environment.
- Water and environment conservation is a joint responsibility for all and therefore there was a call for all residents and citizens to take a proactive stand in doing so.

### 2.3.4 Marking 60 years of Uganda Joint Christian Council (UJCC)

This year, the Uganda Joint Christian Council (UJCC) issued a Pastoral Letter to celebrate its Diamond anniversary of 60 years programmes since its inception in August 1963 by the Orthodox Church, Roman Catholic Church, and Anglican Church of Uganda. Part of its celebration was participation at UWEWK2023 which was delivered by the chairman, The Rt. Rev Joseph Anthony Zziwa (the catholic Bishop of Kiyinda Mityana) on behalf of the co-chairpersons his Grace the most Rev Stephen Kaziimba Mugalu, and the Metropolitan Jeronymos Muzeeyi the Orthodox Archbishop.

MWE and the UJCC joined hands to call for members of the religious community to take practical efforts to tackle the dangers of climate change. This against the background where UJCC launched a drastic campaign against acts of environmental degradation in Uganda by the Archbishop of the Church of Uganda His Grace Dr. Steven Kazimba at UWEWK2022.

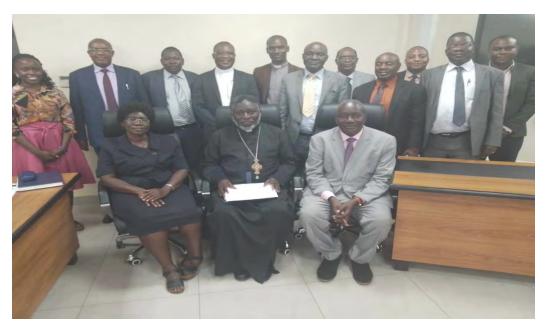


Figure 51: The leadership of the Joint Uganda Christian Council and MWE take a group photo.

#### Summary Outcomes, Key Messages and Recommendations from

- There was a strong call for members of the all Churches to engage in tree planting and minimize usage of plastic materials and to preach the message of saving the environment whenever they come together.
- UJCC message urged all clerics all the time to main stream issues of climate resilience in our homes, villages, parishes, pastoral Ministry and the whole country at large.
- This was a remaindered to the Christian community that it is unfortunate that man who was to take care of
  the environment has become its destroyer, people have destroyed swamps cut down forests made the
  water dirty by throwing in polythene bags and plastic bottles.
- In the fraternity of UJCC agree that the Image of God communicates that humanity was created as special and with the highest possible value and therefore significant in maintaining a clean environment and reduce on depositing rubbish in rivers, streams and lakes; destroying or damaging wetlands; manufacturing or importing, selling of plastic carrier bags; emitting noise beyond permissible levels, etc.
- It's time to make periodic environment and social impact assessment and environment risk assessment.

### 2.3.5 A Rapporteurs' Training

Prior to the start of UWEWK2023, the WRI through the National Organizing Committee did send out a call for rapporteurs to help write different reports on the different activities and events of the UWEWK2023. From the list of 32 applicants, 15 were selected (see Table 8: ) and invited for training at the WRI. The training was done on 25th February 2023 at the WRI-Entebbe by Eng. Daniel Opwonya with opening remarks by Ms. Gwendolyn Kyoburungi- the Coordinator of the WRI.

The purposes of the exercise were to guide, train and/or re-tool all the rapporteurs on their roles, responsibilities and expectations of their service. This included among others the need to

document events, results and agreements, etc. to ease follow-up for implementation but also keep records. Some of the areas centered on: knowing and using the reporting template (Table 10), introduction to venue and routes, access control and protocol, discussing expectations and feedback, distribution and assigning rapporteurs to the programme, allowing the rapporteurs to interface and interact before the event, etc. They were also informed of their deliverables such as the lead rapporteur supervising other co-rapporteurs, coordination and reporting for the day, submit final session/ activity draft, attend the sessions, take notes during sessions and populate templates, and produce draft notes/ report of the meetings and events, etc.

Equally, the rapporteurs were informed about the benefits from their service such as: Career networking through participation at UWEWK2023, acquiring a WRI Rapporteur certificate, opportunities for internship and industrial training at the MWE or partner organisations.

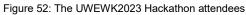
## 2.3.6 **UWEWK2023** Hackathon, 6th -7th March 2023

Water for People sponsored the UWEWK 2023 Hackathon as a creative problem solving exhibition by mostly students to showcase the latest innovations, technologies, processes, products and initiatives in the water and environment sector within a specified period of time.

It was held at the Nile boardroom of the MWE-HQ between 6th -7th March 2023 with key note presentations by Ms. Achilo Brenda, Country Director Water for people, Dr. Callist Tindimugaya the Commissioner WRPRD-MWE and Ms. Rosemita Birungi a trainer & Programs Manager (AFID).

The overall winners were: The Ultimates (1st position), Street smart (2nd position) and Alman (3rd position). This was from 12 Groups that competed under the challenge: Develop an innovative nature based solution or idea that encourages public and private participation, engagement and support to local communities in Uganda in taking necessary actions in relation to water and environment for climate resilient development.





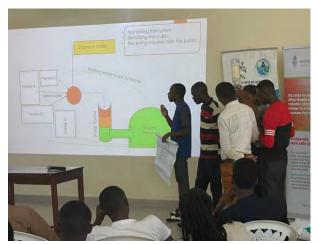


Figure 53: Group members presenting their solutions

Summary Outcomes, Key Messages and Recommendations from the Hackathon

- During the design and testing of their works, the contestants appreciated that water shortage and scarcity
  in our communities is still a challenge that needs to be addressed and therefore future competitions should
  be used to address this.
- It was noted that future works should have more stakeholder engagement during development, the development should be more operational in application than abstract (theoretical) and need to see how to commercialize the new technologies or innovations so that they can be integrated in our works.
- Sustainability of the projects should be made viable but considerations of legal patent protection
- Next presentations should be as related to the thematic areas as possible and include also nature based solutions since issues of water and environment is a responsibility for everyone and it is not limited to particular professionals but anyone can innovate and come up with a solution.
- Generally, the judges and attendants congratulated the participants for job well done and that the students superseded their expectations.

## 2.3.7 The Clean Up Exercises in Nakawa Division-Kampala, 10th March 2023

### i) MWE HQ and Port Bell Luzira

On 10th March 2023, at the MWE HQ- Luzira and within the Port Bell area, there was a clean-up exercise by the staff from MWE, the students and community members within the area.

Before the cleaning exercise, there were speeches from Hon. Sam Cheptoris (the Minister of Water and Environment), Bishop Mbonabingi Constantine (Secretary General Uganda-Joint Christian Council and the Chief Cleaner), and Owek. Mariam Nkalubo Mayanja (the Minister of Environment in Buganda kingdom). Others included Dr. Callist Tindimugaya (Commissioner Water Resources Planning and Regulation at MWE), and Ms. Elizabeth Birungi Local Council 1 Chairperson.

#### ii) Kitintale Market and Port Bell Road

On 10th March 2023, at a team consisting of volunteers led by Hon. Balimwezo Ronald (Member of Parliament Nakawa), Ms. Gwendolyn Kyoburungi (Coordinator-WRI) and the Manager NWSC Kitintale in collaboration with KCCA executed the clean-up exercise. This involved traders, students from Luzira Secondary School and locals, who joined in support of the cleaning exercise of the market.

#### iii) Kirombe market

The clean-up exercise in Kirombe market was officiated by Minister for environment, Buganda kingdom: Hon. Mariam Nkalubo Mayanja by ceremonial tree planting at St. James primary school, Biina. More other trees were planted at Islamic secondary school Biina, Islamic primary school Biina and Bright Angels primary school.

Immediately after tree planting, the clean-up exercise commenced in Kirombe market with the help of local leaders, KCCA routine cleaners, students from Luzira S.S.S, market community, team from Buganda Kingdom and the staff from Ministry of Water and Environment.



Figure 54: Shows the invited guests at the MWE-HQ flagging off the clean-up exercise



Figure 55: School students participating in the clean-up exercise Figure 56: Garbage collection with the support of the in Luzira



community and KCCA garbage trucks

## Summary Outcomes, Key Messages and Recommendations from the Cleaning Exercise

- The speakers emphasized that protecting the environment is everyone's role and therefore collaboration among the community members must stay active not only in collection of garbage but keep a keen eye on their neighbor to avoid others from littering.
- Fishing and fish farming is the major source of livelihood to the community and therefore community members were advised to jealously protect the ecosystem through activities like cleaning the eco system.
- A sensitization talk was organized for community members to educate them on how to sustainably keep
  the environment by stopping the dumping wastes in the drainage channels to avoid the breakages that
  lead to flooding.
- There should be more specific garbage collection points at the market to ensure the wastes are collected at particular points and avoid unnecessary littering.
- It's the responsibility of the community to ensure proper sanitation for good health purposes and there should be special collection of plastic wastes and poly-ethane papers to allow soil aeration.

















## 3 MAIN EVENT ACTIVITIES, MARCH 2023

The UWEWK 2023 main event was held at the MWE-Headquarters in Luzira-Kampala from 12<sup>th</sup> to 17th March 2023 under the main theme: "Water and Environment for Climate-Resilient Development"; with other 4 sub-themes. There was a hybrid attendance where participants were both physical present at the venue but also virtually through other internet based channels. In summary, the main event had the following:

The event had Key Note Presentations and Dialogues. Five keynote addresses were delivered by leading professionals and policy makers and each was followed by a dialogue on the main theme and its sub themes. In total was 35 key note speakers and panelists involved. After which, were parallel sessions on these thematic areas and topical issues but within the framework of the UWEWK 2023.

There were 34 paper and posters presentations, 6 applied training sessions, virtual and physical exhibitions and 16 side events. There were also opportunities for meetings, project launches, and women/youth mentorship programs, 2- field visits, and career talks. These were done by different scholars and practitioners from public and private sector various institutions/organisations, academia, development partners, civil society organizations/non-governmental organizations and others; in relation to overall theme and its sub-themes. The aims were to provide a platform for learning and information sharing.

There were various documentaries on water and environment resources played during the opening and closing ceremonies of UWEWK2023 for the participants. The production showed and highlighted the big picture and on-site locations within the country of successes and challenges, environmental easy-wins and people led actions which could be a starting point and reference moving forward.

### 3.1 DAY 1-The Official Opening of the UWEWK2023:

The opening ceremony of UWEWK2023 was on Sunday, 12th March 2023 from 2:00 to 5:00pm at the MWE-HQ Building-auditorium. The ceremony was streamed live on UBC and NBS TVs, social media platforms and zoom. The opening remarks were by Dr. Florence Grace Adongo (Chairperson of the National Organizing Committee & Director of DWRM/MWE) who presented an overview of UWEWK2023 and the history of the previous UWEWKs. After which, there was a short video of interviews with the Minister of State of Environment- Hon. Beatrice Anywar Atim, the Permanent Secretary-Ministry of Water and Environment, Mr. Alfred Okot Okidi and also highlights of the pre-events of UWEWK2023.

In continuation with the remarks, Dr. Roswitha Kremer (Head of Mission of the Austria Development Cooperation) in Uganda by spoke on behalf of the Development Partners while His Eminence, The Metropolitan Jeronymos Muzeeyi (Archbishop of Uganda Orthodox Church) spoke on behalf of the Uganda Joint Christian Council. To close the opening remarks, the Minister of Water and Environment -Hon. Sam Cheptoris made his remarks before inviting over the Chief Guest- RT Hon. Anita Annet Among (The Speaker of the Republic of Uganda), who was represented by Hon. Dr. Otimu Emmanuel Otaala (Chairperson Parliamentary Committee on Environment and Natural Resources ) to officially open the ceremony.

# Summary Outcomes, Key Messages and Recommendations from the Opening Speeches:

- There is rampant loss of forest and wetland cover due to rising pressure from increasing population and UWEWK is one of the ways to sensitize the communities on the functions and benefits of these ecosystems to the water resources and eventual to national development.
- One of the responses to this degradation is the tree planting especially growing of fruit trees for food and income.
- Activities of the MWE especially on restoration of degraded ecosystem should be complementary to other GOU programmes like the Parish Development Model so that such gains are not reversed.
- The support and cooperation between Uganda and the different development partners has since led to over 260 million Euros invested in water and sanitation sector while 800 million Euros to Government of Uganda.
- God has given man the authority to manage the surrounding resources and live in harmony with the
  environment and therefore participants should embrace investments that don't affect our water and
  environment resources.
- Water and environment are at the centre of our country's development and therefore not only
  complimentary but a foundation for other development activities like oil and gas exploration, tourism, hydro
  power generation, industrialization and agriculture, among others.
- The sector needs to explore improving institutional coordination to improve governance of the water and environment resources while pressing for an increase in the resource envelope (budget).

## 3.1.1 Keynote address on the overall theme for the UWEWK2023

The Keynote address and presentation on the overall theme- Water and Environment for Climate-Resilient Development" was made by Prof. Kalanithy Vairavamoorthy, the Executive Director, International Water Association (IWA).

## Summary Outcomes, Key Messages and Recommendations from the Key Note Address:

- The world economic forum and global risk report already recognizes water as a priority at both the political
  and business agenda and this can be further emphasized by articulating water through its economic and
  political value rather than just a social agenda.
- The perspective of the water cycle should be viewed as a complete system or a system of systems such that interventions are done holistically than just fixing small parts of it at any given time. For example, wastewater and sanitation will have its golden age within the next 20 years and therefore many countries ought to see opportunities this provides such energy savings leading to up to 50% when backed up sing the circular water principles, among others.
- There is need to deal with uncertainties within the water and environment resources using adaptive/flexible systems such as nature based adaptive solutions or smart sanitation solutions to enhance resilience and increase opportunities, for example in expansion of existing systems.
- There is need to address and understand the importance of readiness through capacity building, human resources, etc. in order to address issues of climate change, water and environment. Such readiness can be technical, organisational, societal and legal readiness when designing solutions and sequences for the protection of water and environment as a resource. This helps us reverse the paradigm of prevention and cure than rescue and recovery.

### 3.1.2 Dialogue on the overall theme for the UWEWK2023

There was a panel discussion on the keynote address and the speakers and panelists included: Hon. Emmanuel Otaala (Chairperson Parliamentary Committee on Environment and Natural Resources), Dr. Dick M. Kamugasho (Deputy Executive director, Uganda Industrial Research Center), Mr. Kizito Everest (Representative Buganda Kingdom), Mr. Alfred Okot Okidi (Permanent Secretary, Ministry of Water and Environment) and Mr. Palaniwel Thangawel (UNDP Country Representative). The session was moderated by Mr. Maurice Mugisha and Ms. Mildred Tuhaise.

## Summary Outcomes, Key Messages and Recommendations from the Dialogue:

- There is need to sanction the relevant ministries for failing to implement the policies, enforcement and legislations such as taking the various responsible ministries to court.
- Since Uganda is not short on policies and legislations, the paradigm shifts should now be on implementation so that we don't get surprised why people are repeatedly doing the same things the same way but continue to expect different same results.
- The MWE is implementing a policy that nearly 70% of the funding and financing from the different partners and stakeholders goes to the grass root activities and the target should continually be this.
- Cultural institutions were called upon as another avenue in which water and environment resources can
  be conserved but also expanded. An example cited was that Buganda Kingdom has undertaken several
  initiatives like group fundraising as one way to bring everyone on board, support environmental clubs in
  schools, and encourage growing of indigenous trees.
- In the next 18-20 years, Uganda needs to invest more in irrigation in order to increase productivity. Currently, only 1% of Ugandan agriculture is under irrigation and yet there are abundant water sources like lakes, rivers, etc. This led to call for MWE and partners to improve on irrigation otherwise, agriculture yields will continually be low.

