



# Uganda Water and Environment Week 2020

*Sunday 13th - Friday 18th September 2020*

***Venue: Ministry of Water and Environment - Luzira***

***Theme: "Water and Environment Resources for Inclusive-Growth,  
Employment and Wealth Creation."***

Email: [uwewk@mwe.go.ug](mailto:uwewk@mwe.go.ug) and [wri.uga@gmail.com](mailto:wri.uga@gmail.com)

Phone: +256 772 468772/+256 772560318



**UWEWK 2020 PROGRAM**

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## UGANDA WATER AND ENVIRONMENT WEEK (UWEWK) 2020

Sunday 13<sup>th</sup> – Friday 18<sup>th</sup> September 2020

### OVERVIEW

Uganda Water and Environment Week (UWEWK) is a weeklong event that is organized annually by Ministry of Water and Environment (MWE) through the Water Resources Institute (WRI). Since its inception in 2018, the event seeks to contribute towards the attainment of Sustainable Socio-economic Transformation in achieving Ugandan National Development Plan and Vision 2040. It provides an interface between sector actors and other stakeholders for knowledge exchange, dialoguing, learning for improvement of Uganda's water and environment resources.

UWEWK2020, was scheduled to take place at end of March2020 at the Water Resources Institute in Entebbe but was postponed due to COVID-19. The aim of UWEWK 2020 is to explore “The role of water and environment resources in the achievement of the third National Development Plan (NDP III) goal and targets. Additionally, it will assess the centrality of water and environment resources in increasing sustainable household incomes and improved quality of life of the population and achievement of “Sustainable Industrialization for Inclusive-growth, Employment and Wealth Creation”.

The event is organised under the theme: “water and environment resources for inclusive-growth, employment and wealth creation”. Three sub-themes are proposed to further elaborate on water and environment issues and challenges. These include:

- a) **Water and Environment Security for Inclusive-growth** - This sub-theme is to explore the impacts of degradation of water, environment and natural resources on achievement of NDPIII targets and what needs to be done to ensure water and environmental security for inclusive growth. It intends to discuss the governance challenges associated with environment and natural resources management and transboundary water cooperation and present possible solutions to promote sound water, environment and natural resources management and prevent transboundary conflicts. This sub-theme will also look into ensuring coordinated and sustainable national infrastructure projects considering that Uganda's economy relies almost entirely on the stock of water, environmental and natural resources to produce goods and deliver services. It will address the new approaches to achieving Water-Food-Energy nexus as well as approaches for addressing water scarcity and through non-conventional water and environment resources management approaches.
- b) **Water and Environment for Employment and Wealth Creation** - This sub-theme is to discuss how societies should govern and develop their water and environment resources for employment and wealth creation and improving people's livelihood. Accessibility to safe and clean water is, for many people, a matter of daily survival, or



can help to break the vicious circle of poverty. Similarly, the effectiveness of wastewater treatment, sanitation improvement and disposal can have far reaching effects on survival and meaningful productivity. Improving natural resources governance and development is therefore essential to alleviating global poverty. The sub-theme will also give focus to innovative solutions for more efficient and productive development and management of water, environment and natural resources; case studies of integrated water development and management schemes that account for the water demand and supply as well as land and the environment. It will also explore opportunities for increasing incomes and employment through sustainable use and value addition to water, environment and natural resources.

- c) Climate change and achievement of NDP III goals** - This sub-theme is to explore the impacts of climate change, both positive and negative, on the social and economic sectors of Uganda, and explore existing and potential innovative climate change mitigation and adaptation options that are key in supporting the achievement of various NDP3 goals and targets and specifically employment and wealth creation, and general economic growth.

#### Overall Goal

The overall goal of UWEWK 2020 is: improved understanding of the importance of sustainable management and development of water and environment resources in Sustainable Industrialization for Inclusive-growth, Employment and Wealth Creation.

#### Objectives

The objectives of UWEWK 2020 are to:

- a. Highlight how water and environment contribution to Sustainable Industrialization for Inclusive-growth, Employment and Wealth Creation
- b. Focus on the inseparable link between security of water, energy, food and ecosystems which is critical to underpin Inclusive-growth, Employment and Wealth Creation and hence achievement of the third National Development Plan (NDP3).
- c. Deliberate on the role of effective water and environment management and governance in ensuring coordinated and sustainable national infrastructure projects;

# UWEWK 2020 WELCOMES YOU

## National Organizing Committee



Dr Florence Grace Adongo  
 Director of Water Resources Management  
 Ministry of Water and Environment  
**CHAIRPERSON, NATIONAL ORGANIZING  
 COMMITTEE**



Dr. Callist Tindimugaya  
 Commissioner, Water Resource Planning and  
 Regulation  
 Ministry of Water and Environment  
**CHAIRPERSON, TECHNICAL COMMITTEE**

### MEMBERS OF THE ORGANIZING COMMITTEE

NAMES	ORGANIZATION
Ms Flavia Waduwa	Ministry of Water and Environment
Dr. Nicholas Kiggundu	Makerere University
Rosemirta Birungi	AFID
Eng . Daniel Opwanya	PVT
Jane Nabuunya Mulumba	IRC
Margaret Mwebesa Athieno	MWE-Directorate of Environmental Affairs
Joseph Epitu	Ministry of Water and Environment
Eng. Sonko Kiwanuka	WSS Services
Dr Yazdi Bamutaze	Makerere University
Dr. Ronald Semyalo	Makerere University
Dr Lawrence Orikiriza	Makerere University
Dr. Patrick Musinguzi	Makerere University
Barbara Ntambirweki	ACODE
Lydia Ngozi	GIZ-Uganda
Spera Atuhairwe	Life Water International
Edwin Muhumuza	Youth Go Green
Ms. Mary Namukose	GIZ-Uganda
John Okiira	ACODE
Faith Kanyago	UMI

## MEMBERS OF THE ORGANIZING COMMITTEE

NAMES	ORGANIZATION
Cate Zziwa Nimanya	Water for People
Sophie Kutegeka	IUCN
Ms Andama Carolyn	DFCU
Ms. Marjorie Mugenyi	DDCL
Ms Grace Katuramu Gwendolyn Kyoburungi	DDCL MWE- Water Resources Institute
Roland Biryahwaho	Water Aid Uganda
Chrystelle Kyatengegwa	MWE- Water Resources Planning and Regulation
Solomon Kyeyune	Free Lance Consultant
Stacey Natukunda	MWE- Water Resources Planning and Regulation
Francis Xavier Kizito	MWE- Water Resources Institute
Atwiine Mathew Kariisa	Ministry of Water and Environment
Orijabo Albert	MWE- Water Resources Planning and Regulation
Waiswa Nelson	MWE- Water Resources Planning and Regulation
Irene Kambedha	MWE- Directorate of Environmental Affairs
Deus Kirunda	Ministry of Water and Environment
Emmanuel Jumba	Ministry of Water and Environment
Sowed Sewagudde	Ministry of Water and Environment
Anthelem Iragena	MWE- Water Resources Planning and Regulation
Nathan Mununuzi	MWE- Directorate of Environmental Affairs
Geoffrey Ayeni	Uganda Walkers Association
William Mawenu	MWE- Directorate of Environmental Affairs
Dr Acan Santa Grace-Walkers	Uganda Walkers Association
Lillian Nkwenge	Uganda National Meteorological Authority
Namuyiga Winnie	Water Resources Institute
Gerald Babi	MWE- Water Resources Planning and Regulation
Athamah Kajimu	MWE- Water Resources Planning and Regulation MWE- Water Resources Planning and Regulation
Maimunah Kasujja	Water Resources Institute
Rachel Atuhairwe	Water Resources Institute
Joshua Mugabi Nyombi	
Rehema Aanyu	UWASNET

## MEMBERS OF THE ORGANIZING COMMITTEE

NAMES	ORGANIZATION
Nancy Nahabbo	MWE- Water Resources Planning and Regulation
Atuhaire Brenda	MWE- Water Resources Planning and Regulation
Kansiime Charity	MWE- Water Resources Planning and Regulation
Namurebire Yosam	MWE- ITWA
Bulyaba Hanifa	Ministry of Water and Environment
Bogere Muzamiru	MWE- ITWA
Nalumu Jovan	Ministry of Water and Environment

