

ISSUE 03 Tuesday,
15th September, 2020



UGANDA
W&E
WEEK



THE WATER FRONT

Newsletter



(R-L) Eng. Joseph Eyatu, Acting Director, Directorate of Water Development, Dr. Callist Tindimugaya, Commissioner Water Resources Planning and Regulation at Ministry of Water and Environment and Ms. Cate Nimanya, the Country Director of Water For People during the plenary session on September 15, 2020

Uganda Water and Environment Week (UWEWK) 2020

will run from Sept 13th – 18th, 2020. Theme: 'Water and Environment Resources for Inclusive Growth, Employment and Wealth Creation.'

Sub-themes:

- i. Water and Environment Security for Inclusive Growth
- ii. Water and Environment for Employment and Wealth Creation
- iii. Climate Change and achievements of NDPIII goals

Water and Environment for Employment and Wealth Creation

The 3rd day of UWEWK 2020 focused on the sub-theme *Water and Environment for Employment and Wealth Creation*. The sub-theme aimed at facilitating discussions on how societies should govern and develop their water and environment resources for employment and wealth creation and improving people's livelihoods.

The sub-theme focused on 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 water demand and supply were shared.

The session highlighted opportunities for increasing incomes and employment through sustainable use and value addition to water, environment and natural resources.

The session moderator was Dr. Callist Tindimugaya, the Commissioner, Water Resources Planning and Regulation at Ministry of Water and Environment. The keynote address was made by Prof. Alex Ariho, the CEO of African Agribusiness Incubators Network. Panel discussants included Mr.

From page 1

James Ebitu, the Permanent Secretary of Ministry of Gender, Labor and Social Development (MoGSD), Eng. Joseph Eyatu, the Acting Director of Directorate of Water Development at Ministry of Water and Environment, Dr Tom Okurut, Executive Director National Environment and

Management Authority (NEMA), the Acting Director of Directorate of Water Development at Ministry of Water and Environment, Ms Cate Nimanya Country Director Water for People, Ms Sophie Kutegeka Country Director (IUCN).

The keynote address was made by Prof. Alex Ariho, the CEO of African Agribusiness Incubators Network.

He highlighted the fact that globally, there is inadequate water. This puts pressure on water and environment resources.

He mentioned that the increasing urbanization will contribute to further degradation of the environment.

He said the need to create awareness on sustainable land use management to create sustainable opportunities for employment and wealth creation for women and youth. He stressed the need to invest in clean water, water re-use, treatment of waste water in order to break the vicious cycle of poverty through sustainable utilization of water and environment resources, water for production. "It is high time we created a link between business development and water and environment. Water and environment resources play a big role in generating employment

He recommended the need to focus on water governance, developing effective and efficient models for employment and wealth creation around natural resources. He said it is important to look at other models on how they have managed capacity devt, green economy and waste water reuse. He said that if water resources

are developed, it can create job opportunities for the country. He called for the need to develop public private partnerships incubation models on hubs focusing in youth and women.

Prof. Ariho mentioned that there are four key drivers to Water and Environment employment and wealth creation which are ensuring technology innovation and functional management of water for wealth creation, water and environment accounting for sustainable livelihood improvement, inclusive access to water as a driver of job, employment and wealth creation and modelling employment and wealth creation around water and other environmental resources. He mentioned that well as there will always be plenty of water in the world, the amount of usable freshwater that is easily accessible is rapidly shrinking due to increasing populations, food demand and inadequate water infrastructure. He said water resources need to be managed for wealth creation through land use management, community engagements, improving livelihoods, increasing access to safe water and improved standards of sanitation and hygiene, water reuse and innovation.