### 3.2 DAY 2- Policy, Legal & Institutional Frameworks for Climate Resilient Development

On Day two of UWEWK2023, Monday the 13<sup>th</sup> March 2023, there was a key note address and dialogue on Sub-Theme 1- Policy, Legal and Institutional Frameworks for Climate-Resilient Development. After which were a series of parallel sessions and side events that included among others-Papers and posters presentations, training, project launches, site visits, continued exhibition at the MWE-HQ grounds, etc.

### 3.2.1 Key note address and Dialogue on Sub-theme 1

The key note address was held at the MWE-HQ auditorium by Mr. Ronald Kaggwa, a Manager on Production, Trade and Tourism at the National planning Authority. After which, there was a dialogue on his presentation and the subtheme that had speakers and panelist who included: Hon. Biyika Lawrence Songa (Chairperson, Parliamentary Committee on Climate Change), Dr. Juan Carlos Sanchez (Senior Researcher at the International Water Management Institute), Ms. Margret Antieno Mwebesa (Commissioner for Climate Change, MWE), Dr. Hakan Tropp (Project Manager, Stockholm International Water Institute), and Mr. Simon Peter Weredwong (Ag. Country Director, WWF). This dialogue was chaired by Ms. Birungi Rosemirta and Ms. Brenda Achiro.



Figure 57: Group photo of Panelists, Speakers, and Moderators after the panel dialogue.

# 3.2.2 Session 1 and 5: Policy, Practice & Scientific Papers Presentations on Sub-Theme

A parallel session on subtheme 1 was held in the DWD Board Room where a group of experts on Policy, Legal and institutional presented papers and posters in relation to policy, practice and scientific findings. The session was chaired by Ms. Birungi Rosemirta. The details of presenters and the titles of presentations are contained under section: **Error! Reference source not found.** 



Figure 58: Participants have a discussion on the presentations made under subtheme 1

## Summary Outcomes, Key Messages and Recommendations from Policy, Practice & Scientific Papers Presentations under sub-theme 1:

- Whereas water use efficiency is adequately addressed in the Water Act, the Water Resources Regulations and Guidelines doesn't need to be incorporated within the permit and its processing through an amendment of Water Resources Regulations, Guidelines and Procedures (1998) and for processing under abstraction permits (2000) since such policies are very instrumental in promoting resilience through water use efficiency.
- It was noted that since water abstraction focuses on commercial water users, there was a need to profile these customers and help them better understand these policies and regulations.
- The Water Policy should be urgently revised or updated in light of "Climate-Resilient Development" as first
  priority with the most recent information, issues of governance and institutional arrangements to improve
  coordination of institutions.
- It was proposed that using of in-house capacity was one way of innovative financing and this should be tagged along going activities to harmonize and make updated changes.
- Integrated water management approaches of in cooperating various coping practices by both farmers and
  government is essential for climate resilience in communities vulnerable to flooding e.g. diversification of
  livelihoods to reduce household food insecurity in event of floods.
- It was recommended that the informal sector needed to be educated and sensitized to acquire proper building plans to manage proper drainage, encouragement of green infrastructures that balances vegetation and concrete infrastructure, etc.
- Urban authorities should ensure mindset change, timely and regular collection of wastes from drainage systems are unblocked regularly including vacating wetlands so as to allow easy flow of water in areas of Kampala hence easier to control seasonal floods.
- WASH Scorecards showed that progress is being made in health facilities towards meeting and setting of standards for majority districts but lacking in schools. This also required WASH improvement action plans

and active coordination of WASH actors in all districts for example through the M-water platform helps with Coordination, sanitation and hygiene are key in monitoring, tracking and reporting for better governance.

# 3.2.3 Session 2: Applied Training to Manage Small Scale Piped Drinking Water Systems Sustainably.

This was an applied training by Ms. Judith Brown of SIMAVI/WAI in the Nile Board room on the Water Time, an asset-focused business approach and technical set-up to manage small scale piped drinking water systems sustainably. Session was chaired by Mr. Asiimwe Michael.

## Summary Outcomes, Key Messages and Recommendations from the Applied Training on small scale drinking water systems:

- WaterTime is a modular solar-powered piped water system which is a mini-grid piped water supply, a
  prepaid system of a device that enables the collection of water fees to cover the cost of operation and
  maintenance.
- It does increase reliable basic water supply for people in underserved areas by offering a more sustainable alternative to commonly used hand-pumps.
- Its benefits are better water fee collection, high service level through reduction of water transport to homes, less water system down time, lower installation costs, stand-alone system so functions off-grid and opportunity for entrepreneurs.
- The challenges are that it requires community to pay, proper management and operation, installation and training of operators and managers, Solar pump only works when there is sunlight, prepayment system requires training, more flexible than the hand pump but it does costs about 90,000 Euros which is expensive compared to the hand pump but more sustainable. It has been tried in Karamoja as a case.



**Figure 59:** Pictorial view of the training session on the Token Tap used for payment



Figure 60: Participants at hand wash improvement project training

# 3.2.4 Session 3: Building resilience through Improving water quality and service levels in Uganda

This was a side event on using a new hand pump riser pipe configuration to improve water quality and service levels. The session was chaired by Ms Nabasirye Lillian (WASH Technical Director Water Aid) and the presentations included by MS. Musinguzi Edrida, Ms. Asha Bamutaze and Yalamati from Reliefline

## Summary Outcomes, Key Messages and Recommendations from this side event included: :

- The aim of the training was to show that there was a need to improve the reliability and quality of service offered by hand pumps as the nation transitions to safely managed water services and one way was to fight corrosion through the use of UPVC riser pipe system which is a stainless steel material that uses a 3-piece UPVC connector.
- Since corrosion is everywhere and widely spread especially when using substandard materials, aquifer conditions and strong control is needed for proper functionality of rural water supplies since recharging and recovering is vital under climate change as there is a likelihood of higher depletion of the water table.
- The changes in material increased the functionality rates as 23% under full functioning, 55% for binary and 34% of design yield.

# 3.2.5 Session 6: Side Event: Towards A New Research Agenda for Water Governance in Uganda

This session was hosted at the Auditorium of the MWE-HQ and chaired by Dr. Carlos Sanchez. The presenters included Mr. Allan Nicol, Ms. Kyoburungi Gwendolyn, Professor Nicholas Kiggundu, and Ms. Lonna Kobusingye.

### Summary Outcomes, Key Messages and Recommendations from the Research.

- There is a solid linkage between water governance through a multi-sectoral approach and empowering of the community to enforce and monitor the water resources and their collaboration with the working of other jurisdictions.
- The Nile Basin should not be looked at for water only but rather, for land use, or as a structure for managing complexity among the transboundary countries.
- Community empowerment is important to policy implementation e.g. to address pollution, priority must be
  made to prioritize mindset of the public to preserve natural water bodies and the environment. Therefore
  procedures to maintain the environment should be put in place e.g. 5m buffer to allow between a household
  and natural system would the buffer to cleanse and sustain life.
- It can now be seen that the WRI has evolved beyond issues of water only but it has integrated various activities such as different fields and applied research, mentorship, training, partnership with retired professionals, etc. To date, the WRI has partnerships with over 15 entities.

# 3.2.6 Session 4 and Session 7: Side Event: Dam Safety Consultation and Awareness Creation Workshop

These sessions were postponed away from Monday but it was planned to be hosted at the IREC, NWSC Boardroom.

### 3.3 DAY 3-Climate Resilient Communities, Ecosystems and Infrastructure

On Day Three of the UWEWK2023, Tuesday the 14<sup>th</sup> March 2023, there was a key note address and dialogue on Sub-Theme2-"Climate Resilient Communities, Ecosystems and Infrastructure for Climate-Resilient Development. After which were a series of parallel sessions and side events that included among either-Papers and posters presentations, training, project launches, site visits, continued exhibition at the MWE-HQ grounds, etc.

## 3.3.1 Key note address and Dialogue on Sub-theme 2

The key note address at the MWE-HQ auditorium was by Dr. James Dalton (Director Global program- International Union for Conservation of Nature-IUCN). After which, there was a dialogue that had speakers and panelist- Ms. Lucy Lyango (Ag. Commissioner, MWE), Ms Imelda Kanzomba (Principal Agricultural Officer-MAAIF), Eng. Wilberforce Kimezere (Water and Sanitation Specialist-UNICEF), Mr. Jackson Muhindo (Resilience and Climate Justice Coordinator- OXFAM Uganda) and Hon. Silas Aogon (Chair-Parliamentary WASH Forum). The day's chair was Dr. Callist Tindimugaya while the moderators Mr. Kyeyune Solomon (Consultant/MWE) and Mrs. Yunia Musazi (Executive Director-Uganda Water and Sanitation Network)

# Summary Outcomes, Key Messages and Recommendations from the Key Note Address and Dialogue of Day 3:

- Nature based solutions is not a stand-alone solution but one involving hybrid approaches that utilizes a combination of natural and grey infrastructure.
- Uganda should customize the current global standards on nature based solutions to fit its context which
  will support transitioning to nature based solutions which will assist in designing a new and also assessing
  existing one.
- Uganda must ensure that through policy, legislation and practice, it avoids the unmanageable and manages. For example, by understanding that reducing damage to water infrastructure eventually reduces the associated rehabilitation costs and accruing more benefits when more we become resilient to natural disasters like droughts and floods.
- Building climate resilience should not just as a form of aid and relief but as ensuring justice and reduction
  of inequalities within society.
- There is a need to integrate indigenous and scientific knowledge so that the ideal of climate resilience is not seen as alien to particular communities and therefore building resilience.
- Members of Parliament requested capacity building through training to enhance their knowledge and understanding about WASH and climate change to be in better position to advocate and budget appropriately.

# 3.3.2 Session 8 and 13: Policy, Practice & Scientific Papers Presentations on Climate Resilient Communities, Ecosystems and Infrastructure

A parallel session on subtheme 2 was held in the DWD Board Room where a group of experts on Policy, Legal and institutional presented papers and posters in relation to policy, practice and

scientific findings. The session was chaired by Eng. Daniel Opwonya. The details of presenters and the titles of presentations are contained under section:



Figure 61: Participants at the Climate Resilient WASH Session



Figure 62: Participants at the paper and poster presentations on subtheme 2.

## Summary Outcomes, Key Messages and Recommendations from Policy, Practice & Scientific Papers Presentations:

- Tailored soil and water conservation measures that are physical, biological and agronomical should be integrated into physical planning and also benchmarked for identified hotspots.
- All stakeholders were encouraged to find more sustainable and appropriate alternative sources of water (irrigation, rainwater harvesting, different type of livestock feed storage, etc.) within dry areas in order to ensure that the present ones aren't strained by the human, livestock and agricultural population.
- Bamboo was shown to control landslide in the mountainous areas and also for flood control measure because of its soil binding properties. Equally, it was demonstrated as an alternative livelihood source that there is need to increase studies on its potential and adapted to other parts of the country to get more economic value for the farmers besides the climate change adaptation and conservation of biodiversity.
- Enforcement of laws and regulations governing the disposal of waste should be increased in order to
  ensure safer water because comparative studies and practice had demonstrated cleaner and safer water
  where there was better enforcement on garbage collection and better disposal.

### 3.3.3 SESSION 9: Applied Training on Land and Environment Monitoring

This session on applied training in the use of SEPAL for Land and Environment Monitoring was held in the Nile Board Room of the MWE-HQ. It was hosted and chaired by-Women in GIS Uganda (WiGIS). The presenters were Dr. Ellen Kayende (Lecturer, Makerere University and Member of WiGIS) and Ms. Praise Atwine (GIS & Remote Sensing Expert at FAO and Member WiGIS).

### Summary Outcomes, Key Messages and Recommendations from Session 9:

- Women in GIS, Uganda is a non-profit network for empowering women in the geospatial industry to connect, learn and make impact through geospatial technologies.
- The SEPAL tool was used for the training and it allows users to access powerful cloud computing resources to query, access and process satellite data quickly and efficiently for creating advanced analysis.
- To Access to SEPAL (- https://sepal.io ), one must create a SEPAL account by signing up using your email.
   Complete email verification and create a password. Login with a new password.

### 3.3.4 Session 11: Payment for Water Services by Refugees in Uganda

This session was at the MWE-HQ auditorium on Payment for Water Services by Refugees in Uganda through the project –"Peero Giri" meaning Water Forever under the GIZ WatSSUP Programme. The chair was Mr. Raymond Lukwago while the speakers, presenters and panelist included: Mr. Nicholas Tugume (Deputy Manager-Umbrella of Water and Sanitation), Mr. Bonny Olwa, Ms. Jana Toma, Ms Noelle Kabale, Mr. Martin Wamalwa, and Ms. Offilie Moospher.

## Summary Outcomes, Key Messages and Recommendations from Session 11.

- It was noted that Uganda was a host to 1.4million refugees making it the third largest host country of refugees in Africa. Africa alone hosts 6 million refugees of whom 20% live in sub-Sahara Africa.
- To make a sustainable transition from a humanitarian to developmental approach, there needs to be payment for utility services like water to ensure maintenance, operation and integration within the national setup. This project has proved that this transitional model was successful since refugees were able to afford and were willing to pay the introduced tariffs. This ability and willingness to pay was possible through awareness, vigorous campaign and the sensitization of refugees and the host communities in Northern Uganda.
- Partnerships were noted to be vital especially within institutional set-ups especially to further infrastructure
  development and improve staff capacity through continuous professional capacity development.
- Continuous organizational restructuring is necessary within a new evolving context especially if efficacy is demanded in various operation and maintenance activities e.g. in the acquisition of additional equipment and tools such as cranes, spare parts, etc.



Figure 63: Participants pledging sustainability of services in refugee settlements



Figure 64: Participants attending to session 14 on Climate Resilience in WASH

## 3.3.5 Session 12: Future of Financing – Gender Smart Climate Finance

This session planed at the IREC-NWSC Boardroom under the title: "The Future of Financing-Gender Smart Climate Finance, Unlocking an Inclusive and Sustainable Future" was postponed and eventually cancelled.

### 3.3.6 SESSION 14: Strengthening Systems for Climate Resilient WASH

Another parallel session was on Strengthening Systems for Climate Resilient of WASH in Mpologoma Sub-Catchment by Water-AID. These were experiences and lessons learnt from implanting of the strength of resilience of the vulnerable communities to climate change. It was at the Nile Boardroom with the Session chair as Mr. Solomon Kyeyune while the presenters were Dr. Barasa Bernad and Mr. Ikaaba Dauda.

## Summary Outcomes, Key Messages and Recommendations from Session 14:

- The study concluded that there is need for diversification and piloting of WASH interventions, adequate stakeholder engagement, mapping of partners in the WASH sector, investing in livelihood adaptation options.
   Some examples needed include the need for placement of raised concrete slab around the borehole to avoid flood submerge, lwire fencing of boreholes, construction of drainage channels and fencing of the borehole with wooden poles among others.
- It has been noted that more work is needed for change of mind change within the communities about the effects
  of combat climate change and the required tools and thus the call for these communities to take advantage of
  national activities like UWEWK to mobilize for resources.
- For all intended programs to be successful, water and environment should be at the forefront with the understanding that we are living in a fragile environment, and whatever interventions are implemented, there is need for a risk analysis.