## CONTACT US

Email: [uwewk@mwe.go.ug](mailto:uwewk@mwe.go.ug); [wri.uga@gmail.com](mailto:wri.uga@gmail.com);

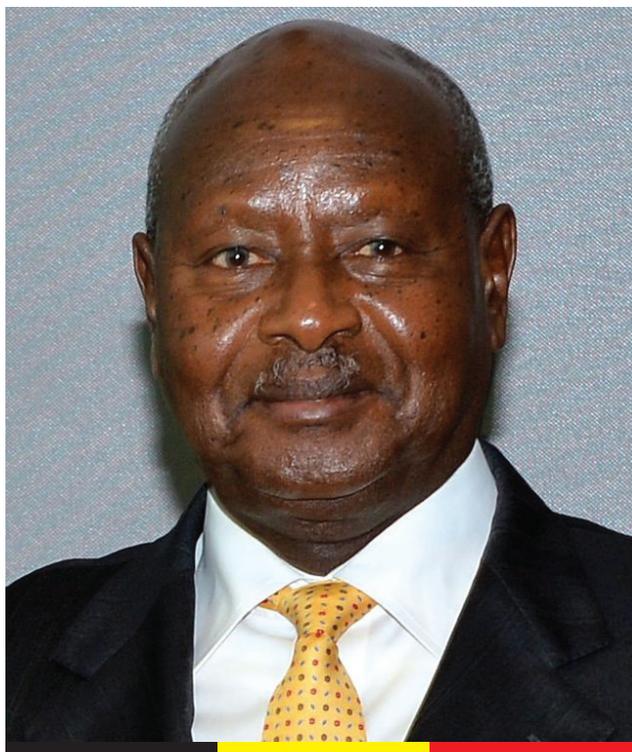
Mobile or WhatsApp: +256 772468772, +256 776153791, +256 772521413

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Website: [www.mwe.go.ug](http://www.mwe.go.ug)

For more details please refer to the Program below.

**GUESTS at UWEWK2020 Opening Ceremony on 13 September 2020**  
Time 14:00 – 17:00



H.E. Yoweri Kaguta Museveni  
**President Republic of Uganda**



Hon. Sam Cheptoris  
**Minister**  
**Ministry of Water and Environment**

## KEY NOTE SPEAKERS AND PANELISTS

**SPEAKERS: Dialogue session on 13 September 2020** - Water and Environment Resources for inclusive-growth, employment and wealth creation, Time 2p.m. – 5 p.m.

### KEY NOTE SPEAKER



**Dr Fred Muhumuza**  
Policy Development  
Analyst and Lecturer,  
School of Economics,  
Makerere and Kyambogo  
Univesities



**Hon. Kefa Kiwanuka**  
Chairperson, Natural  
Resources Committee,  
Parliament of Uganda



**Hon. Elly Karuhanga**  
Chairman, Private Sector  
Foundation

### PANELISTS



**Ms. Elsie G. Attafuah**  
Resident Representative,  
United Nations  
Development Program in  
Uganda



**Prof. Pamela Mbabazi**  
Chairperson, National  
Planning Authority



**Alfred Okot Okidi**  
Permanent Secretary  
Ministry of Water and  
Environment



**Godber Tumushabe**  
Associate Director Great Lakes Institute for  
Strategic Studies

**SPEAKERS: Dialogue session on 14 September 2020:** Water and Environment Security for inclusive-growth, Time 10:00 to 12:00p.m.

## KEY NOTE SPEAKER



**Ronald Kaggwa**  
Manager- Production,  
Trade and Tourism  
Planning - National  
Planning Authority



**Querido Antonio Louis  
Ferreira**  
FAO Country  
Representative, Uganda



**David Duli**  
Country Director, WWF  
Uganda Country Office

## PANELISTS



**Jane Nabunnya  
Mulumba**  
Country Director IRC  
International Water  
and Sanitation Centre -  
Uganda



**Mathias Katamba**  
Managing Director,  
DFCU Bank



**Collins Oloya**  
Director, Directorate of  
Environment Affairs,  
MWE

**SPEAKERS: Dialogue session on 15 September 2020:** Water and Environment for Employment and Wealth Creation, Time 10:00-12:00p.m.

## KEY NOTE SPEAKER

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**Prof. Alex Ariho**  
Chief Executive Officer  
African Agribusiness  
Incubators Network



**James Ebitu**  
Permanent Secretary  
Ministry of Gender,  
Labour and Social  
Development



**Sophie Kutegeka**  
Country Director, IUCN

## PANELISTS

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**Eng Joseph Oriono Eyatu**  
Director of Water  
Development,  
Ministry of Water and  
Environment



**Cate Zziwa Nimanya**  
Country Director, Water  
for People Uganda



**Dr Tom Okurut**  
Executive Director,  
NEMA

**SPEAKERS: Dialogue session on 16 September 2020:** Climate change and NDP III, Time 10:00 – 12:00p.m.

## KEY NOTE SPEAKER

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**Dr Willy Kakuru**  
Consultant, Food  
and Agricultural  
Organization



**Edwin Muhumuza**  
Founder and CEO Youth  
Go Green



**Marion Iceduna**  
Consortium Manager  
ECO-DRR, CARE

## PANELISTS

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**Dr Florence Grace  
Adongo**  
Director of Water  
Resources Management,  
Ministry of Water and  
Environment



**Hon. Biyika Lawrence  
Songa**  
Chairperson,  
Parliamentary Committee  
on climate change  
Parliament of Uganda



**Edith Kateme Kasajja**  
Former Deputy  
Executive Director, NPA  
and Member of Uganda  
CC Negotiating Team

**PANELISTS**

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**Dr. Joseph Muvawala**  
Executive Director,  
National Planning  
Authority



**Maris Wanyera**  
Director- Cash and  
Debt Policy, Ministry of  
Finance



**Patrick Kahangire**  
Retired Director of  
Water Development and  
Presidential Adviser on  
Water issues



**Dr Eng Siver Mugisha**  
Managing Director,  
National Water and  
Sewerage Corporation



**Dr Arthur Bainomugisha**  
Executive Director, ACODE



**Jane Mselle Sembuche**  
Country Director,  
WaterAid

## PROGRAMME FOR THE UGANDA WATER AND ENVIRONMENT WEEK 2020 (UWEWK2020)

*Theme: Water and Environment Resources for inclusive-growth employment and Wealth Creation*