Prof. Alex Ariho

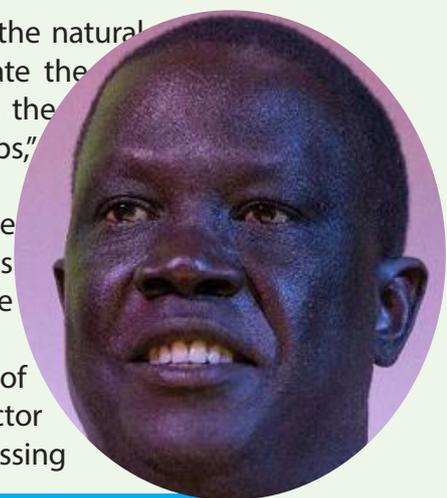
Dr. Tom Okurut, the Executive Director, National Environment Management Authority (NEMA).

He called for the need to invest in water and environment as an essential product that will propel sustainable development in Uganda. "It is unfortunate that we assume water is there and we do not plan or invest in it, but we continue degrading the environment," he said. He said that the ever increasing population will increase demands on national resources. "Uganda has a population of 45.7million and most of these are dependent on natural resources.

One of the factors is to make the natural resources relevant is to regulate the population and invest more in the national resources to create jobs," he noted.

He stressed the need for value addition on national resources through development and use of innovative technologies.

He noted that the productivity of land is declining and private sector need to contribute to addressing issues of degradation.



Dr. Tom Okurut

Mr. James Ebitu, Permanent Secretary, Minister of Gender, Labor and Social Development (MoGLSD)

He congratulated the Ministry of Water and Environment for organizing the UWEWK 2020 and appreciated the sector for involving Ministry of Gender, Labour and Social Development. He said the mandate of MoGSD is to ensure survival, dignity of human persons. "Human life doesn't occur in vacuum. The environment and water is critical and many speakers alluded to the fact that water is life," he said. He mentioned that MoGLSD had relevant flagship programs, including the youth livelihood program, green jobs and fair labour program, which offer jobs and wealth creation. He said MoGLSD has projects that facilitate youth engagement in fish cage farming, low cost irrigation, briquette making, which has reduced deforestation for charcoal burning. These projects are in Buvuma, Moyo, Jinja, Pallisa, Bukedea, and Nyowa. He mentioned that MoGLSD promotes green jobs' creation, safe and productive restoration of the ecosystems and they have a pilot project in Kampiligisa in Mpigi district where people can go and learn. He mentioned that the MoGLSD has planned to open up regional satellite centers to facilitate learning.

He noted that the entrepreneurship program comes in three forms which depend on primary nature resources for inputs and examples of these are crop and animal production and fish farming. "We have supported enterprises that fall in the category of protection and management of the environment such as waste recycling, energy saving," he added. The youth livelihood program which is one of our first examples is a demand driven initiative. Under this program 59% of the investments are in the field of agriculture and this can further be disaggregated into 34% primary production and 25% which falls under small scale manufacturing which includes agro processing for value addition others are in trade and service sectors. He noted that MoGLSD has financed 200 fish cage farming projects worth sh1.8b in the past five years in the district of Buvuma, Kalangala, Namayingo, Moyo and Jinja with direct employment of 2,416 youth across the country. Like other speakers he alluded to the factor that Water is the most critical element for the environment adding that water is life. Citing the Bible he said the relationship between man and the environment is grounded in Genesis 1: 26-28 where God commands us to be fruitful and multiply and fill the earth and subdue it and have dominion over fish of the sea and other birds of the air.



Eng. Joseph Eyatu, Acting Director, Directorate of Water Development, Ministry of Water and Environment

He highlighted the link between the Water and Sanitation sub-sector to employment and wealth creation mentioning that access to safe water and improved standards of sanitation and hygiene were part of daily survival.

He said that amidst the Covid-19 pandemic, there is need to encourage people to frequently wash their hands with soap and water and observe good standards of sanitation and hygiene. He highlighted the plight of the girl child who continue to drop out of school due to unavailability of water. "Menstrual Hygiene Management (MHM) is critical and can be addressed through provision of clean and safe water," he said. "We have 88% of women walking less than 1km to get water and as a sector we are addressing the issue of productivity by increasing storage of water for communities," he said. He said the sector has invested in both small scale and large scale irrigation schemes to address the growing need of farmers. The sector has increased access to improved sanitation and hygiene through promotion of sanitation and hygiene, establishment of Umbrella Organizations to address the needs of community. He called for the need to provide technical guidance to farmers and technologies to increase productivity. He said the sector's irrigation masterplan will open opportunities for private sector collaborations and investments.