### 3.3.7 Session 15: Preparedness and Response to Climate-Induced Disasters

This was a side event by the Uganda Red Cross Society on the "Emerging Lessons and Approaches for Preparedness and Response to Climate-Induced Disasters" at the Zooka Board Room at MWE-HQ. The session chair was Mr. Twesige Kirungi Racheal (Member-URCS Kampala West) while the presenters were Mr. Ntale Emmanuel (Manager Climate and Environment) and Ms. Grace Kyagaba (WASH Senior Manager)

### Summary Outcomes, Key Messages and Recommendations from Session 15:

- To enable communities be more climates resilient in line with ecosystems and infrastructure, the MWE with its
  partners should come up with effective measure for preparedness, early warnings, and quick response. This
  will help in disaster risk management taking anticipatory action including; Early Action Protocols, National
  Dialogues on climate-resilient development, Cash and Voucher Assistance, as well using the localized
  thresholds for District Contingency Plans (DCPs).
- Successful implementation of anticipatory actions is built on trust and therefore a call for mutual respect and
  combination of use for both scientific and indigenous knowledge to enable both decision makers and local
  community leaders to have trust in those forecasts and therefore early action.
- Implementation of successful anticipatory actions requires combined technical solutions and financial support
  for forecasting disasters and response preparedness across all levels. Such that the effective and sustainable
  implementation of Forecast-based Financing (FbF) still needs mind-set change even beyond skill level and
  reliability of a forecast.

## 3.3.8 Session 16: UN Water Conference and the World Water Day

There was a specific side event at the MWE-HQ Auditorium on the status and updates of the UN Water Conference and the World Water Day. The session chair was Mr. Alfred Okot Okidi (Permanent Secretary, MWE) and the presenter was Dr. Callist Tindimugaya (Commissioner WRPR).

# Summary Outcomes, Key Messages and Recommendations from the UN Water Conference and the World Water Day

- In December 2016, the United Nations General Assembly unanimously adopted the resolution of the "International Decade (2018–2028) for Action Water for Sustainable Development". This was to help put a greater focus on water during ten years since the World Economic Forum had ranked the water crisis as one of the top 3 of global risks for the third consecutive year and failure to respond effectively to these challenges will have devastating global effects.
- This new decade will focus on the sustainable development and integrated management of water resources for the achievement of social, economic and environmental objectives and on the implementation and promotion of related programmes and projects, as well as on the furtherance of cooperation and partnership at all levels in order to help to achieve internationally agreed water-related goals and targets, including those contained in the 2030 Agenda for Sustainable Development.
- The updates and status had put Uganda fairly well and ready for the mid-term review of the UN Conference 2023 in New York from the 22<sup>nd</sup> -24<sup>th</sup> March 2023. There was already a team in place to present the overall position through a Country Paper and ready for interactive dialogues guided by themes under the areas of Water for Health, Water for Sustainable Development, and Water for Climate, Resilience and Environment, Water for Cooperation and Water Action Decade.

The country paper and thematic areas were guided by the three principles of inclusivity and opportunity
that allows the public get involved in water development, cross-sectoral and action-oriented to achieve the
targets. This attracted contributions from different country MDAs entities to arrive at the above themed
documents.

## 3.3.9 Side event: Dam Safety Consultation and Awareness Workshop

UWEWK2023 hosted a side event at the IREC-NWSC Boardroom on the Introduction to Dam Safety Management and Dam Safety Requirements. The presenters were Mr. Louis Hatting and Ms. Veronika Martin who are Dam Safety consultants from Arup – UK.

# Summary Outcomes, Key Messages and Recommendations from Dam Safety Consultation and Awareness Workshop

- The key objectives of dam safety management are to ensure that the public and environment are protected from effects of dam failure to a risk level which is as low as reasonably practicable. Therefore, dams should be constructed and operated only if they yield an overall benefit to society
- This is ensured with due diligence exercised at all stages of dam's life cycle by implementing dam safety management systems that include the management of environmental and socio-economic issues which take into consideration of trans-boundary issues, dam safety efforts, regular safety review and use of appropriately qualified trained engineers and teams.
- A key aspect of dam safety management is actually knowledge management where data and information must be continually kept. For example, the Icold bulletin which keeps records on failures suggests that most dam failures of up to 44% is through overlapping of embankments while 35% is through internal erosion. Similarly, concrete dams represent 30% of all dams constructed but 20% of the failures while embankment dams represent 70% of the total dam population but 80% of the failures.

## 3.4 DAY 4-Capacity and Partnerships for Climate-Resilient Development

UWEWK2023 Day Four was on Wednesday, 15<sup>th</sup> March 2023-Day. There was a key note address and dialogue on the sub-theme 3-Capacity and Partnerships for Climate-Resilient Development. After which were a series of parallel sessions and side events that included among either-Papers and posters presentations, training, project launches, site visits, continued exhibition at the MWE-HQ grounds, etc.

## 3.4.1 Key note address and Dialogue on Sub-theme 3

The key note address was at the MWE-HQ auditorium by Dr. Abou Amani (Director of the Division of Water Sciences at UNESCO) after which was a dialogue that had speakers, presenters and panelists that included: Mr. Querido Antonio Louis Ferreira (FAO Country Representative), Dr. Sam Kayaga (Associate Professor-Loughbourough University), Mss Melissa Montgomery (Chief Programs Officer-Engineers Without Borders USA), Mr. Robert Kwesiga (Executive Secretary-Uganda Red Cross Society), Mr. Steven Mugabi (Acting Director for Environment Affairs, MWE), and Ms. Ayebare Denise (Legal Scholar at Makerere University). The session chair was- Dr.Callist Tindimugaya while the moderators were Ms. Jane Nabunnya Mulumba (Country Representative-Uganda Red Cross) and Mr. Joseph Epitu (Commissioner-Sector Liaison at MWE).

# Summary Outcomes, Key Messages and Recommendations from Key note address and Dialogue on Sub-theme 3

- The issue of water and climate change risk is everybody's business and there is no option in not acting
  which may have to consider partnerships and a bottom-up approach besides the current top-down
  approach.
- The UN has put close attention to have climate change education be integrated in its interventions with a clear target to explore indigenous and traditional methods and knowledge. For example, UNESCO has a training platform for water and disasters at <a href="https://openlearning.unesco.org/">https://openlearning.unesco.org/</a>.
- Climate change education should embrace a deep learning approach and emphasis should be on soft skills like IT skills, communication using digital platforms and teams working among others that enable connect with young people.
- Uganda should prepare and implement a National Capacity Development Plan, develop Community Action
  Plans and District Multi-Hazard Contingency Plans that establish and operationalise community resilience
  information centers, strengthen partnerships that will re-enforce the mutual understanding for working
  together.
- There is need for intentional and innovative knowledge sharing and capacity building efforts for example sharing best practices in financing, technology and innovations that can improve climate resilience create initiatives around innovations approaches like digital platforms towards climate resilience
- There needs to be a shift from sustainability of projects to regenerative projects which looks at the totality of programmes as a shift away from the projects approach which also invests in monitoring and evaluation.

### 3.4.2 Session 17 and 21: Capacity and Partnerships for Climate Resilient Development.

A parallel session was on Policy, Practice & Scientific Papers Presentation on sub-theme 3-on Capacity and partnerships for Climate Resilient Development was held in the DWD Board Room where a group of experts on Policy, Legal and institutional presented papers and posters in relation their findings. The session was co-chaired by Dr. Patrick Musinguzi and Eng. Daniel Opwonya. The details of presenters and the titles of presentations are contained under section: **Error! Reference source not found.** 



Figure 65: Participants attending to the presentations on the session



Figure 66: Presentation on the challenge of garbage and impacts on flooding

# Summary Outcomes, Key Messages and Recommendations from Policy, Practice & Scientific Papers Presentation on sub-theme 3:

- There was a call for expedient exploration of innovative approaches of reusing and recycling of different plastics by crushing them to make construction materials. It was found out that the plastic blocks were of lighter weight and compressive strength to the concrete ones and therefore recommended to best be used in non-load bearing walls.
- The adoption of food forests (woodlots, fruit trees, ornamentals) compared to indigenous trees registered a 23% improvement in afforestation among the 1270 beneficiary respondents surveyed. Equally, there was a survival rate of 88% among the food/ fruit trees compared to the 65% national average for conventional forest management practices.
- It was noted that social fabrics within the communities were very important in implementing all projects that the participants were involved in. These included the community governance system which empowered the communities to sustain the projects. For example, there was resistance to resettling the citizens however with support of the community leaders and their mobilizations and sensitizations, the communities accepted the compensation promised to the land owners to allow for land intended for valley tanks construction in Karamoja.
- One of the studies demonstrated that water hyacinth can be a promising feedstock for biogas production using
  a simple and low-cost digester system and therefore more studies and piloting is needed to explore how a
  simple digester was effective in producing biogas from water hyacinth.

## 3.4.3 Session 18: Supporting Climate Resilience in Water /Environmental/Civil Infrastructure

This session was an applied training on "Supporting climate resilience in water/environment/civil infrastructure by WRI, MAK and UEGCL at the Nile Board room. It was chaired by Mr. Joseph Abaho with the Speakers and presenters being DR. Philip Nyenje (Water Resources Consultant from Makerere University).

## Summary Outcomes, Key Messages and Recommendations from this session on Supporting Climate Resilience in Water /Environmental/Civil Infrastructure.

- Designing of multi-purpose dams and their operation should be part of Integrated Water Resources
  Management so as to prevent floods and droughts induced by climate change, provide enough water to
  public during drought, etc.
- Climate resilient and sustainable water infrastructure can be developed but there is still a capacity gap in understanding climate changes and its impact on water infrastructure which calls for more studies.
- There is a strong possibility to turn hydropower dams in Uganda into multipurpose dams just like in they are functioning in South Korea which has almost similar weather patterns as Uganda but this needs careful modification and currently, there are on-going feasibility studies of existing hydropower dams and a possible pilot soon.

## 3.4.4 Session 19: UWEWK 2023 University Hackathon

This session was a continuation of the similar pre-event activity (UWEWK2023 Hackathon, 6th - 7th March 2023) done as a competition among participating universities to encourage public and private entities innovate natural based solutions towards climate resilient development. This side event hosted at the Zooka Board room of the MWE-HQ. The chair was Mr. Simon Kyeyune while the Speakers and presenters included Dr. Callist Tindimugaya- Commissioner DWRM, Ms. Yvonne Kusasira and Competing Groups (as listed in **Table 7**). This was made possible with support from Water for People, WRI, WMO and WWF.

## Summary Outcomes, Key Messages and Recommendations from this session on UWEWK 2023 University Hackathon

Anyone can innovate and come up with a solution for the water and environment sectors because it is a
responsibility for everyone and not restricted to particular professionals.

### 3.4.5 Session 20: Dialogue on Sustainable Business Practices in the Flower Sector

This side event was a dialogue on the sustainable business practices in the flower sector in Uganda. It was organized by the Uganda Flower Exporters Association (UFEA) and Natures. The moderator was Mr. Solomon Serwanjja while the speakers, panelist & presenters included Mr. Alfred Okot Okidi (PS-MWE), Ms. Nanyunja Sylvia Ndahura (Snr. Water Officer-DWRM/MWE), Ms. Esther Nekambi (Executive Director-UFEA), Mr. Bernard Arinaitwe (Principal Wetland Officer-WMD), Dr.Callist Tindimugaya (Comm.-MWE/DWRM), Mr. Plet de Jong (JP Cuttings) and Mr. Achilles Byaruhanga (Natures Uganda).

## Summary Outcomes, Key Messages and Recommendations from this dialogue on the sustainable business practices in the flower sector in Uganda

- There is need for the flower industry to adhere to regulation and standards. For example, of the 11 floral firms, compliance and acquisition to NEMA's Environment and Social certificates is only at 50%.
- The flower firms also indicated that NEMA and other GOU agencies don't give feedback once they have reached compliance citing responses such as "stop disturbing me, I am not going to give you the permit now" and this has led to struggle with compliance.
- There need to strengthen partnership with all stakeholders including civil society, private sector, religious and institutions and development partners to jointly address water environment and climate change concerns of the country



Figure 67: Participants at the training on SDG 6 Manual



Figure 68: Participants at the career talk for young water and environment professionals.

### 3.4.6 Session 22: Sustainable Development Goal 6 training Manual

This session was an applied training on understanding the training manual on Sustainable Development Goal 6 which was held at the Nile Board Room. This was hosted by WaterAid and the WRI. The session was chaired by Mr. Solomon Kyeyune and coordinated by Rose Mirta Birungi. The speakers and presenters included: Ms. Trina Kyomugisha, and Mr. Ivan Biiza.

# Summary Outcomes, Key Messages and Recommendations from Training Session on SDG6 Training Manual

- A costed multi-year National SDG Roadmap has been developed and this has a list of priority actions to
  create an enabling environment to deliver on the SDGs at national, sector and local level. The road-map
  aligns and synchronizes approaches and efforts of government and all stakeholders for the strategic
  attainment of the SDG's.
- A SDG Secretariat and a Focal Point was established in 2019 and it is now headed by a senior technical advisor within the OPM. This was agreed upon by the Cabinet and the United Nations Country Team to

- provide overall political leadership for SDG through presentation of reports on SDG implementation and policy recommendations to Cabinet. This team has key actors from the Parliament, Non-State Actors, Local Governments, Ministries, Departments and Agencies and Program Working Groups.
- It was noted though that challenges still remain in the interpretation and reporting on some indicators and targets and therefore additional capacity building was needed.
- There was equally a challenge and limitation on the collection and interpretation data, awareness rising, and analysis for full scale adoption of SDG6 indicators.
- SDG 6 is key therefore all SDGS need to harmonize to ensure proper implementation and execution at all levels

## 3.4.7 Session 23: Career Talk for Young Water and Environment Professionals.

This session was a side event aimed as a career talk for young water and environment sector professionals which was held in Zooka Board Room of the MWE-HQ. The session chair was Ms. Pamela Musimita while speakers and presenters included Ms. Flavia Byekwaro (senior climate officer), Ms. Rose Kobusingye; Ms. Rosemirta Birungi; Mr. Babi Gerald (Senior Water Officer-MWE).

# Summary Outcomes, Key Messages and Recommendations from the Session on Career Talk for Young Water and Environment Professionals

- There are different development partners funding opportunities for youths like a Germany, Netherlands, Australian, etc. with different categories such as female students doing STEM which are open to youths. This is not only limited to academia but also projects.
- There are also many online courses on climate change with a good number that are free of charge and all are encouraged to join and increase their knowledge. Uganda has developed climate change app in 2021 and this has already been approved and updated within the national climate change institution.
- Look at every opportunity as a social order which helps define your career path to create
  for yourself opportunities. Therefore do not start your day without understanding the
  required social order for that day with a clear outline of activities to achieve on that day.
- Create time to think ones career and from there, draft a career path on what and where
  you want to be and how one will get there in terms of the resources.
- Each young professional needs a mentor who one shall consult on career choices including opportunities and increase your network because your network is your net worth. Hangout with the right people and be focus on your career paths.
- Youth and young professionals need to look at climate change as a great opportunity because it is wide enough for all professions and doesn't require all to be qualified in climate science. For example participating in recycling and reusing is an open opportunity.
- Youths should adapt mindset change which will cause a positive impact to the environment. This may involve volunteering at institutions such as MWE and UWEWK right now.