DAY	TIME SLOT	ACTIVITY
Sunday 13th September 2020	<b>OPENING CEREMONY: @ MWE Auditorium and Live-stream on UBC &amp; NBS TVs, and ZOOM</b>	
	14:00 - 14:05	Welcome and Introduction to the <b>UWEWK2020</b>
	14:05 - 14:10	Welcome Remarks, Chair National Organizing Committee
	14:10 - 14:15	Welcome Remarks, Minister of Water and Environment
	14:15 - 14:30	Opening Speech by H.E the President of the Republic of Uganda - <b>Yoweri Kaguta Museveni</b>
	14:30 - 14:50	Key Note Presentation: "Water and Environment Resources for inclusive-growth , employment and wealth creation" <b>Key Note Speaker: Dr Fred Muhumuza, Policy Development Analyst and Lecturer, Makerere University</b>
	14:50 - 16:30	Panel Discussion ( <b>Prof. Dr Pamela Mbabazi</b> , Chairperson National Planning Authority; <b>Hon. Kefa Kiwanuka</b> , Chairperson Natural Resources Committee of Parliament; <b>Mr. Alfred Okot Okidi</b> - Permanent Secretary, MWE; <b>Ms. Elsie G. Attafuah</b> -UNDP Resident Representative for Uganda; <b>Hon. Elly Karuhanga</b> , Chairman, Private Sector Foundation; <b>Mr. Godber Tumushabe</b> - Associate Director, Great Lakes Institute for Strategic Studies) <b>Moderator: Mr. Maurice Mugisha, UBC &amp; Mildred Tuhaise, NBS</b>
16:30 - 17:00	Plenary Discussion	
<b>END OF DAY ONE</b>		
Monday 14th September 2020	<b>Sub-theme No. I - Water and Environment Security for inclusive- growth - (ZOOM)</b>	
	10:00 - 10:10	Key Note Presentation: "Water and Environment Security for inclusive-growth" <b>Key Note Speaker: Mr. Ronald Kaggwa, Manager- National Planning Authority</b>
	10:10 - 11:40	Panel Discussion - <b>Mr Querido Antonio Luis Ferreira</b> , FAO Country Representative; <b>Mr. Mathias Katamba</b> - Managing Director, DFCU Bank; <b>Ms. Jane Nabunnnya Mulumba</b> - Country Director, IRC; <b>Mr. Collins Oloya</b> , Director, DEA; <b>Mr. David Duli</b> , Country Director, World Wide Fund for Nature. <b>Moderator: Sonko Kiwanuka - Director WSS Services (U) Ltd.</b>
	11:40 - 12:00	Panel and Plenary - Virtual Online -Discussion and Feedback
	<b>LUNCH BREAK</b>	
	<b>Parallel Sessions (ZOOM)</b>	
	14:00 - 16:00	<b>Session 1: Water and Environment Security for inclusive-growth - Policy, Practice &amp; Scientific Papers Presentation - Part I, refer to annex 1</b>   <b>Session 2: Training on Sustainable Development Goal No. 6 - by Ministry of Water and Environment: a video, presentation, and Plenary Discussion, refer to annex 3</b>
<b>END OF DAY TWO</b>		
Tuesday 15th September 2020	<b>Sub-theme No. II - Water and Environment for Employment and Wealth Creation (ZOOM)</b>	
	10:00 - 10:10	Key Note Presentation: "Water and Environment for Employment and Wealth Creation" <b>Key Note Speaker: Prof. Alex Ariho, CEO, African Agribusiness Incubators Network</b>
	10:10 - 11:40	Panel Discussion: <b>Mr. James Ebitu</b> - Permanent Secretary, Gender, Labour and Social Development; <b>Eng Joseph Eyatu</b> - Director, DWD, <b>Dr Tom Okurut</b> - Executive Director, NEMA; <b>Ms. Cate Zziwa Nimanya</b> - Country Director, Water for People, and <b>Ms. Sophie Kutegeka</b> - Country Director, IUCN <b>Moderator: Dr Callist Tindimugaya, Commissioner, MWE</b>
	11:40 - 12:00	Panel and Plenary - Virtual Online -Discussion and Feedback
	<b>LUNCH BREAK</b>	
	<b>Parallel Sessions (ZOOM)</b>	
	14:00 - 16:00	<b>Session 3: Water and Environment for Employment and Wealth Creation - Policy, Practice &amp; Scientific Papers Presentation, refer to annex 1</b>   <b>Session 4: Training on Turning Waste to wealth: a video, presentation, and Plenary Discussion, refer to annex 3</b>
<b>END OF DAY THREE</b>		
Wednesday 16th September 2020	<b>Sub-theme No. III- Climate Change and achievement of National Development Plan III Goals - (ZOOM)</b>	
	10:00 - 10:10	Key Note Presentation: "Climate Change and National Development Plan III -" <b>Key Note Speaker: Dr Willy Kakuru- Consultant, Food and Agricultural Organization</b>
	10:10 - 11:40	Panel Discussion: <b>Hon Lawrence Biyika Songa</b> , Chairperson-Parliamentary Committee on Climate Change; <b>Dr. Florence Adongo</b> - Director, Directorate of Water Resources Management, MWE; <b>Ms. Edith Kateme Kasajja</b> , Former Deputy Executive Director, NPA and Member of Climate Change Negotiating Team for Uganda; <b>Mr. Edwin Muhumuza</b> - Founder and CEO Youth Go Green; <b>Ms. Marion Iceduna</b> , Consortium Manager ECO-DRR, CARE <b>Moderator: Rosemirta Birungi, Program Manager, AFID</b>
	11:40 - 12:00	Panel and Plenary - Virtual Online -Discussion and Feedback
	<b>LUNCH BREAK</b>	
	<b>Parallel Sessions (ZOOM)</b>	
	14:00 - 16:00	<b>Session 5: Climate Change and achievement of National Development Plan III Goals - Policy, Practice &amp; Scientific Papers Presentation, refer to annex 1</b>   <b>Session 6: Career Talk for young professionals, refer to annex 2</b>   <b>Session 7: Training on Natural resources based enterprises - by MUK (CAES) and MWE, a video, presentation, and Plenary Discussion, refer to annex 3</b>
<b>END OF DAY FOUR</b>		
Thursday 17th September 2020	<b>Water Security Conference ( ZOOM)</b>	
	10:00 - 12:00	Kampala Water Security Action and Investment plan conference sponsored by GIZ: refer to annex 4 <b>Moderator: Maurice Mugisha, UBC</b>
	12:00 - 12:30	Followed by a Plenary - Virtual Online -Discussion and Feedback
	<b>LUNCH BREAK</b>	
	<b>Parallel Sessions (ZOOM)</b>	
14:00 - 16:00	<b>Session 8: Water and Environment Security for inclusive-growth - Policy, Practice &amp; Scientific Papers Presentation - Part II, refer to annex 1</b>   <b>Session 9: Training on Solar pumping and micro irrigation: a video, presentation, and Plenary Discussion, refer to annex 3</b>   <b>Session 10: Training - An Introduction to Catchment Based Implementation of IWRM and WASH, refer to annex 3</b>	
<b>END OF DAY FIVE</b>		

Friday 18th September 2020		Parallel Sessions (ZOOM)		
10:00 - 12:00	<p><b>Session 11: Water and Environment Security for inclusive-growth - Policy, Practice &amp; Scientific Papers Presentation - Part III, refer to annex 1</b></p>	<p><b>Session 12: Side Event -Adapting to impacts of Climate Change through a Catchment based IWRM approach - Experiences from EURECCCA Project, refer to annex 5</b></p>	<p><b>Session 13: Training on approaches to climate change mitigation and adaptation: a video, presentation, and Plenary Discussion. refer to Annex 3</b></p>	
LUNCH BREAK				
<b>UWEWK2020 WRAP UP &amp; CLOSING CEREMONY @ MWE Auditorium and Live-stream on UBC &amp; NBS TVs. and ZOOM</b>				
14:00 - 14:05	Welcome to the Closing Ceremony			
14:05 - 14:15	UWEWK2020 Summary & Key Messages			
14:15 - 15:30	<p>Panel Discussion: <b>Dr Joseph Muvawala</b> -Executive Director, National Planning Authority; <b>Mr. Patrick Kahangire</b>, Retired Director of Water Development and Presidential Adviser on Water issues; <b>Ms. Maris Wanyera</b>, Director- Cash and Debt Policy, Ministry of Finance; <b>Dr Eng. Silver Mugisha</b>- Managing Director, NWSC; <b>Ms. Jane Mselle Sembuche</b> - Country Director, WaterAid; <b>Dr Arthur Bainomugisha</b> - Executive Director, ACODE</p>		<p><b>Moderator: Maurice Mugisha (UBC) and Mildred Tuhaise (NBS)</b></p>	
15:30 - 15:35	Remarks by Minister of State (Water)			
15:35 - 15:45	Launch of Sector Strategy Documents			
15:45 - 16:00	Closing Speech by Guest of Honour: Rt Hon. Dr. Ruhakana Rugunda, Prime Minister of the Republic of Uganda			
END OF UWEWK 2020 CONFERENCE				