Ms. Agnes Kirabo, Executive Director, Foods Rights Alliance

The centrality of food and how it underlays with water. Employment creation and wealth, its huge but it is also fascinating,

There is a perception that issues of water and environment are only for people within the sector. There is another perception that people outside the sector should only complain, exploit and misuse the environment. This is wrong.

I do congratulate the Ministry of Water and Environment for bringing this discussion and building the nexus and it is my hope that it moves to other sections as well to facilitate joint planning.

Water and the environment is at the heart of transformation of other sectors including contributing to employment and achievement of the goals in the 3rd National Development Plan (NDPIII).

It is unfortunate that many actors in the agricultural sector think about water only when it is too less or too much. But if it is in adequate amounts, they rarely think or talk about water.

The thinking that the water is too much is the limited ability to exploit the water resource and this will

and has caused challenges right from individual to institutional level.

There is need to think about the awareness creation models to give out to Ugandans to appreciate the values of one single drop of water.

We have allowed water to be a burden in some areas of these country. If we change people's perspectives about water as a precious item that you ever access during the day, then you can improve how we improve the resource. We always talk about water for industrialization and irrigation but we forget to talk about water for livestock.

Technologies for water for agriculture should be made available and accessible including solicited or unsolicited technical advice on how we should sustainably manage the water at our disposal so that it is not a burden and that we can use it all year round. With NDPIII, it is for us to approve or disprove the world on whether we will implement it successfully or not. The choice is with us. Water and Environment is one aspect that really requires investment and we are not going to run away from that.

We thus need to make strategic and painful decisions to ensure that our water and environment resources

Ms. Sophie Kutegeka, Country Director, International Union of Conservation and Nature (IUCN)

Ms. Sophie shared the work IUCN does in Uganda which includes generation of data and scientific knowledge to inform and guide planning and prioritization of country strategies and plans. She mentioned that IUCN has been rolling out Catchment Management Based Integrated Water Resources management in Uganda. Through their work, IUCN has been able to demonstrate how to work with communities, understand the value of water resources management, demonstrate that communities can be supported to create employment opportunities.

She said that catchment management structures provide guidance and oversight to investments and IUCN has demonstrated engagement and involvement of private sector in sustainable water resources management.



There is need to showcase the benefits of waste by Ms. Cate Nimanya, Country Director, Water For People

Ms. Cate Nimanya highlighted the need to sensitize the community on sustained waste management and the potential use of waste to make money. She said that this is because a big number of people do not know that waste is wealth. She cited the issue of fecal sludge management where people lack knowledge on what to do incase their latrines are full.

"Majority of the population do not know what to do when their latrines fill yet fecal sludge is a very great resource that can be turned into money through production of briquettes for energy," she said. Some sanitation technologies on the

To page 5

Parallel sessions on water and environment for employment and wealth creation

Training on turning waste to wealth

What kind of waste streams do you know in your community? Organic waste, polythene bags, leftover food and market waste, sewage, wood, scrap metal, paper, plastic. The answers are many.

That was the ice breaker at the training session on 'Turning waste into wealth' on the third day at UWEWK 2020. The sub-theme for the day was Water and Environment for employment and wealth creation. "In essence, our communities grapple with 4 types of waste – industrial, faecal, medical and municipal waste," said Dr. Najib Lukooya, Deputy Director for Sanitation and Environment at Kampala Capital City Authority.

A lot of this waste remains untreated and uncollected, causing damage to drainage systems and 81% of urban waste in Kampala is biodegradable, offering an opportunity for treatment and recycling.

"In dealing with urban waste, municipal authorities must put in place measures to recover this waste," Dr. Najib said. He also noted that the most challenging wastes are plastic bags. Plastic bottles can be recycled. "This is why KCCA, Coca Cola and Stanbic Bank are working on a major project to turn plastic bottle waste into fiber," he said. This fiber will feed other industries, including the beauty industry.