### 3.4.8 Session 24: Coordination and Governance of Water Resources

This session was a side event on the Coordination and Governance of Water Resources following Catchment Based Integrated Water Resources Management Approach at the MWE-HQ Auditorium. It was organized by SIWI and WRI with the session chair- Dr Callist Tindimugaya with the speakers, panelists and presenters: Mr. Alfred Okot Okidi (PS-MWE), Dr. Hakan Tropp (SIWI); DR. Muhumuza Fred (Development Policy Researcher), Dr. Mary Akurut (UEGCL), Mr. Namanya Beria Ibony (WWF), Mr. Abdul Nasser (MoLHUD); Ms. Imelda Kanzomba (MAAIF), Mr. Aaron Werikhe (NPA) and Mr. Joseph Epitu (Commissioner-MWE). The moderators were Mr. Maurice Mugisha and coordinator-Ms. Rachel Magara.

### Summary Outcomes, Key Messages and Recommendations from Session:

- The water resources of Uganda significantly contribute to the social economic development and poverty eradication since water is a natural resource that is potentially useful for drinking purposes, irrigation, and industrialization.
- Building governance capacity for improved water security is currently a 2 year program ending in June 2023 with a Phase 2 planned for scaling up (2023-2026) and the partners shall include: National/sub-national level, water ministries/agencies, etc. The target is middle and higher level water professionals that are expected to improve outcomes and operational efficiency, water policy implementation and regional experience on sharing exchanges.
- The outcomes of the assessment are for increased understanding and implementation of catchment-based management (CbIWRM) as a means to planning, coordination and regulation. This may increase wetland restoration, land and water use, floods and drought management, etc.
- Issues to build are overall governance capacity from the individual to partners across
  the country and the overall governance capacity through a coordination mechanism,
  support and compliance of society to governmental decisions and to make policies
  sustainable overtime.
- Most of the water resources are found on land, we should alien our policies and laws so that they work together like the land policy which focuses on institutionalizing since many resources are under threat like wetlands, forests, etc.

#### 3.5 Thursday, DAY 5- Dialogue Session #5 - Innovative financing mechanisms

On Thursday, 16th March 2023-Day Five, there was a key note address and dialogue on subtheme 4 on Innovative Financing Mechanisms at the MWE-HQ Auditorium. After which, there were a series of parallel sessions/ side events that included either-Papers and posters presentations, training, project launches, site visits, continued exhibition at the MWE-HQ grounds, etc.

### 3.5.1 Key note address and Dialogue on Sub-theme 3

The key note address was at the MWE-HQ auditorium by Mr. Onesmus Mugyenyi (Deputy Executive Director-ACODE), after which was a dialogue that had speakers, presenters and panelists that included: Mr. John Walugembe (Executive Director-Water and Sanitation Entrepreneurs Association-Uganda), Mr. Denis Muggaga (Head of the Climate Change Finance

Unit, Ministry of Finance, Planning and Economic Development), Mr. Boris Martin (Chief Executive Officer, EWB-USA), Ms. Sophie De Coninck (Global Climate Facility Manager Local Climate Adaptive Living Facility of UNCDF); Ms. Jane Sembuche Mselle (Country Director-WaterAid, Uganda). The day's chair and moderator was Dr. Fred Muhumuza (MUK) and Dr Akankwasah Barirega (NEMA) while overall coordinator was Dr. Callist Tindimugaya (DWRM-MWE).

## Summary Outcomes, Key Messages and Recommendations from the key note address and dialogue on Innovative Financing Mechanisms:

- The World Economic Forum 2023 stated that global risks ranked climate and weather issues as top the priority list by severity over the short term and long term. This has therefore created a prediction that the World Economy is set to lose up 18% GDP in the next 30 years due to climate change.
- It has been noted that the current financing mechanism has been found inadequate and not able to finance climate change which therefore calls for a new mechanism of innovative green funding; which has enlisted the need for the Green Finance Strategy (2021-2030) which points to key innovative mechanisms such as mobilization from the public sector, sustainable procurement, green energy investments, among others. This may also include the use of environmental instruments to raise finances for green taxes, national green funds, for example the Rwanda green fund which currently is the largest fund in Africa.
- There are also calls for green banks and green financial products and this needs creation of awareness on the available loans/products. This may also include the issue of financing targets on the 3Ts (Taxes, Transfers and Tariffs) which can be adjusted to attract entrepreneurs from the private sector.
- There is need to build on the works or activities within the green economy by mitigation and adaptation in the agricultural sector for example a tax economy that needs to be started or expound on WASH activities or forums that are attracting CSOs into different banks to provide a number of products.
- Leverage the potential to use Intergovernmental Finance System for attracting and deploying climate finance to the district level which is a performance-based grant. This promotes transparency, sustainability, reliability and accountability upon which local governments may make amendments accordingly and also though NDP III and NDC national contribution are localized through them. A similar system is now operating in the 4 districts of Nebbi, Nwoya, Zombo and Kasese that are now getting grants and support from Belgium over 07 years with potential to continue working on budget operations.
- Carbon credits can be additional revenue for water and sanitation to supply clean water and able to demonstrate reduction of greenhouse gases. Such may contribute to mitigation funds where companies emitting greenhouse gases can be made pay and therefore an opportunity to tap in the Green Funding.
- There is need to create an enabling environment for innovative financing. This should clearly be provided for in the Water Act, and in other instruments and also institutional

- arrangements, etc. For example, innovative financing products and services should be taken directly to the intended climate change activities but not into the consolidated fund.
- There is need for Bank of Uganda, other financial institutions e.g. banks, insurance companies and microfinance institutions to come up and encourage sharing of risks in climate change financing.
- The creations of climate finance unit was applauded with a clear call for training and development of capacity of Ugandan institutions on entrepreneurship, innovative financing, resource mobilization, proposal writing, preparing of bankable projects and the development of green instruments that monitor progress in these while ensuring that assets e.g. hydropower dams that have been developed under such funding are climate proofed.
- Any solutions under governance, technology and financing, etc. should be seen and made a nexus of themselves and made counter dependent, interlinked and integrated together by the use of policy, legal and institutional instruments.
- The country should quickly recognize that borrowing is no longer an option and therefore unsustainable so other methods of funds mobilization such as the polluter pays principle, Payment for ecosystem services, carbon credit market, etc. must be provided for in the policy, legal and institutional instruments.
- Innovative financing should not only be seen has monetary transfer from one source to another but through the eyes of public private partnership, technology transfer, resource efficiency and green growth which should be protected through policy, legal and institutional instruments.

## 3.5.2 Session 25 and 29: Innovative financing mechanisms Technical Presentations

These two sessions were on policy, practice & scientific paper and poster presentations on Innovative financing mechanisms. It was held at the DWD Board Room and it was chaired by Ms. Stacey Natukunda. The details of presenters and the titles of presentations are contained under section: **Error! Reference source not found.** 

## Summary Outcomes, Key Messages and Recommendations from this Innovative financing mechanisms Session:

- Public sector investment rate in safe drinking water and sanitation is lower than the annual population growth rate which creates a big burden for finance to match the necessary need hence the need to attract more financing.
- People engaging in activities which protect the environment like renewable energy should be given priority in innovative financing mechanisms because they make the environment sustainable.
- Financial institutions need to come in and provide low interest or free loan products that support activities related to the water, sanitation and environment sector. It should then be the duty of MDAs through events like UWEWK to provide such information.

- Government needs to open up the space through liberalization of utilities e.g. in the water and energy sectors to spur the needed growth such as private water operators who will attract inflows of financing
- Alternative technologies should be motivated as first options for innovative financing because they protect the environment though products such as included fireless baskets, briquettes, improved cook stoves, c commercial tree growing, etc.

# 3.5.3 Session 26: The Relevancy of Water and Environment to Nutrition and Food Systems

This session was a side event by MWE/ UNICEF/ NPA on the relevancy of Water and Environment to nutrition and food systems held in Zooka Board Room. It was chaired by Eng. Richard Matua (Ag. Commissioner-Urban Water and sewerage Services-MWE) and coordinated by Mr. Michael Asiimwe (MWE). The presenters and speakers included Ms. Kamara Julia Billiart (Nutrition Focal Point Officer-MWE) and Mr. Grace Bwengye (Agro-Industrialization head-NPA).

## Summary Outcomes, Key Messages and Recommendations from this session on the relevancy of water and environment to nutrition and food systems

- Good nutrition is a catalyst for social economic transformation and human development whereas poor nutrition causes irreversible cognitive and physical defects that affect individuals, households, communities and the nation at large.
- The government developed a Uganda nutrition action Plan-UNAP1 (2011-2016) and then the UNAPII (2020-2025) where there was a strong focus on water supply interventions. Now, NDP III is set up to measure the sector's contribution to improving nutrition and due consideration is for a multi-sectoral approach to nutrition security. Considering that water is a key factor in production and provision of water enhances productivity of food systems.
- A healthy diet requires protective foods, energy giving foods and body building foods. Water is the most neglected nutrient in your diet but one of the most vital~ Julia Child.

## 3.5.4 Session 27: The dilemma of household incentives for scaling-up safely managed sanitation.

This side event was organized by IWA and GIZ-Sanitation for Millions Programme at the MWE-HQ Auditorium on the topic- "To be or not to be" – the dilemma of household incentives for scaling-up safely managed sanitation. It was co-chairs by both Dr. Najib Bateganya Lukooya (International Water Association) and Ms. Joan Asiimwe (Coordinator-GIZ-Sanitation for Millions/Athena Infonomics). The speakers, presenters and panelist included: Mr. Fred Nuwagaba (Manager, GIZ- Sanitation for Millions), Mr. Sam Drabble (Water and Sanitation for the Urban Poor-WSUP), MS. Barbara Gerhager (GIZ), Ms. Anabella Nyakaisiki (Athena Infonomics), Mr. Prit Salian i-San (GIZ Sanitation for Millions) and Suresh Kumar Rohilla. Others were Eng. Dr. Felix Twinomucunguzi (A.C UWSSD), and Fred Othieno (KfW).

Summary Outcomes, Key Messages and Recommendations from the session on the dilemma of household incentives for scaling-up safely managed sanitation.

- More than 50% of greenhouse emissions in Kampala are contributed by poor household sanitation but MWE is piloting projects on Ecosan toilets to demonstrate the appropriate technologies for household connections and benchmarking.
- The issue of sustainable subsidies in sanitation and hygiene management is a serious and wide issue that needs to be harmonized in order to contain the issue of contamination and hygiene related diseases in Uganda.
- There is need for continued collaboration between public and private sector, as well as
  with the beneficiaries will also go a long way in setting up programs to benefit the urban
  poor populations to acquire these services.
- The investment gap at containment level within households needs to be filled or narrowed because this is causing a challenge in viability of sanitation treatment plants.
- The event also saw the handover of 6 cesspool emptier trucks acquired under the Strategic Towns Water Supply and Sanitation Project with support from African Development Bank (AfDB). The trucks were received by Assistant Commissioner, Urban Water and Sewerage Services Department, Dr. Eng. Felix Twinomucunguzi on behalf of the Permanent Secretary, Ministry of Water and Environment. He commended AfDB for the continued support of Government of Uganda. The trucks are to be deployed in the regional Umbrella Authorities to ease faecal sludge management.

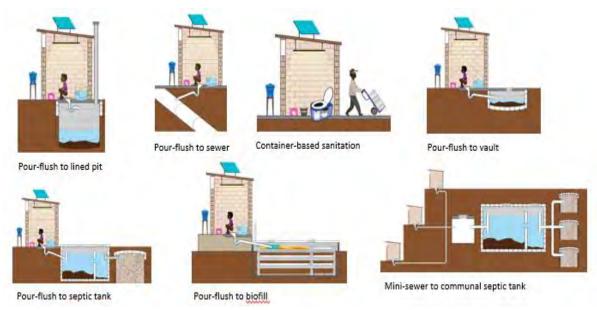


Figure 69: An Illustration of different sanitation system and part of their value-chain

# 3.5.5 Session 28 and 32: A Youth Debate on the Role of Students towards Climate Resilient Development.

These two sessions were side events on the role of students towards a climate resilient development. It was held at the IREC Board Room of NWSC with support from Youth Go Green. The sessions chair was Mr. Edwin Muhumuza (Youth Go Green) while the speakers and

presenters were Mr. Gyavira SSewankambo, MS. Phiona Boonabaana, and Ms. Laura Muwanguzi (Climate Activist). The contestants were students from Mary Hill High School, Amusu College, Makerere University and Gulu University. The list of participants and paper presentations are included in (**Error! Reference source not found.**). The Judges declared - Ms. Barry Ainomugisha (Mary Hill High School) as winners under the secondary school section while Ms. Kishemeire Patricia (Makerere University) was announced the winner from University level.

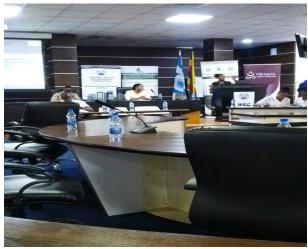






Figure 71: Graduation ceremony of the mentorship program at WRI

#### Summary Outcomes, Key Messages and Recommendations from the Youth Debate:

 The youth requested to participate more in panel discussions and debates in regards to the changing institutional norms and civic rights that affect climate change due globalization.

#### 3.5.6 Session 30: Technical Evaluation of Large Scale Solar Water Powered Systems

This session was an applied training at Nile Board Room on the technical evaluation of large scale solar water powered systems by EWB East Africa. The session coordinator was Ms. Pauline while the speakers and presenters was Mr. Phil Powell, EWB- Electrical Engineer.

#### Summary Outcomes, Key Messages and Recommendations from this applied training:

- Optimizing solar powered system is an example of how to mitigate climate change impacts. For purposes of this training, a select review of the development report for Nakivale piped water supply system was done and specifically for the Rwabahinda Borehole.
- In this case, the HOMER Pro was used. This is the industry standards for rapid assessment of least cost solutions for clean, reliable and distributed renewable power. While the ODYSSEY is set up was done to enable the evaluation of finance, build and operate renewable distributed energy projects at scale.

### 3.5.7 Session 31: Graduation Ceremony for the WRI Mentorship Program 2<sup>nd</sup> Phase.

A side event for the graduation ceremony for the mentees of the second phase of the WRI Mentorship program was done by MWE and WRI at the MWE Auditorium. The session chair was Ms. Diana Ninsiima Kibuuka (Girls for Girls) whiles the presenters and speakers were: Dr. Florence Grace Adongo (Director-DWRM/MWE), Ms. Kyoburungi Gwendolyn (Coordinator-WRI) and Ms. Katusime Doreen (PS Ministry of Tourism, Wildlife and Antiquities).