## ANNEXES

### Annex 1: Paper Presentation Time table (ZOOM) – presentation order and program may change without prior notice

#### Session 1:

S/No.	Date of presentation	Time of presentation	Title of Abstract	Theme for UWEWK 2020	Category of applied research	Author's Name
1	Monday 14th September 2020 between 10:00-12:00	Five (05) Minutes each Presentation and 55 minutes of Plenary Discussion	Reliability of Rural Water: a Fundamental for Inclusive Growth	Sub-theme 1: Water and Environment Security for Inclusive-growth	Policy	Elibabeth Buhungiro
2			Assessing the Water Sanitation and Hygiene facilities using GIS in the pro-poor urban in Kampala			Andrew Ssendyowa
3			Improving Dam Surveillance and monitoring in countries with non-existent legal and regulatory dam safety frameworks – A Case of Isimba Hydropower Plant (Uganda)			G. Rwakafunjo
4			Catchment degradation; a threat to Valley tanks: Case Study: Lokok Catchment, Karamoja		Practice	Kajimu Athamah
5			Ecosystem depletion attributes and cubing it in Maziba catchment			Gilbert Tusiime
6			Effect of Livestock Production Systems On Physio-Chemical Properties of Water in Mpigi District			Reuben Kawagga
7			The Climate Change Discourse: Where is the Media?			Rebecca Nabatanzi
8			Water and Environmental perspectives for refugee settlement: the case of Nyumanzi camp, Uganda			Gladys Acaya
9			Integrating Water Sanitation and Hygiene in school development plans; Experiences, lessons and recommendations based on the five schools in Kampala.			C. Kizito
10			Integrating Technology-Driven Solutions to Improve The Production and Utilization of Weather Products and Services in Uganda			Georgina Campbell Flatter
11			Groundwater resources management for sustainable socio-economic development in Uganda: status, challenges and prospects			Callist Tindimugaya
12			Sustainability of water and hygiene in rural healthcare facilities in western Uganda: Preliminary findings from interviews with stakeholders and a scoping review of the literature.			Jenna Davis
13			Justification for monitoring of groundwater levels in town water supplies in Uganda- a case of Albert Nile Catchment			Johnson Pule

#### Session 3

S/No.	Date of presentation	Time of presentation	Title of Abstract	Theme for UWEWK 2020	Category of applied research	Author's Name
14	Tuesday 15th September 2020 between 10:00-12:00	Five (05) Minutes each Presentation and 55 minutes of Plenary Discussion	Uganda to pay high price for tampering with environment. A Case study, Rwizi catchment, Mbarara Municipality	Sub-theme 2: Water and Environment for Employment and Wealth Creation	Policy	Gilbert Tusiime
15			Assessing the water footprint of irrigated rice production for Doho rice irrigation scheme, Butalejja district	Sub-theme 2: Water and Environment for Employment and Wealth Creation	Policy	Naula Catherine
16			Could the Health-Energy-Water-Agriculture Nexus be the Solution for improving African livelihoods?	Sub-theme 2: Water and Environment for Employment and Wealth Creation	Policy	Patrick Musinguzi
17			Better Livelihood Opportunities for Catchment Management in Maziba Sub Catchment, Kagera Catchment	Sub-theme 2: Water and Environment for Employment and Wealth Creation	Practice	Gilbert Tusiime
18			Challenges and opportunities for promoting private sector investment in tree seedling production in Uganda	Sub-theme 2: Water and Environment for Employment and Wealth Creation	Practice	Dennis B Mujuni
19			Citizens' perceptions on water, sanitation and hygiene service delivery impact on associated businesses and the water and environmental management for inclusive growth	Sub-theme 2: Water and Environment for Employment and Wealth Creation	Practice	Andrew Tebandeke
20			Developing Shea value chain for Wealth creation in Aswa catchment, northern Uganda	Sub-theme 2: Water and Environment for Employment and Wealth Creation	Practice	Sophie Kutegeka
21			The relevance of WASH community initiatives in boosting livelihood	Sub-theme 2: Water and Environment for Employment and Wealth Creation	Practice	Shafiq Kakeeto
22			The Role of Pollution Control Task Force (PTF) in Improving Environmental Compliance -A case study of Industries in Kampala City, Uganda	Sub-theme 2: Water and Environment for Employment and Wealth Creation	Practice	Stacey Natunkunda
23			Moving Sanitation in Rural Growth Centres (RGCs) - A Business Opp	Sub-theme 2: Water and Environment for Employment and Wealth Creation	Practice	Stephen Alege
24			Trace metal pollution in the surface water and bioaccumulation in the Brycinus sadleri (Sadleri robber) and Barbus altianalis (Rippon barbel) fish species from River Rwizi in Western Uganda; the risks to both human health and economic development.	Sub-theme 2: Water and Environment for Employment and Wealth Creation	Scientific	Anthony Basooma
25			Situation of Groundwater Resources in Urban Areas of Uganda-The Case of Kampala City	Sub-theme 2: Water and Environment for Employment and Wealth Creation	Scientific	Julius Aheebwa
26			Safe water, Wealth and Household income among homes that harvest rainwater	Sub-theme 2: Water and Environment for Employment and Wealth Creation	Scientific	David Baguma

## Session 5.

S/No.	Date of presentation	Time of presentation	Title of Abstract	Theme for UWEWK 2020	Category of applied research	Author's Name
27	Wednesday 16th September 2020 between 10:00-12:00	Five (05) Minutes each Presentation and 65 minutes of Plenary Discussion	What is the contribution of sustainable biomass production and utilization towards achievement of Environment and Natural Resources and Sustainable Energy Programs National Development Plan III (2020/21-2024/25) Targets	Sub-theme 3: Climate Change and achievements of NDP III goals	Policy	Arafa Kamoga
28			Excessive deforestation in Uganda	Sub-theme 3: Climate Change and achievements of NDP III goals	Policy	Simon Peter Okello
29			Nodding Syndrome illness infections in northern Uganda	Sub-theme 3: Climate Change and achievements of NDP III goals	Policy	Simon Peter Okello
30			Examination of use of agro-ecologically based management strategies for resiliency to climate disasters as an approach to achievement of NDP III	Sub-theme 3: Climate Change and achievements of NDP III goals	Practice	Nakayemba Allen
31			Technology Needs Assessment for Climate Change Adaptation in the Forestry Sector in Uganda.	Sub-theme 3: Climate Change and achievements of NDP III goals	Practice	Joshua Zake
32			Farmers' Adaptation to Climate Variability Using Mobile Phones A Case of Kasangombe Sub-County, Nakaseke District, Uganda	Sub-theme 3: Climate Change and achievements of NDP III goals	Practice	Rashid Lukwago
33			Using the Impact based forecasting methodology (IBF) to reduce anticipated risks	Sub-theme 3: Climate Change and achievements of NDP III goals	Practice	Irene Amuron
34			National-Scale impact-based forecasting of flood risk in Uganda (NIMFRU)	Sub-theme 3: Climate Change and achievements of NDP III goals	Practice	Tumusiime D Moses
35			Drought Assessment (1987-2017) And Adaptive Capacity of Households to Water Scarcity in Kasali Sub-County, Kyotera District, Uganda	Sub-theme 3: Climate Change and achievements of NDP III goals	Scientific	Joseph Mukasa
36			Low Flow Analysis in Lake Albert, Edward and Victoria Basins	Sub-theme 3: Climate Change and achievements of NDP III goals	Scientific	Nanyunja Sylvia Ndahura
37			Comparative Suitability of the Global Hydrological Model GLOFAS Against a Catchment-Based Model to Simulate and Predict Floods in Uganda	Sub-theme 3: Climate Change and achievements of NDP III goals	Scientific	Mulangwa Douglas