In line with wealth creation, KCCA is currently carrying out operations to sort organic waste by breeding black flies from organic waste. This translates to wealth creation, for example, for livestock farmers who would have an alternative for livestock feed. The black soldier flies' larvae



Dr. Najib Lukooya

are more cost-friendly than silver fish.

Speaking at the same session, Yvonne Sanyu Lugali, the Sanitation Engineer at Water for People, said another way to turn waste into wealth is through recycling fecal sludge.

The sludge is treated and combined with charcoal dust made from peelings from sugar cane, matooke or pineapple to make the briquettes more sustainable. "The briquettes save households from expenditure on charcoal," Ms. Lugali said.

"A bag of charcoal costs between sh100,000 and sh120,000. The same quantity for briquettes costs half that price.

So, a household is able to save and use the briquettes for a full month, yet a sack of charcoal might not last the month."

Dr. Najib emphasized that it is in partnering with the private sector that we will begin to see real wealth creation for people and the country.

Continued from page 4

market cannot reach the poor person in the slums and Water For People are promoting business opportunities for people through working with small scale fabricators to make the technologies

available for people. She asked Government of Uganda to coordinate with finance institutions to finance business development especially in the water, sanitation and hygiene sub-sector, provide incentives or subsidies to small and medium enterprises and support them to access markets.

The Role of Pollution Control Task Force in Improving Environmental Compliance

Presenting on behalf of the Kampala Pollution Control Task Force, Ms. Natukunda Stacey from Ministry of Water and Environment and Namanda Clare from Kampala City Council Authority (KCCA) expressed that, "The non-compliance to wastewater discharge and waste management regulations by the industrial sector has greatly impacted the quality of the environmental assets in wetlands, Murchison Bay and Water Supply and biodiversity in Kampala and population therein." Uganda like many other developing countries, experiences rapid urban population growth and industrialization which has greatly endangered the environmental resources.

Kampala City is experiencing rapid urbanization with a daily population of 4.5 million and resident population of about 1.5 million.

The City is largely reliant on Lake Victoria as its major source of water which is currently polluted due to unregulated developments such as industries, commercials and human settlements. The Pollution Control Task Force (PTF) that was represented by Ms. Namanda and Ms. Natukunda is mandated with a task of averting non-compliance to wastewater discharge and waste management regulations by the industrial sector. Ms. Natukunda called for a collaborative planning to improve resource mobilization, efficiency, reducing costs of production while promoting recycling (waste to wealth innovations) and reduce impact on the environment.



Community members inspecting encroachment on Lubigi wetland in Wakiso district

Safe water, wealth and household income among homes that harvest rainwater by David Baguma, Gerald Karyeija, Willibald Loiskand

Wealth creation has a strong influence on the safety of drinking water. Besides, access to safe water and sanitation for all is essential for eradicating poverty, building peaceful and prosperous societies, and ensuring that 'no one is left behind' on the road towards sustainable development.

By having more households harvest rain water, wealth is increased partly due to possible reduction of expenses on water bought from vendors and the management of water-related health risks.

For this to be successful at household level, there should be follow-up strategies to improve storage cleanliness after the installation of the water supply equipment. This further succeed once programmes to improve reading are implemented, especially for women who are, in most cases, the immediate beneficiaries of wealth creation at the household level.



UWASNET members during a learning journey rainwater harvesting in Mbarara

Trace metals contamination of fish and water in Rwizi River by Anthony Basooma: Research Scientist (Aquatic Ecological Modeller), National Fisheries Resources Research Institute

River Rwizi in Western Uganda, is a principal water source for about 5 million people in its catchment area. There has been trace metal pollution contributed by both domestic and industrial activity.

Better livelihood for catchment management in Maziba sub-catchment by Mr. Gilbert Tumusiime.

The presenter highlighted the importance for forest management towards improving livelihood. He said forests supply 88% of Uganda's energy needs, 61% of Uganda's tourism income and creates jobs for about one million people in Uganda.