#### Summary Outcomes, Key Messages and Recommendations from Session:

- Mentorship is one of the flagship activities of the WRI and it is intended to be as a career development fellowship for young water and environment professionals.
- WRI targets to build a pool of young and mid-career professionals with communication, mind-set, and leadership skills. This helps the mentees gain understanding and ability to articulate issues in the water and environment sector to improve on their performance, growth, and create networks with others.
- The first program which was piloted in 2021 graduated 26 young water and environment professionals from the MWE. This pilot was conducted with a team of 10 dedicated strategic and experience mentors with funding from Water Aid Uganda offices.
- The second program received higher registration with diversity involving staff at regional
  offices with 60 participants. This was further strengthened since the mode of delivery
  being hybrid and physical interactions.
- Mentorship is the fastest way of passing information to others and should be a life long journey of professional growth and development.
- Through mentorship program, young professionals have been able to build a brand and be known for excellence which has included the ability to speak, lead, and negotiate for the country.



Figure 72: MWE leadership appreciating the Mentors supporting the WRI Program

# 3.5.8 Side Event: Building Climate Resilient WASH through Effective Fiscal Decentralization

This session was a side event intended on building climate resilient wash through effective fiscal decentralization. It was held at the Nile board Room, moderated and chaired by Chair-Romeo Buskin (NTV). The session presenters, speakers and panelist included: Mr. Solomon Kyeyune, Mr. Aogon Silas (Chairperson of Uganda Parliamentary Forum –WASH & Kumi Municipality MP), Hon .Bataringaye Basil (MP Kasheri North & member of Finance Committee), Hon Wakabi Pius (MP-Bugaya Hoima District & member of Public Accounts Committee), Mr. Daniel Wetaka (CDF-President & Mbale City Development Forum), Mr. Richard Cox Okello (Chairperson LC5 Lira), Ms. Jane Mselle Sembuche (Water Aid), Mr. Richard Rwabuhinga (Chairperson Kabarole), Ms. Regina Barite Nakkazzi (Nansana Mayor), Hon. Kimono Josephine (MP Kobogo) and Hon. Florence Nebanda.

# Summary Outcomes, Key Messages and Recommendations from this side event on effective fiscal decentralization:

- There is limited funding for to the local governments which limits their power to perform their mandate because most of the money was spent on salaries.
- The above situation is further made complex because of the revenue collected by the local government was set back to the central government which needed to be appropriated first before being sent back to local governments.

- Many local governments received their money late and this made them unable to implement projects in time and any unspent money had to be sent back to the treasury which takes Parliament another 10 months for approval for it to go back to the district.
- There was a call for creation of planning and accountability platforms between MDAs, local governments and municipalities.

#### 3.6 DAY 6- The Official Closing of UWEWK2023

Friday, 17<sup>th</sup> March 2023 was the official closing day for UWEWK2023. The morning session was predominately a continuation of the parallel sessions and side events that included among others-Papers and posters presentations, training, project launches, site visits, continued exhibition at the MWE-HQ grounds, etc. from the previous sub-theme of Day 5. The UWEWK2023 Wrap and Closing Ceremony was then held in the afternoon.

#### 3.6.1 Session 33 and 37: Innovative financing mechanisms Technical Presentation

These two sessions were supposed to be held at the DWD Board Room and It was intended on policy, practice & scientific paper and poster presentations on innovative financing mechanisms but were cancelled because all paper and poster presentations had been concluded on Thursday, Day 5.

#### 3.6.2 Session 34 and 38: New innovations in the Water Resources Institute

This session was held at the MWE-HQ Auditorium as a side event on the New Innovations in the Water Resources Institute. It was chaired by Ms. Ann Namakula, coordinated by Ms. Gwendolyn Kyoburungi and key remarks by Dr. Callist Tindimugaya. The presenters, speakers and panelist included:

- i) Panel 1. Mr. Solomon Kyeyune (Consultant-MWE), Mr. Anthony Luutu (UDCA), Ms. Rosemirta Birungi (FAO) and Ms. Jane Nabunya Mulumba (IRC).
- ii) Panel 2. Ms. Rosemary Twinobusingye, Ms. Pamela Musimenta, Ms. Yvonne Lugali and Ms. Naturinda Sarah.
- iii) Panel 3. Rev Ssekasiko (UJCC), Mrs. Proscovier Vikman (Buganda Kingdom), Ms. Brenda Achiro (CSOs), Dr. Ronald Semyalo (Academia), Mr. Gilbert Guma (Private Sector), Mr. Geoffrey Ayeni (Walkers), Dr. Fred Muhumuza (Dialogues) and Mr. Edwin Muhumuza (Youth).

Summary Outcomes, Key Messages and Recommendations from the Session on New Innovations from WRI.

- The WRI was established as part of the implementation of the reform recommendations to fill gaps identified in the reform studies (1999 to 2005) to offer integrated capacity building courses for in service officers and officers joining the water and environment sector in the country, conduct basic and applied research, implement outreach activities related to research and human resources development, and promote policy dialogue on water related issues.
- It was recommended that the WRI- should have main activities (e.g. Hackathon, trainings, webinars, etc.) on calendar so that people are able to apply for these trainings timely while WRI sends out calls for application early enough.

- The WRI certificates of participation that are given out needs to improve professional visibility and weighted recognition for example during job applications.
- A market orientated approach should apply and this should be done where clear gaps are assessed and preparations on relevant and applied courses are put on calendar & modules available on the website.
- Publication of the WRI materials on the website and documentation should be done of all activities that transpire in WRI not only UWEWK; where they are archived and readily available.
- Need to fully take up the social media spaces like twitter and engage the youth.
- Growing and formalizing partnerships through MOUs, agreements, etc. For example
  this power of partnerships is very important and it can be seen since 60% of the
  UWEWK budget was covered by the partners.
- Continue to build capacity formally within institutions but also extend down to the grass roots mostly as action.
- There was a wider call that climate change education should be incorporated into the school curriculum of the country at the different levels of education.

#### 3.6.3 Session 35: Deepening the Regulatory Mandate for Efficiency and Efficacy

This session was organized as a field trip to Kitintale, Bugolobi, Nakawa and Kireka Markets by the Water Utility Regulation Department of MWE to deepen the regulatory mandate for efficiency and efficacy. This field trip was cancelled by the organizers

#### 3.6.4 Session 36: Climate Resilient Communities, Cities, Ecosystems, and Infrastructure.

This session was organized as a field trip on climate resilient communities, cities, ecosystems, and infrastructure but was later cancelled by the organizers.

#### 3.7 DAY 6- UWEWK2023 Wrap and Closing Ceremony

The UWEWK2023 wrap and closing ceremony was held on from 2pm to 4pm on Friday March 17, 2023 at the MWE Auditorium and screened Live on UBC & NBS TVs and ZOOM. The session summarized key issues that came out of the 5 dialogues, the key messages as well as plans for implementing the recommended actions. It was used to formally close the UWEWK 2023 and launch preparations for UWEWK2024. While there was mention of the International days: World Forest Day, World Water Day and World Meteorological Day, they were not officially commemorated since these where to fall on 23<sup>rd</sup>, 24<sup>th</sup> and 25<sup>th</sup> March 2023.

#### 3.7.1 UWEWK2023 Closing Remarks

Dr. Callist Tindimugaya as Chair of the Technical Organizing Committee and Dr. Florence Grace Adongo as Chair of the National Organizing Committee made remarks at the closing ceremony. This included a reminder of the main events which took place and the main theme of the UWEWK 2023 which was "Water and Environment for Climate Resilient Development" and the other 4 sub themes. There were several activities that took place throughout the week and a short video was played summarizing the UWEWK 2023 and this included the pre-event activities in communities, schools and churches .This clearly highlighted the proceedings of the week and activities include:

#### Summary of Activities and Events of UWEWK2023. .

- There were several activities from all the 6 regions of the country from 28th February to 10th March 2023 prior to the main event.
- There was a 320km Walk for water and environment for climate resilient development from King Fisher Development Area in Kikuube district to Kampala district.
- The UWEWK 2023 University Hackathon and Regional youth debates in the 5 regional de-concentrated structures of MWE.
- Community based water and environment restoration, cleaning and awareness programmes by the Uganda joint Christian council (UJCC) including prayer/pastoral letters for UWEWK by churches under the UJCC and Buganda Kingdom.
- Clean up exercise in Luzira by MWE management and other stakeholders.
- Water and environment week marathon in Fort portal and Nile run in Jinja.
- Other events included 6-Applied trainings, 34 Papers and Poster Presentations, 16 Side events like the career talk show, mentorship, field visits, project launches among others.
- Invited everyone to attend the NBI forum as it was equally important and Uganda needed to show presence.
- On behalf of the NOC and TOC, thanked all participants and partners, management and staff of MWE for their valuable contribution to the event and noted that over 60 partners were on board and called upon more partnerships to be made in the future.
- Apologies were made for what may have gone wrong in one way or another and once again thanked participants for the great contribution made towards protecting the resources and attendance of UWEWK 2023.

#### 3.7.2 UWEWK2023 Closing Dialogue

The session chair was Dr. Callist Tindimugaya (DWRM/MWE) and moderators were Mr. Mugisha Maurice and Ms. Mildred Tuhaise. The session speakers, presenters and panelist included: Dr. Lydia Wanyoto (National Planning Authority), Dr. Silver Mugisha (Managing Director-NWSC), Hon. Mike Sebalu (District Governor Rotary International), Prof. Stefan Uhlenbrook (Director Hydrology, Water and Cryosphere & World Meteorological Organisation), Ms. Rose Kobusingye (Youth climate change activist), Mr. Guillaume Chartrain (Deputy Head of Delegation of EU to Uganda) and Mr. Matthew Crentsil (UNHCR Representative in Uganda).

#### Summary Outcomes, Key Messages and Recommendations from Session:

- Partnerships are very vital and invited people to work with the National Planning Authority, Rotary International etc. to have the great ideas from UWEWK2023 integrated into national plan and activities to ensure sustainability.
- It was vital to recognize that we can't leave water and environment issues to government structures alone and it all starts with us and in our homes. Noted that the last 2yrs of COVID19 & Ebola highlighted that water was such a big component for survival as everything revolved around washing hands.
- It was mentioned that all institutions should push for the review of the curriculum right from nursery, secondary level to universities to include climate education and entrepreneurship.

- There's need for UWEWK to have a planted forest to show that something tangible and historical can be done outside the boardroom. For example, there should be a campaign to plant a tree(s) to mark important days in our lives.
- Noted that the youth should fully be involved as they are the successors and NWSC already has the Young Water Professional and school water and sanitation clubs.
- By end of 2027, early warning systems will be in place to help strengthen society resilience to floods and drought as they will enable forecasting. For example, It was mentioned that there's a new program with Ethiopia, South Sudan and Uganda looking at R. Nile and its tributaries where different flood mechanisms are happening and possible funding.
- There was need for behavioral and mind set change to solve the self-made issues. At NWSC, the concept of self-help is relied on and other people that come in only complement what's already being done. Therefore NWSC would be interested in data for carrying out continuous problem analysis, learning and improvement.
- Role of digital technologies present and the youth are the experts at these.
- Need to explore new forms of cooperation with finance to have a more friendly economy.
- Water sector has achieved the most success in refugee settlements and this was done through water tracking of less than 1% water supply. It was also mentioned that as a result of all the above, Uganda has been invited as the highest level co-convener (only 6 in the world) at the Global Refugee Forum Conference. Equally, over 8 million trees have been planted by refugee settlements in Uganda.
- It was mentioned that water and environment resources are connecters and catalysts for the social economic development of Uganda; and therefore its conservation needs adequate attention, strengthened partnerships, collaboration and funding thus the need to identify suitable sources of funding.
- Highlighted that they are aiming at using solar for small systems and hope to do groundbreaking and this will reduce the cost of water as it's currently 70/= per 20L container.

#### 3.8 UWEWK2023 National Exhibition

The objective of the exhibition was to provide a platform to all sector players to showcase new technologies, lesson learnt and best practices. This provided an opportunity to demonstrate the centrality of water and environment resources in Uganda in increasing household incomes, improved quality of life of the population and fulfilment of the NDP III targets.

The exhibition was linked to the theme for UWEWK 2023 which looked at improving the understanding of the linkages between climate resilience, economic growth and improved livelihood of communities in emerging challenges in management and development of water and environment resources

The 6 days exhibition program was hosted at the Ministry of Water headquarters in Luzira and it provided a valuable opportunity for networking and information sharing as well as

showcase the different innovative best practices. It also presented an opportunity for all those interested in knowledge, innovation and development of the country.

The exhibition attracted numerous key sector players, as well as the local population, with visual displays of climate change art, cost-efficient lighting, waste management, clean and efficient energy, WASH research and development, water quality testing, research in analytical chemistry, Natural Resources Management, Mushroom Growing, Water, Sanitation and Hygiene, Renewable Energy Semiconductor Manufacturing (pumps, solar water heaters, irrigation equipment, boreholes), Irrigation, Solar Pumping, Water Pumps, Solar Equipment, Boreholes, Water Treatment, Meteorological Authority, Charcoal/briquette cooking stoves, Business Incubation and Innovation. 75 exhibitors participated in the 6 days UWEWK2023 main event.

#### **UWEWK2023 Exhibitions in pictures**







# Take away messages from the exhibitors

- 1. The collective effort needed if the negative impacts of Climate change are to be limited
- 2. The need for more sensitization on cleaner production before industries invest in wastewater treatment equipment
- 3. The economic gains/ returns of investment in clean and efficient energy alternatives
- 4. The need to create more awareness to the public to reduce on the cultural resistance to environmental conservation
- 5. The negative effects of not responding to pollution at an infant stage as well as the rewards that come along with environmental conservation and protection practices

#### 4 CONCLUSIONS & RECOMMENDATIONS

This UWEWK2023 event was largely successful with a combined attendance of 2319 (Physical-1551 and Online-768) participants (see Table 2 with details) and over 60 partners and sponsors. As part of the main event, there were Key Note Addresses and Dialogues, 6-Applied trainings, 34 Papers and Poster Presentations and 16 Side events that included Career Talk Show, Youth Debates and the University Hackathon, Career talk and Mentorship, Field Visits, Project Launches, etc. It is of great interest to note that UWEWK2023 was also used to discuss and review Uganda's mid-term progress on the UN-International Decade (2018–2028) for Water and prepare the country's position paper for that conference in New York from the 22nd -24th March 2023. Equally, participants were shown the new and planned innovations already taking place at the WRI, which is the official host for UWEWKs since inception.

In continuation with UWEWK tradition, UWEWK2023's main event was preceded by pre-event activities in the regional structures and among the communities such as the 320km "Walk for Water, Environment and Climate Change", publicity and media campaign, regional youth debates, marathon and run, football matches, clean up exercises or restoration activities, etc. Herewith below are overall key outcomes, messages and recommendations from the event:

#### 4.1 Policy, Legal and Institutional Frameworks for Climate-Resilient Development

- i) The natural environment contributes to management and regulation of water availability and water quality, strengthening the 'resilience of watersheds' and complementing investments in physical infrastructure and institutional and regulatory arrangements for water access, use and disaster preparedness.
- ii) Give priority to science for a water secure world in a changing environment by investing in scientific research and innovation, water education, bridging the data knowledge gap, integrated water resources management under condition of global change and water governance based on science for mitigation adaptation and resilience.
- iii) Man was given authority to manage the surrounding resources and live in harmony with the environment. A true Christian must keep this promise and shouldn't change what God has created. Religious institutions need to strengthen their role in this area
- iv) The best strategy towards climate resilient development is community engagement. Cultural and religious institutions and youth should commit more to working with government in conserving the environment as they have necessary structures and mechanisms for engaging the people
- Customers and water users should be helped to understand policies for better regulations of water and environment resources e.g. Water abstraction focuses on commercial water users.