## Session 8.

S/No.	Date of presentation	Time of presentation	Title of Abstract	Theme for UWEWK 2020	Category of applied research	Author's Name	
38	Thursday 17th September 2020 between 10:00-12:00	Five (05) Minutes each Presentation and 55 minutes of Plenary Discussion	Integrated Environmental Management Principles and Application: Case of NWSC	Sub-theme 1: Waer and Environment Security for Inclusive-growth	Practice	Innocent Twesigye	
39			The role of Watershed Partners in averting impacts of environmental degradation and poor water quality supply at River Mpanga Catchment			Lydia Biira	
40			Enhancing waterborne toilets to reduce water usage in schools: Experience from Kampala			Jude Byansi Zziwa	
41			Gendering The Design, Planning, Implementation and Operation of Sanitation-Hygiene Programs Under RWSSP in Karamoja			Prossy Nambi	
42			Lessons from the WASH Infrastructure - Age analysis in Kabarole District, Rwenzori Region.			Florence Anobe	
43			Setting A Foundation for Citywide Inclusive Sanitation, Kampala City			Bernadette Kwebiha	
44			The Water Security Action and Investment Plan for Greater Kampala: Tools and approaches to promote integrated planning for Water Security at the metropolitan scale			Lydia Ngonzi	
45			Water Security Threats Facing Greater Kampala: Current and Future Trends and Need for Transformative Institutions			Lydia Ngonzi	
46			Gender Equity in Agroforestry Resource Management in Elgon Regi			Peter Fuuna	
47			Assessment of the Faecal Sludge Management Services Delivery in Mbarara Municipality, Uganda			Charles B. Niwagaba	
48			Knowledge, Attitudes and Practices Towards Household Treatment of Piped Water Among Rural Households in Busoro Parish- Busoro Sub-County, Kabarole District, Uganda			Scientific	Otto Businge
49			Assessing the Impact of Land Use and Land Cover Changes on the Stream Flows Case Study-Upper River Rwizi Catchment			Scientific	Pamela Musiimeta
50			Impacts of Climate Variability and Land Use Changes On Streamflow in Upper Rwizi Sub Catchment, Uganda			Scientific	Arinaitwe Kimosho Emmanuel

## Session 11

S/No.	Date of presentation	Time of presentation	Title of Abstract	Theme for UWEWK 2020	Category of applied research	Author's Name
51	Friday 18th September 2020 between 10:00-12:00	Five (05) Minutes each Presentation and 55 minutes of Plenary Discussion	Role of Uganda's National Hydrological Service in Inclusive Growth	Sub-theme 1: Water and Environment Security for Inclusive-growth	Scientific	David Kataratambi
52			The potential of rainwater harvesting for domestic and irrigation of selected crops in Mbale District, Uganda			Joash Bwambale
53			Molecular genetic diversity and differentiation of Nile tilapia ( <i>Oreochromis niloticus</i> , L. 1758) in East African natural and stocked populations			Papius Dias Tibihika
54			The Right of Use and Economics of Irrigation Water in Uganda- A Comparative Analysis of Small Scale Irrigation Schemes in Eastern, Northern and Western Uganda			Ogwai Harold
55			Bacteriological Quality of Potable Borehole Water In a Peri-urban Area – A Case Study from Iriiri, Napak District, Uganda			S. Kizza-Nkambwe
56			Assessment of Ground Water Potential in The Upper Nile Water Management Zone			Daniel Samson Okurut
57			A collaborative resource-recovery game to enhance urban sanitation planning			Charles B. Niwagaba
58			The impact of abstraction on the quality and quantity of groundwater in Kampala. A case of Kawempe division			Thaddeus Matovu
59			Developing and Validating a Landsat Model to Argument In-situ Monitoring of Fresh Water Lakes in Uganda			Esther Namakula
60			Impact of irrigated and non-irrigated cropping systems on soil physio-chemical properties in a small scale irrigation farming system in Eastern Uganda			Issa Kaduyu
61			Spatial Vulnerability Assessment of River Mitano Catchment to Degradation in SW Uganda-Congo Boarder			Patrick Musinguzi
62			Massive soil loss due to erosion beyond tolerable limits and an environment threat in the highlands of Uganda			Patrick Musinguzi
63			Transforming lives of the rural vulnerable communities through the provision of safe, sustainable domestic water supply and sanitation services			Azzora David

## Annex 2: Career Talk (ZOOM)

### Session 6 Program – PROGRAMME: 2<sup>nd</sup> Career Talk for YOUNG WATER AND ENVIRONMENT PROFESSIONALS

Wednesday September 16, 2020 at 1:50- 4:30 p.m. East Africa Standard Time (EAST)

Topic	Proposed Panellist	Main topics to cover	Time
Welcome remarks	Moderator-Kemi Ruyondo	Welcome participants, ask participants to check in the chat, where they are joining in from, what are their expectations	15 minutes (Starts from 1:50 pm)
Recap from the last career talk-key lessons moving forward	Mary Namukose	History of career talk, Key messages from last year and the link to career talk at UWEWK 2020, Objectives of the career talk	10 minutes
Recap	Moderator-Kemi	Samples and reads some of the expectations of participants, Introduces the next presenter	5 minutes
Personal Story 1- Career journey from a senior professional	Senior Professional: Dr. Flower Msuya (AWARD Alumni from Tanzania)	Career development from entry to retirement, Challenges and How you navigated them? Advice to YWEP	20 minutes
Personal Story 2- Career journey from a YWP	Emerging Water and Environment Professional: Shafiq Kakeeto from SVN Uganda	Journey from University up to date, Finding that job- the challenges encountered, Impact of COVID to you as a YWEP- Take away for the YWEP	15 minutes
<b>Q &amp; A to panellists- moderated by Faith</b>			<b>10 minutes</b>
Career Purpose -Road Map	Allan Bukusi: Leadership Coach MDI-Nairobi, Kenya	Career roadmap- why it's important? Prepare for exit the day you get a job-brief remarks on retirement	20 minutes
<b>Q &amp; A to panellists- moderated by Mary</b>			<b>10 minutes</b>
Ice breaker	Chat Question by Kemi	What comes to your mind when someone mentions: Mentorship Reads answers from the polls and introduces next speaker	5 minutes
Role of mentorship in professional development	Dr. Sarah Mubiru, Kampala Uganda	Role/benefits of mentorship, Who is a mentor, mentee and their roles and responsibilities? Where can you find a mentor? Dos and Don'ts	20 minutes
<b>Q &amp; A to panellists- Moderated by Kemi</b>			<b>10 minutes</b>
Closure		Group Photo: Participants turn on cameras, thank you message,	10 minutes
<b>TOTAL TIME</b>			<b>150 Minutes</b>



## Annex 3: Training Concept Notes (ZOOM)

Session 2 – Training on SDG 6 – Monday September 14, 2020 at 2:00- 5:00 pm EAST.

### BACKGROUND

Water and sanitation, as absolute necessities for people, planet and prosperity, are at the very core of sustainable development. Safe drinking water and adequate sanitation and good hygiene are pillars of human health and well-being. The 2030 Agenda for Sustainable Development includes a dedicated goal on Water and Sanitation (SDG 6) that sets out to “ensure availability and sustainable management of water and sanitation for all.” SDG 6 expands the MDG focus on drinking Water and Sanitation to cover the entire water cycle, including the management of water, wastewater and ecosystem resources. SDG 6 does not only have strong linkages to all of the other SDGs, it also underpins them; therefore, meeting SDG 6 would go a long way towards achieving much of the 2030 Agenda. It has however been noted that there is still limited understanding and capacity by the various stakeholders on the meaning of SDG 6 and its various indicators and targets and how to collect and interpret data.

### Purpose the training

Therefore the proposed training aims to enhance the understanding of SDG 6 and its monitoring framework, the scope and meaning of the various indicators and how to collect and interpret the data in Uganda’s context.

### Target Beneficiaries

This training targets water, sanitation and hygiene sector stakeholders including those that are engaged in policy formulation and those that are implementing WASH related interventions. It also targets the other line sectors of energy, agriculture, health and education etc.