It was noted that Uganda loses 120,000 hectares of forests cover per annum. However, the rate of deforestation in Uganda is high there by degradation of water catchments.

"Consequently the country will soon become water stressed if citizens do not pay attention to forest management.

Although many trees have been planted in the catchment through various projects, it is not known how it has impacted livelihood of communities due to insufficient data available," he said.

The study he presented seeks to know how forest management has impacted livelihood of communities in areas trees have been promoted in the catchment.

The assessment began with baseline study on stakeholder identified the most degraded areas for tree planting and how it has impacted on their livelihoods

The findings were validated with the stakeholders for their review, updating, and agreeing on interventions to support communities to undertake forest restoration.

Community tree nurseries have been supported in the three sub-catchments under a private government partnership arrangement to produce 350,000 seedlings of different species, and siblings distributed to 3,400 farmers for restoration of 250 ha of degraded land in the catchment.

He presented the following results as highlighted below;

- i. Community nurseries production capacity has improved from <10,000 per season to above >30,000 tree seedlings due to support provide I form of improved seeds, tools and implements.
- ii. Tree nurseries supported have been able to increase the number of community members working on nurseries especially the women, youth and elderly.
- iii. Number of different two species planted in catchment have increased from <30,000 to >50,000 per season in pilot communities.

iv. 33,234 assorted tree seedlings (fruits, timber, fodder and ornamented tree seedlings) have been distributed and planted in the last 2 months.

He noted that community led forest management is key since it makes easy to access seedlings for planting at subsidized rates.

Policy, practice and scientific paper presentations on water and environment for employment and wealth creation

[Health-Energy-Water-Agriculture Nexus, a possible solution for improving African livelihoods by Patrick Musinguzi, School of Agricultural Sciences, Makerere University](#)

Poor health remains the leading obstacle for millions of people in Africa for effective work both the formal and informal sectors of the labor market. Poor health is primarily attributed to poor sanitation and hygiene, poor nutrition, and unclean sources of water and energy. To satisfy the health needs of a human being requires innovative approaches that are interlinked for better leveraging of resources.

The Health-Energy-Water-Agriculture Nexus (HEWAN) is a new concept aims at the purposive use of making available resources for health lives, fuel, food, fibre forage and income using water, agriculture, and energy as key tenets for better livelihood.

More than half a million people die from health related complications associated to household air pollution. These are some of the issues the Nexus aims to address.

The HEWAN approach can contribute to overcoming energy poverty, nutrition disorders,

water challenges – boosting health, and improving livelihoods

Investment and policy decisions must be targeted to this concept to catalyze transformation for prosperous, healthy and economically empowered households in line with NDP III goals.

[Situation of groundwater resources in Kampala city by Julius Aheebwa and Dr. Callist Tindimugaya, Ministry of Water and Environment, Uganda](#)

Use of groundwater sources for urban water supplies is increasing because of its good quality and little or no treatment costs compared to surface water sources.

There is an increase in groundwater abstraction within Kampala city aquifers that demands need for more knowledge on the resource and how it relates to issues like climate change impacts.

There is an increase in groundwater abstraction within Kampala city aquifers that demands need for more knowledge on the resource and how it relates to issues like climate change impacts.

Water sector laws and policy reviews are needed to encourage more participatory approaches for quality self-monitoring data collection during well construction and operational phases.



Ministry of Water and Environment and sector development partners touring the irrigation scheme in Butaleja district



MINISTRY OF WATER AND ENVIRONMENT

Sponsors & Partners



EUROPEAN UNION



german cooperation

DEUTSCHE ZUSAMMENARBEIT

Implemented by:

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

NatuReS
NATURAL RESOURCES STEWARDSHIP PROGRAMME
Joint solutions for resilient economic growth



Empowered lives.
Resilient nations.

This newsletter has been produced with support from the Civil Society in Uganda Support Programme (CUSP) which is implemented by GIZ with funds from the European Union and the German government. The contents of this publication can in no way be taken to reflect the views of the European Union or the German government and GIZ.