#### 4.2 Climate Resilient Communities, Ecosystems and Infrastructure

- i) Understanding readiness is important. Such as technical readiness, organisational, societal and legal readiness. And there is need for more human resources and have more technical trainings addressing issues of climate change, water and environment
- ii) There is need for climate proofing of infrastructure and having sustainable green investment, monitoring and instruments against climate change

- iii) Uganda should develop facilitative standards to support transitioning to nature based solutions by borrowing global standards like the 8 criteria and 28 indicators for designing new and assessing existing nature based solutions
- iv) Use AI, ICT and tools that allow users to access powerful cloud computing resources to query, access and process satellite data quickly and efficiently for creating advanced analysis is needed to adapt or integrated for Nature based solutions
- v) There is need to access to indigenous knowledge in building climate resilience communities and economic development. This can be through setting up of information sharing centers in the different communities to facilitate this

#### 4.3 Capacity and Partnerships for Climate-Resilient Development

- i) More opportunities for partnerships and collaborations exist to protect, manage and sustainably develop our water and environment resources. We have to work together and partnership is of paramount importance as it comes to building climate resilience. We need partnerships that understand the challenges and can deliver
- ii) In the next 20 years, there will be a golden age for wastewater and sanitation where many countries will have opportunities to leapfrog like energy savings up to 50%, backed-in circular water principles among others.
- Limited access to safe water and sanitation remains key challenge threatening our local communities. Water is a system of systems that we can view from different heights. Therefore, there is need for a systems perspective of a water cycle.
- iv) Sectors should not maintain "silos" but open with "windows and doors" for coordination and cooperation within and among sectors. Therefore focus on cross sectoral engagement and retain mandate
- v) Understanding the political economy of water and environment and interests of various organizations is key in strengthening coordination and collaboration
- vi) Need to strengthen coordination of all players in the sector(government, CSOs, private sector, DPs, academia, cultural and religious institutions, youth etc.) from national, regional and national level for climate resilient development
- vii) Need to develop a framework for assessing the benefits and cost of vertical and horizontal coordination and partnerships with clear indicators at various levels
- viii) Need to allocate money to coordination and capacity building
- ix) Effective coordination requires assignment of roles and responsibilities of the different players

#### 4.4 Innovative financing mechanisms

- i) 30% of Uganda's budget goes to debt financing and therefore constrains our capacity and ability to fight climate change. Thus borrowing for Uganda is no longer an option and therefore a need to put in place policies, legal and institutional frame work that can enable innovative financing
- ii) Many innovative financing options exist but awareness of their existence is low and capacity to access them limited

- iii) Explore citizen led financing for proven and bankable nature based projects building on principles of co-management and co ownership.
- iv) Build capacity and strengthen the country ability to access and utilize available climate financing mechanisms for example carbon credit, green bonds and funds.
- v) Improvement of utilization and governance of existing and new funds is part of the innovations to prioritize.
- vi) Need to explore more the use of environmental instruments for resource mobilizations
- vii) Make investments and borrowers bankable
- viii) Overall Creation of an enabling environment for innovative financing is paramount for water and environment resources management and development

#### **5 POST-EVENT ACTIVITIES**

The post event activities will include preparation of UWEWK2023 report, book of abstracts, publication of the proceedings of UWEWK 2023 and summary of the outcomes of UWEWK 2023. And follow up and implementation of the recommendations and outcomes of UWEWK 2023.

Additionally, this year's UWEWK2023 post event activities included community cleaning and sanitation competition exercise in Entebbe Municipal Council, field work and tree planting in selected sites in South Western MWE, region and the Buganda Kingdom Environment week.

#### 5.1 Community cleaning and sanitation competition in Entebbe Municipal Council

The Ministry of Water and Environment through the Water Resources Institute in collaboration with Water Aid Uganda and within the framework of the UWEWK2023 undertook a community and stakeholders' involvement/engagement in activities that included: clean up, hygiene and sanitation promotion competition exercises and environment conservation /restoration through tree planting, awareness campaign in relation to pressing and challenging issues in management and development of water and environment resources and climate change. These activities were undertaken for period of one week within Entebbe Municipal Council and final cleaning exercise on Wednesday 29th March 2023. The overall objective of the clean-up exercise, tree planting and engagement of communities in Entebbe was to raise awareness and understanding of the linkages between climate resilience, economic growth and improved livelihood of communities in emerging challenges in management and development of water and environment resources in Uganda.

The sanitation and hygiene promotion competition covered a week between key markets in Entebbe Municipal Council that included Central Market, Nakiwogo Market and Kigungu Market until 28th March 2023 when the final assessment was undertaken. Upon identification of the markets a baseline survey and continuous monitoring and evaluation on performance of the markets was made by team from Entebbe Municipal Council, Water Resources Institute and Makerere University, Public Health department to assess the situation and status in these market. The baseline included structural development, lighting and ventilation, drainage, solid waste management, water supply, sanitation and hygiene, occupational health and hygiene and finally leadership. Additionally, during this week, the market communities were sensitized on good practices on sanitation and hygiene and proper management of solid waste.

From the sanitation and hygiene promotion competition, Nakiwogo market came out as an overall winner followed by Central Market and lastly Kigungu Market. All the three markets that participated in the competition received awards from Water Aid Uganda presented to them by the Entebbe Municipality Mayor Fabrice Rulinda. The best market Nakiwogo received Uganda shillings 12,000,000/=, followed by Central Market Uganda shillings 7,000,000/= and lastly Kigungu Market Uganda shillings 5,000,000/= on 29<sup>th</sup> March 2023, the D-day for general cleaning exercise. The clean-up was carried out in Nakiwogo Market and Kitooro Market, while the environmental restoration (tree planting) in various schools in the Entebbe Municipal council and

also around the open places within municipal including Kigungu health center III, Mayors garden and Children's park.



Figure 73: Plate showing cleaning up exercise in Entebbe Municipal Council



Figure 74: Plate showing the closing of the sanitation and hygiene promotion competition week and awarding of prizes

#### 5.2 Field work and tree planting is selected sites in South Western MWE Region

The field work took place from 3<sup>rd</sup> to 6<sup>th</sup> April 2023 in South Western Uganda as a UWEWK2023 post event activity. The field work included awareness campaign on issues on water and environment protection, conservation and management and environmental restoration. Four sites were selected for tree planting as demonstration sites for environmental restoration; Mbarara University of Science and Technology (200 seedlings), St. Andrews Catholic Church Rubanda District, Muchahi Sub county, Muchahi parish, Muchahi village (500 seedlings), Betonde Glorious, Kihumuro Buffo Zone (956 seedlings) and Bishop Stuart University (2,074 seedlings). The species delivered were included Prunus Africana, Gravelia, Eucalyptus South Africa, Neem, Bamboo, Cypress, musizi and Warbigia. A total of 3,730 seedlings were delivered in the above mentioned institutions.



Figure 75: Tree seedlings being loaded on trucks for distribution



Figure 76: Technical team from MWE South Western Regional Office demonstrates to Mbarara University of Science and Technology and Bishop Stuart University Students on how to plant trees

The technical team undertook a backstopping to make sure that the seedlings are well planted with right spacing for the different tree species as shown in the pictures taken during the field work exercise.

#### 5.3 Buganda Kingdom Environment Week 2023

The Buganda Kingdome Environment Week, is a three days activity organized by the Ministry of Lands, Agriculture, Trade, Cooperatives Bulungi Bwansi and Environment within the structure of Buganda Kingdom and it seeks to bolster environmental conservation works within the Kingdom The Kingdom of Buganda is committed to pursuing the conservation of the environment and all the natural resources through collaboration and working with critical partners and stakeholders and above all engaging the kingdom communities in conserving and protecting the environment.

It is against this background that the Buganda Kingdom in collaboration with the Ministry of Water and Environment, WWF, Climate Action Network, Uganda and other partners, marked its Environment week as a post event of the Uganda Water and Environment Week (UWEWK)-2023 and a precursor to the International Environment Day 2023.

The Buganda Kingdom Environment week (25<sup>th</sup> to 27<sup>th</sup> April 2023) was held under the theme "Strengthening community resilience against climate change through water and environment conservation" activities included: i) Training on linkages between water, environment and climate change and building climate resilient through water resources management and was facilitated by a number of professionals/ experts spearheaded by Ms. Gwendolyn Kyoburungi and Ms. Irene Kambedha from Ministry of Water and Environment ii) Cleaning the Kabaka's lake and tree planting in Ndeeba lead by Deputy Katikkiro, oweek. Robert Wagwa Nsibirwa and iii) the main event held in Gombe, Sabawaali, Kyadondo that included exhibitions from various schools and partners (MWE/WRI exhibited), school performances, demonstrations, skits among others with Oweek Charles Mayiga, Katikkiro as guest of honor.



Figure 77: The Buganda kingdom communities attending the training in Bulange on 25th March 2023



Figure 78: Cleaning up and tree planting at Kabaka's lake in Ndeeba in pictures





Figure 79: Exhibitions during the main event of Buganda Kingdom Environment Week 2023

## 6 APPENDIX A:

## **6.1 List of paper presentations (policy, scientific and practice)**

	Name of the	Type of	
Presentation title	presenter	presentation	Sub-theme
11 - Enhancing Climate			Policy, Legal and
Resilient development			institutional frameworks
through Water Use			for climate-resilient
Efficiency	Atesa Abigail	Oral	development
17- Evaluating Uganda's			Policy, Legal and
National Water Policy in			institutional frameworks
Light of Climate-Resilient	Kataratambi		for climate-resilient
Development	David	Oral	development
68 - What drives water quality			
changes in Uganda? A			Policy, Legal and
preliminary national mapping			institutional frameworks
of drivers and pressures for	Florian Sorger-		for climate-resilient
water quality changes	Domenigg	Poster	development
9-Akankwasa Eunice -			
Adoption of efficient energy			
technologies for			
communities adjacent			Climate resilient
southern sector of Bwindi	Akankwasa		communities, ecosystems
National Park	Eunice	Oral	and infrastructure

24 -Assessment of Water			
Availability Using the Water			
Evaluation and Planning			Climate resilient
(WEAP) Model in Namatala			communities, ecosystems
River Catchment	Namakhola Rajab	Oral	and infrastructure
29 -Assessing Erosion Risk and	- ramaniona majas	o.u.	
Heavy Metal Loading in			
Sediment from the Inner			Climate resilient
Murchison Bay (IMB)	Gyaviira		communities, ecosystems
Catchment	Ssewankambo	Oral	and infrastructure
35 - Assessing the Potential for			
Climate Resilient Ground			Climate resilient
Water Development in Kumi	Okurut Daniel		communities, ecosystems
District	Samson	Oral	and infrastructure
36 - Strategies For Building			
Climate Resilience For			Climate resilient
Vulnerable Communities In			communities, ecosystems
Uganda.	Ojera Alex Bright	Oral	and infrastructure
41 - Spatial Distribution of			
Water Reservoirs in the Sota			
Catchment (Benin, West			Climate resilient
Africa) and Implications for			communities, ecosystems
Local Development	Kevin S. Sambieni	Oral	and infrastructure
57 - Climate change impact on			
the livelihoods of women in			
local communities in the			Climate resilient
Rwenzori sub region of	Boonabaana		communities, ecosystems
Uganda	Phionah	Oral	and infrastructure
71 - Production of biogas from			
water hyacinth using Simple			Climate resilient
Digester: A case study of Katosi	Sempungu		communities, ecosystems
Lake Victoria shore	Stephen	Oral	and infrastructure
18- Localizing approaches			
towards climate resilient			Climate resilient
communities, ecosystems			communities, ecosystems
and Infrastructure	Nyangoma Jessica	Oral	and infrastructure
30-Assessing the implications			211
of Lake Victoria water level			Climate resilient
patterns on community	Twesigye		communities, ecosystems
livelihoods in Kalangala district	Gyezaho lan	Oral	and infrastructure
8-Community-based			
mapping and people's			
perception on wetland			
management. A case study			Climate resilient
of Nakatongoli wetland in			communities, ecosystems
Mityana District	Muhoozi Yosia	Poster	and infrastructure
Thirty aria District	111010021 10310	1 33001	and initiastractore

21- Effectiveness of the water			Climate resilient
	Pedo Lokeris		communities, ecosystems
access programs in the	Claire	Poster	and infrastructure
Karamoja region  22Raising community	Claire	Postei	and initiastructure
awareness of climate change,			
landslides mitigation and			
adaptation while enhancing			
the livelihoods of communities			Climate resilient
in the Mount Elgon region of			communities, ecosystems
Uganda	Marunga Winnie	Poster	and infrastructure
39 - Mapping Hotspots and	iviarunga vviiinic	1 03101	and initiastructure
Severity of Pollution in			
Kampala Industrial Business			
Park, Namanve Micro			
Catchment as A Result of			Climate resilient
Inadequate Industrial Waste			communities, ecosystems
Water Management	Stephen Emor	Poster	and infrastructure
44-Strengthening Resilience to			
Climate Change with Water			
Source Protection on improved			Climate resilient
Valley tanks for Livestock in the	James Bonn		communities, ecosystems
Karamoja region, Uganda	Olinga	Poster	and infrastructure
53 - Food forests an			Climate resilient
innovation approach to tree	Twinobusingye		communities, ecosystems
survival	Rosemary	Poster	and infrastructure
Sarvivar	Rosemary	1 03101	Climate resilient
			communities, ecosystems
55-Waste to Wealth	Rhitus Nabaasa	Doctor	and infrastructure
58 - Climate Change Induced	KIIILUS INADAASA	Poster	and initiastructure
Flooding: Resilient Lessons			Climate resilient
from Karuma Hydropower			communities, ecosystems
Dam	Oroma Alan Denis	Poster	and infrastructure
67 -Improving water quality	Oroma Alam Denis	1 03(0)	and initiastructure
and service levels in Uganda			
through testing and scaling up			Climate resilient
of a new handpump riser pipe			communities, ecosystems
configuration	Ceaser Kimbugwe	Poster	and infrastructure
82- Mainstreaming climate-			
resilient WASH programming			
through systems			Climate resilient
strengthening in Kabarole	Ayoreka Mary		communities, ecosystems
District - Uganda	Concepta	Poster	and infrastructure
65 - Water Sources as a			
Potential Site for Zoonose			
Transmission in and Around			Climate resilient
Budongo Central Forest			communities, ecosystems
Reserve	Otwal Haron	General	and infrastructure

4- Mugisha Moses-			
Renewable energy as a key			
in environmental			
restoration- a case study in			Climate resilient
Kisoro district, western			communities, ecosystems
Uganda	Mugisha Moses	General	and infrastructure
10 - Changes in			
Meteorological Dry			
Conditions across Water	Kerudong		Climate resilient
Management Zones in	Paskwale		communities, ecosystems
Uganda	Acayerach	General	and infrastructure

5- Community Skilling in Environment Management			Capacity and Partnerships
Practices to Mitigate Climate	Mbowa Henry		for Climate-Resilience
Change Impacts in Uganda	Stanley	Oral	Development
80 - Optimizing water use			Capacity and Partnerships
efficiency in flood irrigation			for Climate-Resilience
systems in Uganda	Patrick Onen	Oral	Development
7-Analysis of the Kateebe -			Capacity and Partnerships
Katoma Water Basin in	Byaruhanga		for Climate-Resilience
Mubende	Crispus	Poster	Development
14 -Effect of climate			
variability on crop			
production and adaptation			
strategies of smallholder			Capacity and Partnerships
farmers in Nebbi district,			for Climate-Resilience
Northwestern Uganda	Norman Isaac	General	Development

## **6.2 UWEWK2023 Attendance Analysis**

Number of Participants who attended UWEWK Dialogues, Opening and closing ceremony

Table 2: Number of Participants who attended-- UWEWK2023

Date	Day	Session	Physical	Online
Sunday 12th March	Day1	Opening Ceremony	105	69
Monday 13th March	Day 2	Key Note & Dialogue	68	44
		Parallel Sessions	150	48
Tuesday 14th March	Day 3	Key Note & Dialogue	70	41
		Parallel Sessions	229	164
Wednesday 15th March	Day 4	Key Note & Dialogue	50	49
		Parallel Sessions	291	171

Thursday 16th March	Day 5	Key Note & Dialogue	55	15
		Parallel Sessions	301	99
Friday 17th March	Day 6	Closing & Dialogue	180	48
		Parallel Sessions	52	20
Sub-Total			1551	768
TOTAL			2319	

#### 6.3 UWEWK2023 Participants Feedback

The UWEWK 2023 evaluation targeted participants who attended the main event starting from 12<sup>th</sup> to 17<sup>th</sup> March 2023. The UWEWK 2023 evaluation focused on the participants' perspective and satisfaction of the various events (keynote addresses, dialogues, applied trainings, paper presentations, exhibition, side events and others activities) of UWEWK. The results of the evaluation will inform the preparations and proceeding of the future UWEWKs. It was also to measure the efficiency, effectiveness and impact of UWEWK to the participants in relation to the water and environment sector in general. About 100 participants were selected using simple random sampling technique. These filled a predetermined questionnaire availed to them during the Uganda Water and Environment Week event.