### Proposed Approach and training methodology

Considering the time allocation of 2 – 3 hours, the training shall focus on the following

#### Introduction to the SDG 6 training

- Meet and get know the participants and facilitators
- Expectations and Objectives

#### Overview of the SDG framework

- Linkage between SDG 6 and other goals
- Water and sanitation contribution to sustainable development
- Monitoring water and sanitation in the 2030 Agenda at global level

#### Implementation of the SDGs with special focus on SDG 6 in Uganda

- SDG 6 indicators, targets and monitoring methodologies
- Overview of SDG 6.1 – SDG 6.6 indicators, targets and monitoring methodologies
- Data collection, analysis and interpretation base on case studies on 6.3 and 6.6 indicators

## Training schedule

Activities	Facilitator	Time (EAST)	
		Start	End
Introduction to the Training	Solomon	14:00	14:20
Overview of SDG 6	Dr. Callist	14:20	14:50
<b>Question and Answer</b>		<b>14:50</b>	<b>15:10</b>
Implementation of SDGs (Goal six)	Rose Mirta	15:10	16:00
Data collection and Analysis (6.3)	Trinah K	16:00	16:25
Data collection and Analysis (6.6)	Carol N & Joseph E	16:25	16:45
Question and Answer and closure		16:45	17:00

## Implementation

- The water resources institute shall spear head the training working with the thematic Teams and other resource persons.
- Training shall be modulated by Solomon. The facilitators shall be as shown in the training schedule.
- Training shall be delivered online on Zoom on Monday 14th September 2020. The facilitators shall convene at the MWE auditorium.

**Conveners: Water for People, GIZ and Kampala Capital City Authority**

<b>Title of the Applied Training: Turning Waste to Wealth</b>	
<p><b>Description of Training Facilities and other logistics needed:</b></p> <ul style="list-style-type: none"> <li>✓ Open space where black soldier flies and market waste can be displayed to participants showing the break done process of the waste by the flies.</li> <li>✓ Open space where briquettes and compost can be displayed to participants</li> <li>✓ A table to display the IEC materials/ tools</li> <li>✓ Chairs with social distancing and masks.</li> </ul>	
<p><b>Profile of the Target Participants:</b></p> <ul style="list-style-type: none"> <li>✓ Town council or Municipal officials</li> <li>✓ District Officials (District Education officers, Community Development officers, District Health officers among others</li> <li>✓ NGOs promoting Sanitation</li> <li>✓ Ministry officials especially from MOEs, MWE- Public Health Specialists</li> <li>✓ Other WASH practitioners</li> </ul>	
<p><b>Prior knowledge or experience required:</b> Basic knowledge in Sanitation</p>	<p><b>Professional or educational requirements:</b> None</p>
<b>Profile of the Facilitators</b>	<ul style="list-style-type: none"> <li>✓ Sanitation Engineers with over 10 years of experience working on treatment and re-use options</li> <li>✓ Environmental Health professionals</li> </ul>
<p><b>Proposed Learning objectives of the Applied Training</b></p> <ul style="list-style-type: none"> <li>✓ To gain knowledge on re-use options for faecal sludge (co-composting, briquettes and Bio toilets)</li> <li>✓ To build capacity of participants on how to make faecal sludge briquettes, design and construct biotoilets and co-composting using black soldier flies)</li> <li>✓ To gain understanding of the business models around FS briquetting and co-composting.</li> </ul>	

### **Description of the Applied Training:**

Content/Subject Matter:

**Faecal Sludge Briquette:** As part of the sanitation mission, disposal or repurposing of accumulating fecal sludge has become a concern. One option for addressing the problem is to convert some of it into a heating fuel in the form of eco-briquettes, sticks and honeycomb blocks.

**Black Soldier Flies:** One tonne of larva comprise of 1.5 million larva and need 3.5 tonnes of organic waste to feed. KCCA has created a farm producing half a ton of larva a week. The black soldier fly larva has been found to thrive on organic market waste and 50% pit waste.

### **Method of facilitation:**

02 Short video clips showcasing actual FS briquetting process including; production & packaging, and black soldier flies production process including waste break down process by the flies. In addition, actual demonstration of the production processes for both briquette and black soldier flies will be done in the open space at the ministry in the presence of a few participants.

An interactive session of question and answer, as well as quizzes will be done. Most active participants will be motivated with prizes.

✓ **Wrap-up module:** Summarize the learnings and follow up actions

### **Didactics:**

✓ Lecture	✓ Role play	
✓ Debate/discussion	✓ Demonstration	
✓ Exercise	✓ Quiz	

**Conveners: Makerere University (CAES) & Ministry of Water and Environment**

**Team members:** Dr. Patrick Musinguzi, Prof Twaha Basamba, Gwendolyn Zake, *et. al.*

### **Background**

The Ministry of Water and Environment (MWE) in collaboration with key partners are organizing the 3<sup>rd</sup> Uganda Water and Environmental Week (UWEWK) at the Water Resources Institute (WRI) in Entebbe from Monday 23<sup>rd</sup> March to Friday 27<sup>th</sup> March 2020. The theme is '*Water and Environment Resources for Inclusive-Growth, Employment and Wealth Creation*'. The UWEWK 2020 is now intrinsically linked to the (i) Sustainable Development Goals (SDGs); with the ultimate goal of achievement of economic goals such as reaching middle income status by 2020; and to (ii) the Uganda's National Development Plan III (NDP III), which focuses on achieving structural transformation through increased industrial activity, with emphasis on manufacturing, including value addition in agro-processing. As Uganda seeks to industrialize and meet national development goals, development and management of water and environment resources will be critical to ensuring steady growth of the manufacturing, agricultural and service sectors.

It is against this background the UWEWK 2020 has considered building capacity of interested practitioners and related parties in natural resource based entrepreneurship for wealth creation. Uganda is well-endowed with a range of natural resources, critical for empowering entrepreneurs to utilize the resources optimally with right investment decisions.

### **Goal of the training:**

The goal of the training is to build capacity in skills of entrepreneurs in various natural resources for better investment decisions and effective management

### **Module Objective**

The main objective of this module is to empower entrepreneurs with skills in natural resource planning and investment so that they can use resources for wealth creation while maintaining the environment.

### **Learning Outcomes**

At the end of this module, the trainees should be able to know;

- (i) Major natural resources for wealth creation in Uganda
- (ii) Attributes of successful entrepreneurship
- (iii) Natural resources, wealth creation and sustainable environment management
- (iv) The planning cycle
- (v) Organizing an on-farm/natural resource based business plan
- (vi) The successful natural resource based enterprises
- (vii) Management and monitoring of the natural resource enterprises



## Module outline

1. Introduction to natural resources planning for wealth creation
2. Understanding different resources in Uganda
3. Factors to consider during natural resources planning
4. The planning cycle
5. Data sources for planning
6. Components of a land/resource use plan
7. Organizing a land based business plan
8. The successful natural resource based enterprises (Examples of successes in forestry, agriculture, water, etc)
9. Management and monitoring of the natural resource enterprises

Session 9: Training on Solar pumping and micro irrigation: a video, presentation, and Plenary Discussion, on Thursday September 17, 2020 at 2:00- 4:00 pm EAST

<b>Title of the Applied Training:</b>		
<b>Description of Training Facilities and other logistics needed:</b> ✓ Solar powered Water Supply for Irrigation		
<b>Profile of the Target Participants:</b> ✓ WASH Practitioners		
<b>Prior knowledge or experience required:</b> <b>Some technical knowledge of water supply systems.</b>		<b>Professional or educational requirements:</b> <b>None.</b>
<b>Profile of the Facilitators</b> EWB USA	<ul style="list-style-type: none"> <li>✓ Developed with MWE Solar Powered Water Supply Guidelines for WASH sector</li> <li>✓ Developed practical design, installation, and O&amp;M manuals and training workshops</li> </ul>	
<b>Proposed Learning objectives of the Applied Training</b>		
<ul style="list-style-type: none"> <li>✓ Understand benefits and applications of solar powered water supply for irrigation</li> <li>✓ Understand possible challenges</li> <li>✓ Basic principles of design</li> <li>✓ Critical components for inspection during installation</li> <li>✓ Basic principles of Operation and Maintenance</li> </ul>		
<b>Description of the Applied Training:</b>		
Content/Subject Matter:		
<ul style="list-style-type: none"> <li>✓ Solar powered Water Supply Applications</li> <li>✓ Design Principles</li> <li>✓ Installation inspection Points</li> <li>✓ Operation and Maintenance</li> </ul>		
<b>Didactics:</b>		
<ul style="list-style-type: none"> <li>✓ Lecture</li> <li>✓ Discussion</li> </ul>		

Session 10: An Introduction to Catchment Based Implementation of IWRM and WASH  
 Thursday September 17, 2020 at 2:00- 4:00 pm EAST

**Conveners: IRC International Water and Sanitation Centre Uganda**

**Title of the Applied Training:** An Introduction to Catchment Based Implementation of IWRM and WASH

**Description of Training Facilities and other logistics needed:**

In this training there is need for breakout groups for discussion and the mentimeter for participants inputs.

A link to the 2hours 30 minutes training should be shared early for prior registration by the participant.

**Profile of the Target Participants:**

- ✓ Academicians and students of public Health, Water and Environment, Development
- ✓ WASH CSOs and implementing partners of Government
- ✓ Catchment Based Management Committee members and supporters
- ✓ Water and Sanitation Developers
- ✓ Private sector Players in the WASH and Environment sectors
- ✓ Policy Makers and other interested professionals

**Prior knowledge or experience required:**

Open

**Professional or educational requirements:**

Open

**Profile of the Facilitators**

- ✓ Albert Orijabu- Assistant Commissioner for Policy and Regulation- DWRM/MWE
- ✓ Prof Emmanuel Kasimbazi – WASH IWRM Specialist
- ✓ CSO Representative on IWRM Sector Working Group

**Proposed Learning objectives of the Applied Training**

- ✓ To Increase participants awareness, knowledge and skills in WASH & IWRM linkages
- ✓ To enlighten participants on the government policy priorities for WASH & IWRM
- ✓ To show case and thus promote adoption of the catchment-based management approach to IWRM & WASH
- ✓ To share the impact story for Watershed Programme as a best of practice approach

**Description of the Applied Training:**

Content/Subject Matter:

*The applied training will focus on policy and practice for WASH and IWRM linkages. A presentation on the government policy environment and priorities for WASH and IWRM will be followed up with a presentation and discussion of the Catchment Based Management Approach for Water Resources- experiences of AWMZ in the Rwenzori Region. The Training will also use case study of the Watershed programme on building capacity of CSOs, promoting learning and advocacy for inclusive WASH and IWRM.*

*The following are the topics for presentation*

- ✓ Policy position of Government on WASH & IWRM
- ✓ Catchment Based Management approach to WASH & IWRM
- ✓ Watershed Impact Story in the Rwenzori Region- Learning, Capacity Development and Advocacy for WASH – IWRM

*Participants will be involved in plenary discussion following guided questions. Mentimeter will be used for the participants to share key highlights*

**Didactics:**

- |                        |              |
|------------------------|--------------|
| ✓ Lecture/Presentation | ✓ Multimedia |
| ✓ Discussion           | ✓ Group work |

Session 13: Approaches to Climate Change Adaptation and Mitigation on Friday September 18, 2020 at 10:00- 12:00 pm EAST

<b>Title of the Applied Training:</b> Approaches to Climate Change Adaptation and Mitigation		
<b>Description of Training Facilities and other logistics needed:</b>		
<ul style="list-style-type: none"> <li>✓ Projector</li> <li>✓ Audio equipment</li> </ul>		
<b>Profile of the Target Participants:</b>		
<ul style="list-style-type: none"> <li>✓ Civil servants in national ministries, Departments and Authorities</li> <li>✓ Environmental managers in private sector and civil society organizations;</li> <li>✓ Faculty, researchers and students; and</li> <li>✓ Interested citizens.</li> </ul>		
<b>Prior knowledge or experience required:</b>	<b>Professional or educational requirements:</b>	
<i>Basic Science and Geography</i>	<i>Diploma and Degree holders</i>	
<b>Profile of the Facilitators</b>	<ul style="list-style-type: none"> <li>✓ Dr. Kennedy Igbokwe – Team Leader Climate Change Program, Food and Agriculture Organization of the United Nations</li> <li>✓ Dr. Emmanuel Zziwa – Assistant Team Leader Climate Change Program, Food and Agriculture Organization of the United Nations</li> </ul>	
<b>Proposed Learning objectives of the Applied Training</b>		
<ul style="list-style-type: none"> <li>✓ Explained key concepts, terminologies and principles of climate change adaptation and mitigation</li> <li>✓ Acquired increased knowledge and skill on the application of variety of tools and methods/ approaches for climate change adaptation planning, implementation, monitoring and evaluation</li> </ul>		
<b>Description of the Applied Training:</b>		
Content/Subject Matter:		
<ul style="list-style-type: none"> <li>✓ The training aims to enhance capacity of different stakeholders to understand climate change science better and be able to explain the framework, tools and approaches for facilitating the planning, designing and implementation of climate change adaptation and mitigation projects. The following training sessions will be covered: <ul style="list-style-type: none"> <li>○ Basic Climate Change Science: Global warming, Greenhouse gases and consequences and Climate Change Scenarios</li> <li>○ Responses to Climate Change – Mitigation and Adaptation</li> <li>○ Adaptation to Climate Change: Understanding the framework and application of tools and methods for CC adaptation planning, designing, implementation monitoring and evaluation</li> <li>○ Mitigation to Climate Change: Understanding the framework and application of tools and methods for climate change mitigation planning, designing, implementation, monitoring and evaluation</li> <li>○ Action planning</li> </ul> </li> </ul>		
<b>Didactics:</b>		
<ul style="list-style-type: none"> <li>✓ Lecture with participation</li> <li>✓ discussion</li> </ul>	<ul style="list-style-type: none"> <li>✓ videos</li> </ul>	<ul style="list-style-type: none"> <li>✓ Action planning</li> </ul>

## Annex 4: Water Security e- Conference, Thursday September 17, 2020 Time 10:00 to 12:00 (EAST)

### THEME: WATER SECURITY FOR INCLUSIVE URBAN GROWTH

The national vision to transform Uganda's economy through industrialization is dependent on the country's capacity to strengthen fundamentals that drive socio-economic development, which include among others, urban development, land management, water and environment resources management, and innovation (GOU, 2013).

Water security has emerged as a primary sustainability challenge for urban areas at national and international level since it is a key determinant for security of other vital societal aspects including the economy, food, public health, and the environment and thus has a complex political spectrum that goes far beyond the traditional water sector. To achieve water security, there is need for policy makers (.gov), the private sector (.com) and civil society (.org) to create an environment which allows among other things, to enhance livelihoods of the urban poor who encroach on vital natural urban ecosystems, to mitigate and manage flood risk and damage, to efficiently use and manage surface and ground water resources, to reduce, treat and recycle waste and waste water, to protect and restore urban wetlands and forest ecosystems, and to make use of cross sector benefits arising from continued investment in water security.

The Ministry of Water and Environment, Kampala Capital City Authority, National Water and Sewerage Corporation, Uganda Manufacturers Association with support from the GIZ Natural Resource Stewardship (NatuReS) programme, will be hosting the Water Security E-Conference. The e-conference aims to bring together policy makers, the private sector, civil society, and academia to discuss the centrality of water security in achieving sustainable industrialization for inclusive urban growth, employment and wealth creation – NDP III and the role of collective planning and action in achieving water security for inclusive urban growth with a focus on Greater Kampala Metropolitan Area (GKMA). Greater Kampala Metropolitan Area has been earmarked as an economic engine to drive structural transformation of Uganda's economy to a competitive upper middle-income country. To achieve positive structural transformation, there is need to understand, project, plan and address water security threats likely to hinder growth and frustrate development efforts within and outside the Greater Kampala Metropolitan Area.

### E-Conference Objectives

The e-conference aims to strengthen the dialogue between actors and bridge the gap between evidence, policy and action through dissemination of the findings of the Water Security Action and Investment Plan (WSAIP) for the Greater Kampala Metropolitan Area. Specific objectives of the conference are:

1. To disseminate evidence to support investment in water security for inclusive urban development.
2. To discuss the water security agenda for Greater Kampala and the need for targeted investment actions.
3. To highlight the significance of private sector engagement in realizing the water security agenda.