From the data collected the following were the evaluation results and feedback were recorded

97% of the respondents agreed that UWEWK 2023 is a vital source of new information useful to the water and environment sector practitioners in their professional work. The keynote speakers were very knowledgeable and shared immensely a lot of new information shared during UWEWK 2023. However, there is need to harness this information beyond UWEWK, through creation of knowledge management platforms or interactive website among others. It was further requested that the secretariat should share the presentations from various speakers during UWEWK with the participants for further reference and reflections

80% of the respondents acknowledged that UWEWK 2023 was generally successful, satisfactory and it met their expectations. Great experience listening to experts in various fields but keynote speakers should endeavor to summarize their content and use fewer slides as much as possible. However, the following concerns were raised; the moderators prolonged introduction and question period, hence encroaching on the time for the panelists and time for questions from the participants. This calls for the need to improve time management.

92% of the respondents with the higher likelihood UWEWK 2023 was effective, efficient and sustainable will recommend and encourage to friends and colleagues to participate in the future events. The connection for virtual presentation was managed well and good setup by the organizers. The respondents further highlighted the need publicize UWEWK more so as to attract more participation from the general public. Also time management during UWEWK so as to create room for timely and equitable deliberations by the keynote speakers, panelists and other speakers during the event was highlighted.

From the evaluation survey, the following were recommended

- Need to ensure that meals are adequate for all participants during the event and the service providers to be hospitable
- There is need to put guiding labels and directions for participants clearly showing where different sessions are taking place and at what time.
- There is need to harness information shared during UWEWK beyond the event through creation of knowledge management platforms or interactive website and the recommendations put into action.
- There is need to share the presentations from various speakers of UWEWK with the participants for further reference and reflections. Additionally, the slides are too technical the need to be simplified for everyone to understand the content.
- There is need to boost time management during UWEWK event in all aspects involved.
- There is need to publicize the UWEWK event more so as to attract the general public participation in all aspects.
- Ensure that the meals are adequate and served timely for all participants during the event.
- There is need to have a briefing session with the event moderators for the dos and the don'ts of the event.
- The UWEWK side event rooms should be labeled clearly indicating the type, tittle and the time for session so as to guide the participants.
- MWE should be exemplary in its interventions to the public like tree planting, water harvesting, irrigation and delivery of WASH services etc.
- MWE to reach out to more stakeholders who are the beneficiaries of water and environment sector.
- Research content presented in slides must be more elaborate in bringing clearly how designs of projects can be done locally
- Future studies or surveys should be demand driven

#### **Lessons learned and limitations**

During the evaluation, the following lessons were learnt: i) most Participants/respondents always prefer answering questions with predetermined answers to open questions, ii) Questionnaires be short and precise for respondents to fill in conveniently and iii) respondents need to be availed with pens for filling in questionnaires.

During the data collection, the following were some of the challenges and limitations met; i) some participants were not willing to fill in the questionnaires, ii) some participants walked away with the questionnaires instead of filing them. All this was overcome by the moderators constantly reminding them to fill in the questionnaires

#### **6.4 Organizing Committee Members UWEWK2023**

Table 3: UWEWK2023 National Organizing Committee members

No.	Name	Organization
1	Dr. Florence Grace Adongo	Director, DWRM/MWE (Chair, NOC)
2	Dr. Callist Tindimugaya	Commissioner, DWRM/MWE (Vice Chair, NOC)
3	Abaho Joseph	WRPR/DWRM
4	Abili Steven Gerald	
5	Acan Santa Grace	WAU
6	Achola Susan	WRI
7	Ahereza Owen	DWRM/MWE
8	Akakisiima John Vicent	Acts Fathers Foundation
9	Akampurira Susan	MWE
10	Amuge Barbara Catherine	Ministry of Water and Environment
11	Angela Munyasya	
12	Anita Tibasanga	FAO
13	Anna Amumpire	
14	Anne Namakula Serunjogi	Contour Consult Ltd
15	Anthony Walimbwa	Climate Action Network Uganda
16	Anying Angella	Walkers Association
17	Apil Jannet	WMP/DEA
18	Arinaitwe Emmanuel Kimosho	MWE/ITWA
19	Asiimwe Micheal	CBD
20	ASP Tumuhairwe Fred	EPPU
21	Atesa Abigail	MWE/DWRM
22	Atuhairwe Christine Rachel	WRI
23	Atwiine Matthew Kariisa	MWE
24	Awori Maurine	MWE
25	Ayebazibwe pedison	MWE
26	Ayeni Geoffrey	Walkers Association of Uganda

27	Azam Henry	Youth go green
28	Betonde Glorious	
29	Biziimah Derrick	
30	Bob Kazungu	MWE/FSSD
31	Bogere Muzamiru	MWE/ITWA
32	Boonabaana Shillah	WRI
33	Braruhanga Chrispus	Munansi Green Initiative
34	Byaruhanga Joan	
35	Caroline Andama	DFCU Bank
36	Carol Athieno	MAADMcCAAN
37	Caroline Niwagaba	MWE/VWMZ
38	Ceaser Kimbugwe	WAU
39	Charllote Mwiza	GNCC
40	Christopher Bukenya	UWASNET
41	Clintone ljeji	Caunty Youth Tranzoia
42	Collins Odonga	
43	Dadinoh	
44	Daniel Babikwa	
45	Daudi Ndiwalana	PROMOTE UGANDA
46	David K. Ssemwanga	
47	David Kataratambi	MWE/DWRM
48	David Walugembe	UFN
49	David. S.Nsubuga	PROMOTE UGANDA/ROTARY UG
50	Denis Ocoromac	MWE
51	Dr Acan Santa Grace	Walkers Association Uganda
52	Dr Irene Nansubuga	NWSC
53	Dr Martin	
54	Dr.Brian Guma Emmanuel	MWE/AWMZ
55	Dr.Jibril S.Owomugisha	Million Trees International Org.
56	Eddie M. Ojara	NEMA
57	Edmond Tumusiime	MWE/KWMZ
58	Edwin Muhumuza	YOUTH GO-GREEN
59	Edyandu Jude	WRPR/MWE
60	Emmanuel Arinatiwe Kimosho	ITWA/MWE
61	Eng. Annette Nantongo	DWRM/MWE
62	Eng. Daniel Opwonya	Consultant/SET-TransGlobal
63	Eng. Hillary Mutabazi	RWSSD
64	Enguchu Emmanuel	WRI
65	Epitu Joseph	WESLD
66	Eteu Xavier	WRPR/MWE
67	Fiona Mwesigwa	Trade
68	Florence Laker	IWA
69	Gerald Babi	DWRM/MWE

70	Gikusoka Joseph	Kyambogo University
71	Grace Waako Katuramu	Consultant
72	Gwendolyn Kyoburungi	MWE/WRI
73	Hajjat Sebyala	UNMA
74	Hanifah Bulyaba	MWE
75	Hanifah Kasule	Simavi
76	Hiire Ismail	WRI/MWE
77	Hillary Ahimbisiibwe	MWE
78	Irene K Bwamiki	MWE/DEA
79	Irene Kambedha	MWE/FSSD
80	Irinatwe Laban	Kyambogo University
81	Isingoma Simon	Ndejje University
82	Jane Nabunnya Mulumba	IRC
83	Jane Namubiru	
84	Joan Asiimwe	GIZ
85	John Okiira	ACODE
86	Joseph Katongole	UWASNET
87	Joshua Nyombi Mugabi	MWE/WRI
88	Joyce Kyeyune	CONSULTANT SIWI
89	Joyce Magala Mpalanyi	Consultant
90	Juliet Mubi	NFA
91	Kago Wamuyu	CONSULTANT SIWI
92	Kajimu Athamah	MWE
93	Kansiime Charity	MWE
94	Kanyesigye Reagan Churchill	Mbarara University
95	Karungi Joanne Bagonza	MWE/WRI
96	Kataratambi David	MWE/DWRM
97	Katto David	WRPR/MWE
98	Katusiime Rabecca	MWE
99	Katwesigye Allan	Million Trees International.
100	Khaitsa Susan Wasubire	CLIMATE ACTION NETWORK UGANDA
101	Kiteme Rita	MWE
102	Kizito Daniel Mulwana	MWE
103	Kizito Xavier Francis	MWE/WRI
104	Koburamuzi Brenda	DWRM/MWE
105	Kyomuhendo Agness	MWE
106	Laker Janet Opira	MWE/F&A
107	Lilian Bainemirembe	MWE
108	Lillian Nabasirye	Water Aid Uganda
109	Lubega Boaz	NEMSA
110	Lucky Brian	Food Rights Alliance
111	Malinga Joseph	MWE/WMD
112	Marion Iceduna	

113	Martin Kityo	UWASNET
114	Mary Namukose	GIZ-NatuRes
115	Masengere George	Mukono LG
116	Matthew Kariisa	MWE
117	Maurine Awori	Busitema University
118	Mbalumya Luke	
119	Monica Nambirige	MWE/WRI
120	Moses Egaru	IUCN
121	Moses Lubanga	Tedafatmers
122	Muganga Aggrey	MAADMcCAAN
123	Mugarura Deneth	MWE
124	Mugisha Moses	Million Trees International Org
125	Mugoda Rodgers	
126	Mugume Matthew	MWE
127	Muhumuza Edwin	Youth GO-GREEN
128	Mwesigye Lucky Patson	FSSD
129	Nabongho Timothy	
130	Naboth Mulangira	GNCC
131	Nahabbo M. Nancy	DWRM/MWE
132	Nakitende Mastula	Buganda Youth Council
133	Namirembe Gloria	FSSD/MWE
134	Namurebire Yosam	MWE
135	Nayiga Florence	CCD/IFPA-CD Project
136	Ndibarema Dadinoh	MWE
137	Ndungu Isiah	
138	Niwagaba Emmanuel	Kabale University
139	Njuni Bellarmine	
140	Nnanyonjo Proscovier Vikman	Buganda Kingdom
141	Odong Joseph	DWRM/MWE
142	Ojera Alex Bright	NEMSA
143	Okurut Daniel S.	MWE
144	Pamela Nyamutooka	IIRR
145	Pamela Musimenta	WRPR/DWRM
146	Patrick Angupale	UEGCL
147	Patrick Ronoh	IWA
148	Pedo Claire Lokeris	Million Trees International Org
149	Phionah Boonabaana	Youth Go Green
150	Queen Catherine Kirabo	DEA
151	Regina Namugerwa	Tree Adoption Uganda
152	Rev. Ssekasiko Wilberforce	UJCC
153	Richard Musota	MWE
154	Ronald Semyalo	MAK
155	Rosemirta Birungi	AFID

156	Sarah Namuwenge Mugumya	NWSC
157	Sekindi Isaac	MWE
158	Sempabuka Michael	MWE/WRI
159	SGT Byamugisha	EPPU
160	Shillah Boonabaana	WRI
161	Solomon Kyeyune	
162	Sonko Kiwanuka	WSS
163	Spera Atuhairwe	Life Water International
164	Stephen Tumwesige	MWE
165	Suresh Kumar Rohilla	IWA
166	Susan Akampurira	MWE/DWRM
167	Sylvia Nanyunja	MWE
168	Trudy Muwanga	Green Building Council Uganda
169	Tumusiime Aryane Ninsiima	
170	Turimumaso Wilbrord	IRC
171	Turyatunga Edwin Cole	CNCC
172	Twesige Racheal Kirungi	
173	Twinamatsiko Jastus	FSSD
174	Victoria Kinobe Nakatude	WRPR/MWE
175	Washington Otieno	WMO

Table 4: UWEWK2023 Technical Organizing Committee members

No.	Name	Organization
1	Dr. Callist Tindimugaya	Commissioner, DWRM/MWE (Chair)
2	Prof. Nicholas Kiggundu	Makerere University (Vice Chair)
3	Anna Amumpiire	
4	Anthony Wolimbwa	Climate Change Network, Uganda
5	Ashabrick Nantege	MWE/ATC
6	Asiimwe Michael	MWE
7	Atesa Abigail	MWE
8	Atuhairwe Rachel	MWE/WRI
9	BagendaAustine	Buganda Kingdom
10	Bicul Mukiibi	
11	Boonabaana Shillah	WRI
12	Brenda Achiro	Water For People
13	Daniel Omodo M	
14	Eng. Daniel Opwonya	Consultant/SET-TransGlobal
15	David K. Ssemwanga	Water for People
16	Dr Irene Nansubuga	NWSC
17	Dr Jibril S. Owomugisha	Million Trees Org.
18	Edwin Muhumuza	Youth Go-Green