## E-CONFERENCE SESSION PLAN

Time	Item	Responsibility
9:30 am- 10:00am	Participants Log on	
10:00am- 10.10am	Welcome and Introduction to the e-conference	<b>Moderator-</b> Maurice Mugisha
	<b>Ice Breaker</b>	
10.10am- 10.20am	Opening Remarks	Dorothy Kisaka Executive Director, KCCA)
10.20am- 10.30am		Jordan Martindale, UK Foreign and Common Wealth Development Office
10.30am- 10:40am		Mr. Alfred Okot Okidi Permanent Secretary, Ministry of Water and Environment
10.40am- 10:55am	<b>Keynote address</b> Water Security and Urban Growth: Exploring the link between water security and inclusive urban growth, employment, and wealth creation.	Dr. Fred Muhumuza, Makerere University
10.55am- 11.00am	<b>Ice Breaker</b>	
11.00am - 11.10am	<b>Introduction to the Water Security Action Plan (WSAIP)</b> <ul style="list-style-type: none"> <li>Overview of Water Security in GKMA</li> </ul>	Dr. Callist Tindimugaya (MWE)
11.10am - 11.20am	<b>The Water Security Action Plan (WSAIP): Key findings</b> <ul style="list-style-type: none"> <li>Evidence for water security investments</li> <li>Investment options and implementation towards a water secure GKMA</li> </ul>	Anthelem Iragena (MWE) and Christopher Kanyesigye (NWSC)
11.20am- 11.50 am	<b>Interactive Question and Answer Session</b>	Moderator
<b>Panel Discussion</b>		
11.50 am- 12.20pm	<b>What role can private sector play in achieving water security</b> Chairman Uganda Manufacturers Association (UMA) Board	Moderator
	<b>Stewardship approach in addressing water security in Lusaka, Zambia</b> GIZ Zambia	
	<b>Role of evidence and decision support tools in achieving water security</b> Professor Ken Strzepek (IEc)	
12.20pm- 12.30pm	<b>Closing Remarks</b>	Dr. Silver Mugisha Managing Director National Water and Sewerage Corporation

### Mode of delivery

- The water security e-conference will be held online via an easily accessible and usable platform. An access link will be shared to participants.

### Participants

- Over 250 guests will be invited to e-conference. E-invitations with the access link will be shared via email. Guests from the Ministries, Departments and Line Agencies, private sector, civil society organizations, academia and development partners will be invited.

**Annex 5: Session 12 -Side Event - Adapting to impacts of Climate Change through a Catchment based IWRM approach - Experiences from EURECCCA Project**, Friday September 18, 2020  
Time 10:00 to 12:00 (EAST)

**Conveners: EURECCCA Project Team- Ministry of Water and Environment**

**Objectives of the session**

- Share experiences of how a catchment based approach to the management of water and related resources is being used to improve resilience of the communities to impacts of climate change
- Highlight the role of stakeholders in the management of water and related resources
- Highlight key climate change adaptation actions that can improve resilience of the communities and improve their livelihoods and incomes

**Introduction**

The “*Enhancing Resilience of Communities to Climate Change through Catchment Based Integrated Management of Water and Related Resources in Uganda*” (EURECCCA) Project was designed to support Uganda’s Government efforts to implement Integrated Water Resources Management (IWRM) through Catchment Management Planning and implementation to increase the resilience of communities to the risk of floods and landslides in Maziba, Aswa, and Awoja Catchments. The overall goal of the project is to increase the resilience of communities to floods and landslides in Awoja, Maziba, and Aswa Catchments through promoting catchment based integrated, equitable and sustainable management of water and related resources. The project is implemented through 3 components namely; Component 1-Establishing Frameworks for Climate Resilient Catchment Management in Awoja, Aswa, and Maziba catchments; Component 2 - Implementing concrete adaptation actions for resilient and sustained ecosystems, agricultural landscapes and diversification of livelihood systems and Component 3- Building capacities of extension services and institutions at sub-catchment, catchment and WMZ level to support local communities and knowledge management.

**Experiences from the project**

**1. Multi sectoral Strategic guidance of the project**

The project is guided by various committees including the Project Steering Committee whose role is to provide strategic guidance to the project, ensure that resources are efficiently utilized, the project objectives are achieved in an efficient and effective manner. This is achieved through regular meetings to review and approve annual and quarterly project work plans and budgets, review and approve quarterly and annual progress reports, Review and approve project technical reports, and review and approve any modifications to the project execution strategies and arrangements. The PSC is composed of a multi sectoral team from various government institutions eg. Ministry of Agriculture, Ministry of Finance, Planning and Economic Development, Civil Society, NEMA, Climate Change Department, Directorate of Environmental Affairs and Ministry of Trade, Industries and Cooperatives. As a result, the different agencies have supported the Directorate of Water Resources Management in successfully implementing the project. For example, Ministry of Trade has been instrumental in guiding the operationalisation of the use of the revolving fund through the Water and Environment Cooperatives, as an incentive for communities to start other Income Generating Activities which are friendly to the environment.



## **2. Formation of Catchment and sub catchment management structures**

Three (3) fully functional Catchment management structures and 9 sub catchment management structures have been formed and supported to hold meetings as well as support the project activities. These committees consist of both political and technical leaders, representatives of the disabled, women (37%), youth and elderly at district and subcounty level. They have been mandated to oversee and participate in the implementation of activities within their catchments and as such, the project has witnessed successful mobilisation of community members during project execution resulting from their leaders being at the fore front of the implementation. Apart from the regular meetings that the committees hold, the capacity building initiatives by the project have placed these leaders in a good position to be ambassadors of CbIWRM in the various offices they hold.

## **3. Partnering with Other Government Institutions for sustainability**

Three (3) demonstration centres to facilitate experience sharing regarding ecosystems conservation, control of floods and landslides and Alternative Income Generating Activities have been established at National Agricultural Research Organisation research centres of NASSARI in Serere, KAZARDI in Kabale and NGETTA in Lira respectively. The Ministry of Water and Environment signed an MOU with NARO to this effect to provide land to demonstrate the various best practices in order to ensure sustainability of the demonstration centres even beyond the project period. The project has in turn supported NARO to set up the demonstration plots, renovate and equip their training facilities at the 3 research centres in order to create a conducive environment for training various stakeholders.

## **4. Promotion of improved cooking stoves through women groups**

One of methods targeted by the EURECCCA project to reduce on deforestation in the catchment is through promotion of improved energy saving stoves. This has been done through identifying existing 18 women groups (6 per catchment) to partner with in this cause. The women groups were then trained and given the skills of producing and marketing the cookstoves as well as given funds to produce the cookstoves within the communities. As such, the women have been empowered with an alternative source of income and a skill. The communities have also appreciated the energy saving stoves as a means of reducing the amount of firewood used, the amount of time taken cooking and the amount of money spent in a household.

## **5. Support of existing tree nurseries to produce tree seedlings**

Restoration of degraded land is one of the major outputs of the project where it is expected that 1,200,000 tree seedlings are expected to be planted. The EURECCCA project targeted the existing tree nurseries in the catchment and supported them with trainings, tools, inputs and seeds to expand their tree nurseries and supply the required tree seedlings. As such, the 9 targeted tree nurseries (3 per catchment) have been able to supply the community members with various tree species that have been planted. The nursery operators have also been trained on how to manage a tree nursery and grow trees and are in charge of following up the planted trees so as to ensure a high survival rate.

## **6. Community based restoration of degraded areas**

The project has employed a stakeholder/ community-based approach of restoring degraded riverbanks, wetlands and construction of water harvesting and flood control structures as a means of enhancing the resilience of the ecosystems and communities to the risk of floods and landslides. As such, local consultants were hired to support the communities to prepare restoration action plans and later supervise their implementation. The community members that were mobilised during the preparation of these plans were the same communities that implemented the action plans by providing labour to construct the water harvesting and flood control structures, plant the tree seedlings and install the pillars, all required for restoration of the ecosystems.

### **Invitation to Participate in the Side Event**

During the UWEWK2020, the proponents of EURECCCA Project will share the above experiences and lessons learnt, so far, in a two-hour session on the side lines of other events on Friday September 18, 2020 starting from 10a.m. EAST. Please register to participate in this side event. You are welcome.