19	Enguchu Emmanuel	WRI
20	Firimina Acuba	MWE/WESLD
21	Florence Laker	IWA
22	Grace Waako Katuramu	Consultant
23	Gwendolyn Kyoburungi	MWE/WRI
24	Hiire Ismail	WRI
25	Jane Nabunnya Mulumba	IRC
26	Jane Namubiru	ACODE
27	John Okiira	ACODE
28	Joseph Katongole	UWASNET
29	Joseph Epitu	MWE
30	Kago Wamuyu	Consultant
31	Kimbugwe Ceaser	Water Aid Uganda
32	Kizito Francis Xavier	MWE/WRI
33	Kyeyune Joyce	Consultant
34	Lubega Boaz	
35	Martin Kityo	UWASNET
36	Mbowa Henry Stanley	
37	Michael Sempabuka	WRI
38	Mugabi Nyombi Joshua	MWE/WRI
39	Mutibwa Robert	MWE
40	Nakyeyune Cotilda	CARE UGANDA.
41	Namukose Mary	GIZ
42	Natukunda Stacey	MWE/DWRM
43	Dr. Patrick Musinguzi	Makerere University
44	Ndibarema Dadinoh	MWE
45	Paul Oloya	MWE
46	Proscovia Vikman	Buganda Kingdom
47	Rev. Ssekasiko Wilberforce	UJCC
48	Rosemirta Birungi	AFID/NILE/IWRM
49	Solomon Kyeyune	WRI
50	Eng. Sonko Kiwanuka	WSS Services Ltd
51	Trudy Muwanga	Green Building Council Uganda
52	Washington Otieno	WMO Secretariat
53	Yvonne Lugali	Water for People

Table 5: UWEWK2023 Rapporteurs List

NO	NAME EMAIL		NO	ORGANISATION	
	Eng. Daniel Opwonya				
	(Chief Rapporteur &	daniel.opwonya@gmail.com		Consultant/ SE	:T-
1	Trainer)		0772610164	TransGlobal	

				Ministry of Water and
2	Rose Nkugwa	nkugwarose@gmail.com	0779260345	Environment
				Ministry of Water and
3	Pamela Musimenta	pamelamusimenta@gmail.com	0778 717378	Environment
				Ministry of Water and
4	Sophie Luwano	sluwano@gmail.com	0773459600	Environment
	Victoria	victoriakinobe16@gmail.com		Ministry of Water and
5	KinobeNakatudde		701982205	Environment
				Ministry of Water and
6	Atesa Abigail	atesabigail@gmail.com	778998265	Environment
7	Sande ElisonOundo	sandeelison23@gmail.com	0774 92 959	AAR Healthcare
	Rosemary	maryronisie@gmail.com		Ministry of Water and
8	Twinobusingye		0787 738529	Environment
9	Kayaga Sarah	svkayaga34@gmail.com	0782025216	Water.org
				Ministry of Water and
10	Rukundo Roy Robert	royrukundorobert@gmail.com	0786168146	Environment
		arinaitwegodwinkituku@gmail.co		Ministry of Water and
11	Arinaitwe Godwin	<u>m</u>	0781458035	Environment
12	Kwera Faith	quera1204@gmail.com	0784707060	Quera tickets
				Ministry of Water and
13	Awori Maurine	aworimaurine2000@gmail.com	0761904582	Environment
				Ministry of Water and
14	Naturinda Sarah	naturindas62@gmail.com	0789427962	Environment
	TwesigeKirungi			Women in GIS
15	Racheal	rtkirungi230@gmail.com	0778318611	(WiGIS) Uganda
				Ministry of Water and
16	Owen Ahereza	owenahereza19@gmail.com	0706609890	Environment

Table 6: Committees for the Karamoja Regional UWEWK2023 Preparation

Sub Committee	Members	Task and Terms of Reference
Overall	Chairperson (Okello	Provide technical advice and guidance on all matters
Organizing	Wilfred); Secretary/Focal	related to the preparations of the UWEWK
Committee	Person (Jalameso);	Liaise with the national committees
	Advisor (Johnson Opige,	
	and Ochero Robson,	
	Olinga James Bonn and	
	Tendo Mark	
Finance	Katongole Mark (Chair);	Financial mgt, Resource mobilization and allocation,
	Masiga Patrick; Okello	Coordinate with the finance committee in the center,
	Logira; Patrick Onyango	Identify for the suppliers of goods and services, and
	and Moses Mugerwa	Ensuring payments for goods and services.
Technical	Alex Ojuka Jalameso	Guide the whole process of the preparation, Identify
Committee	(Chair); Mugerwa Moses	suitable transport in consultation with the finance team.
	Emadu Daniel Okidi Chris;	Also negotiate the price and coordinate the transport
	and Eng. Mulala	arrangements for the members; Ensure the sites are

Protocol, Events and Reception	Raymond Oyugi Nacy John Bosco; Daniel Emadu; Elilu Stephen	available for visit during the week; Identify the relevant Partners to join the regional celebration.  Ensure every requirement to do with KRUWEWK celebration is adhered to.  Identify and invite the persons to attend and participate in the activities of the regional celebration; Work with the technical team to identify the service provider and negotiate the cost; Agree on the color theme, work with the service provider; Ensure the quality of the flowers and decoration; Identify the all the venues and ensure all what is required is available; Liaise with other committees on programme of the activities and advise on how it will run; Come up with an alternative venue and cost or confirm venue  Ensure all logistics are organized (chairs, oversee decoration of venue, ushering of guests, agree on the menu in consultation with the overall committee); Designate one person to specifically follow up all the items brought to the venue and make sure they are returned to the right places); Ensure security is tight and avoid commotion during the celebration; and Liaise with other committees on time management.
Security	DPC Moroto; RDC and Baguma Daniel (WfPRC- K)	Ensure the police to provide security for vehicles and other during march and at the venue; Reception team to work with the security team to control the gate crushers.
Communication and Entertainment	Damalie Baliyana; Olandason Wanyama; Ocero Robson	Ensure all the activities are published in social media and the national and in the media houses with the right information; Ensure partners and the ministry have the documentations for pullout during the UWEWK and world water week for publicity  Liaise with the vision group on what activities to be done; Come up with articles for the publicity for the print and the electronic media.  Ensure the drama group, artist or any local theaters are identified and mobilized
Welfare Committee	Nasur Charles; Margie Oluka; Apolot Domitila Ayamo Judith; Oyugi Nancy; and Abili Stephen	Identify a service provider and negotiate a package, including the transport arrangements; Ensure food and refreshments are delivered in time; Work with the regional hospital for the first aid requirement during marching and cleaning activities and establish a first aid tent at the venue.

Table 7: The UWEWK2023 Hackathon Groups, Problem Statement and Solutions

GROUPS	PROBLEM STATEMENT	SOLUTIONS
WATER OR WHAT	Limited access to information by people at the grass root levels and the most disadvantaged.	<b>Ugandan Green Libraries-</b> An institution that provides consistent information to the grass level at subscription basis called Uganda green libraries about water and climate in general.
AQUA TEAM	Insufficient timely access of accurate information on environment emergencies in local communities in Uganda poses significant challenge to achieving climate resilient social economic development.	A mobile application that provides a centralized platform for reporting and disseminating information on environmental emergencies to local communities in Uganda.
ALMAN	Water is a resource of increasing scarcity due to continual use and expansion of consumption due to increase in population and increased need. Much focus has been put on industrial and municipal waste water plants but non on house hold grey water recycling that is instead released in the environment, water sources and trenches. Average use is 45.63litres/day yet 26.42litres of those are wasted thus need for household recycling.	Provision of a low cost household grey water recycling system, protecting the environment, mainly water bodies from pollution caused by waste water and high bills spent on flashing water.
ECO VA	Lack of coordinated efforts to implement climate resilient agricultural practices among stakeholders and reduced available labour.	Creation of a solution hub which will be a web portal through which different challenges faced by farmers shared to the ministry are posted and solutions are generated by university students and shared back to Ministry of Water and Environment and then the applicable solutions are practically enforced by the university students.
STREET SMART	Environmental pollution by mercury in the waste water from gold mines in Tiira community.	Developing an artificial wetland by planting water hyacinth and macrophyte Typha which will help absorb the mercury from the waste water
US 4 KATANGA	The increased poor waste disposal in slum areas of Uganda specifically katete slum in Mbarara city.  A lot of waste is poorly disposed in the different slums in Uganda and this leads to blockages in the drainage systems, poor sanitation and environmental degradation.	Solution is to ensure that there is a proper waste management through collecting waste discriminatively (organic and inorganic) and selling it to the recycling bodies and also emptying the existing full latrines in the slums and selling the waste to the treatment bodies and black solider flies farmers
AQUA QUADRO	Quick response to water leakages in Kampala city	Designing sensors that automatically detect water leakages that are to be monitored using hardware and software managed by stakeholders (water supplier ) and consumers (Kampala community)

DOLPHINS	Long periods of drought in Karamoja region (Kotido and Moroto) has resulted into food insecurity, land degradation, shortage of water and green pastures in the areas. This is as a result of dry monsoon winds originating from Sahara desert via the Ethiopia highlands	By increasing the vegetation cover a form of enhancing the green belt through introduction of new plant species that easily adapt to adverse dry conditions
ELITES	SDG 6 suggests that clean and safe water should be available for all people, however there is scarcity in rural areas	Implementation of water stations that are monitored in real time for refilling should the water levels fall low. These provide water 24hours 7 days a week at a low cost that the people as compared to high prices charged by the few who poly-tanks
SAFE AND CLEAN WATER FOR ALL (SCWaFA)	There is a challenge to access to safe and clean water in slum areas brought about by poor sanitation ,Poor water drainage ,overcrowding and poor housing units that has a negative impact on the public health systems in the city	SCWaF-Uganda, technology that purifies dirty/un clean water, involves quality and quantity of water in slum areas which is safe and clean for domestic use
A BETTER LIFE	Plastics harm the environment and hinder access to clean water because they leach into water, degrading the quality. Plastic production has been exponentially in recent decades and is predicted to double again by 2025.	PLASTECH -Use of digital bins which have an application on smart phones but also plastic companies installing unique QR codes that customers can scan and get rewards upon disposal in the digital bins which creates easy re-use recycling.
THE ULTIMATES	Def-forestation is a major environmental problem in Uganda with an estimated 90,000 hectares of forests being lost per year. This has resulted in a range of negative impacts on both environment and human wellbeing. Despite efforts by the government and the NGOs to address this issue, deforestation continues to occur at alarming rates because of lack of real-time monitoring system to collect timely and accurate information about deforestation activities.	REAL TIME MONITORING SYSTEM TO HACK DEFFORESTATION  To create an app that uses satellite imagery to monitor and track deforestation in Uganda. The app uses machine learning algorithms to identify areas of forest cover loss in real-time and alert authorities and conservation groups. The app could also provide a platform for individuals, ministries, departments, agencies and NGOs to report and track illegal logging and deforestation activities.

Table 8: List of Hackathon Groups members

No	Name of Group	Institution	Group Members
1	Safe and Clean Water for All-Uganda (SCWaFa-Uganda)	King Ceaser University	<ol> <li>Edema Fred</li> <li>Tumwijukye Laurensio</li> <li>Nkurunziza Brenda Hilda</li> <li>Dushime Ronald</li> <li>Arinda Leackey</li> </ol>
2	A Better Life	Makerere University	<ol> <li>Muhwezi Joshua Lawel</li> <li>Ayebare Denise</li> <li>Kaitesi Shallon</li> <li>Asoniwa Sandra</li> </ol>
3	Us4Katanga	Mbarara University of Science and Technology/ Kabale University	<ol> <li>Katugume Prosper</li> <li>Keitesi Aisha</li> <li>Musiimenta Fortunate</li> <li>Patience Namuyanja</li> <li>Ashante Charlotte Catherine</li> </ol>
4	Aqua Quadro	Makerere University	<ol> <li>Mbalire Shawal</li> <li>Namiiro Shamim</li> <li>Kwizeera Wilson</li> <li>Nabachwa Mariam</li> <li>Twijukye Balam</li> </ol>
5	H20 or What	Mbarara University of Science and Technology	Agaba lan     Elianu Peter     Alec Becky
6	Aqua Team	Mbarara University of Science and Technology	<ol> <li>Elweu Joshua</li> <li>Akugizibwe Immaculate</li> <li>Kalema Gilbert</li> <li>Okello Benjamin</li> </ol>
7	Alman	Mbarara University of Science and Technology	<ol> <li>Mujuni Ivan</li> <li>Lutaakome Renicah</li> <li>Abaho Criscent</li> <li>Ayebazibwe Disan</li> <li>Nkunda Mary Uwera</li> </ol>
8	Elites	Makerere University	<ol> <li>Kirabo Isaac Buyondo</li> <li>Mbeiza Rachael Lorna</li> <li>Ambangira Mark Mwesigwa</li> <li>Arwa Linda</li> <li>Abitegha Bridget</li> </ol>
9	Dolphins	Makerere University Business School	<ol> <li>Asingura David</li> <li>Nankunda David</li> <li>Atuheirwe Isaac</li> <li>Tamukedde Juma</li> <li>Nabaggala Kimuli Nashua</li> </ol>
10	The Ultimates	Makerere University and Kampala International University	<ol> <li>Honey Abourahman</li> <li>Muhoozi Owen</li> <li>Senjiyunra Mesarch</li> <li>Marvin Muhumuza</li> <li>Amina Mayole</li> </ol>

11	EcoVa	Makerere University	2. Kabe 3. Akiro 4. Onya	wo Raphael Lucky enge Rathaan or Karen E ango Deogracious eire Natasha
12	Street Smart	Busitema University/ Mbarara University of Science and Technology	2. Natu 3. Aher	ri Maurine ırinda Sarah reza Owen ante Charlotte

Table 9: List of Participants/ Organisations in South Western UWEWK2023

CATEGORY	
	ORGANISATION
	Nwsc Mbarara, Acord Mbarara, Cecord Mbarara
	Kazire Industry, Gbk Dairy Industry, Nbl Mbarara
	Lake View Hotel Mbarara, Hotel Triangle Mbarara, Amos Diaries, Pearl Dairy
	Mbarara, Coca Cola Mbarara, Kigezi Diocese Water And Sanitation, Adritex Uganda
	Limited, Akvo International Limited, Davis And Shirtlift, Dfcu Bank Mbarara,
	Centenary Bank Mbarara, Icea Mbarara, Mbarara Dlg, Embogo Extra, Acode
Funder and/ or	Mbarara, Pinnacle, Umeme, Roofings Ltd, Excel Hot Consult, Unra, Red Star Wine,
Exhibitor	Kabirit Energy Drink, Nssf, Ura, Ministry Of Internal Affairs, Rotary –Mbarara
Participants	
Specialized	
Service (e.g. HIV	
testing, banking,	Mbarara University Of Science And Technology, Mbarara Hospital, Ruharo Church
etc. ) and/ or	Institution, Uganda Martyrs Catholic, Mbarara City Council & MDLG Participants,
Exhibitor	Mbarara Mosque
	<b>SECONDARY SCHOOLS</b> (Bweranyangi Girls, Ntare School, Mbarara High School, Mary Hill High school, Nganwa High School.
	UNIVERSITIES ( Mbarara University, Bishop Stuart University, MUBS, Kabale
	University, University of St Joseph's, Excel
	PRIMARY SCHOOLS ( Uganda Martyrs primary schools, Parental care primary
	school
Debating Schools	
Press and Media	NBS, NTV, UBC, TV West, Cruise FM, Radio West

## Table 10: UWEWK 2023- Rapporteuring Report Template

Theme:					
Sub theme:					
Title of session:					
Date					
Venue					
Session chair:					
Coordinator:					
Rapporteur:					
Participants	Physical	Online	Max	Min	
Session presenter (s):					
Key points					
Overall take way messages from the session					
(rapporteur)					
(.appa.com)					

## 6.5 UWEWK 2023 Programme









"water and environment for climate Theme: -resilient development"





















