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REMARKS FROM OUR EXECUTIVE DIRECTOR

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**WILLIES CHANOZGA MWANDIRA,
EXECUTIVE DIRECTOR- WESNET**

It is with gratitude that I welcome you to the first quarter edition of the WESNET newsletter for the year 2023. Looking back from where we are coming from and where we are now as a sector, I can testify that we have achieved great milestones and we are moving towards the right direction in providing quality WASH services.

The WASH sector in Malawi has had quite a number of challenges; poor funding, high vacancy rates, vandalism of public facilities, the Cholera pandemic and the Covid-19 pandemic which have shown that a lot needs to happen if we are to have a strong WASH sector.

However, let me say that I am satisfied with the support our various partners and members have rendered to the sector during the Cholera pandemic and also the Cyclone Freddy crisis that we experienced as a nation.

As always, we saw everyone coming out with the resources they had to help victims of the cyclone with various WASH related materials which is a plus as WASH is mostly not prioritised in times of crisis and disasters.

Let me also applaud the government for making it possible to start the National Sanitation and Hygiene Policy review processes. For so long we have been using an outdated policy which somehow disadvantaged the progression of development in Sanitation and Hygiene.

It is also commendable that we now have the Directorate of Sanitation, meaning that our Ministry is now complete. Our expectation is that, going forward, issues of Sanitation will equally be prioritised together with the other issues within the Ministry.

I would like also to thank all of you who took part in the 2nd WASH Innovation Fair. It couldn't have been a beautiful event if you weren't part of it.

Thank You!

Wesnet hosts Wash Innovation Fair



The Water and Environmental Sanitation Network (WES Network) organized a two-day WASH INNOVATION FAIR with the aim of providing WASH players in Malawi a platform through which innovations, technologies and proven best practices in Wash services can widely be shared.

On the first day, four public lectures were presented and participants had the opportunity of discussing issues surrounding Water, Sanitation and Hygiene. The activity was officially opened by the Director of Sanitation and Hygiene in the Ministry of Water and Sanitation Dr Modesta Kanjaye. UNICEF Malawi Chief of WASH, Dr Mougabe Koslenger and Wesnetwork board chairperson Yankho Mataya also made their remarks.



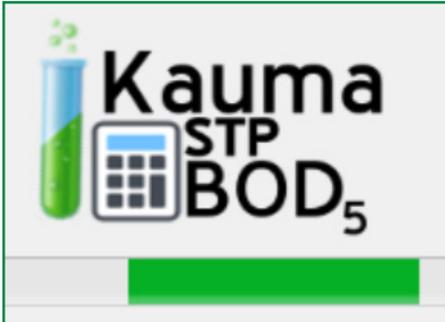
On the second day, 15 players in the WASH sector showcased their innovations and technologies to the general public. Deputy Minister of Water and Sanitation Honourable Liana Kakhobwe Chapota graced the second day of the Fair where she encouraged various players to continue the good work in promoting the WASH sector in Malawi.

Outstanding technologies were also recognised and winners went home with trophies and cash prizes.

World Vision Malawi, Evidence Action, Malawi University of Science and Technology (MUST), Mzuzu University (MZUNI) and Grace Pads showcased powerful innovations and were awarded for being outstanding in various categories.

The two-day annual event was being celebrated under the theme “Promoting climate resilient and sustainable technologies and innovations for improved WASH service delivery in Malawi.”

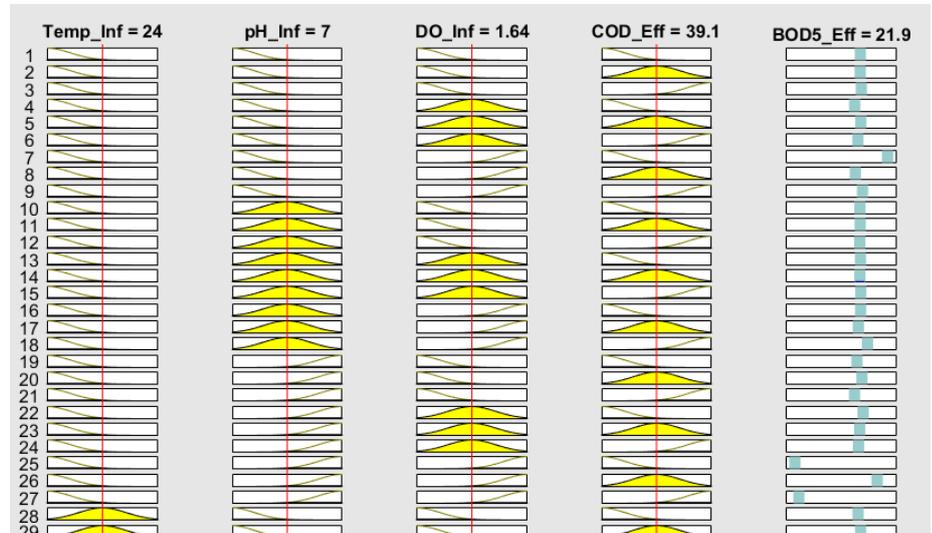
Artificial Intelligent Driven Software sensor for predicting Conventional wastewater 5 Days Biochemical Oxygen Demand



By Madalitso Mng'ombe

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The standard procedure of measuring Biochemical Oxygen Demand (BOD₅), which is an indicator used to monitor water quality, is time-consuming. Accordingly, relying on such procedures result in delays in the execution of crucial mitigation works, particularly in wastewater treatment plants where pollution is also inevitable. Previous research attempted to address this challenge by developing biosensors which proved unsuccessful owing to the high cost of purchasing and maintenance, the intensive calibration required, and that they are negatively affected by toxins and other inhibitors. Calibrating BOD₅ against Chemical Oxygen Demand (COD) had also limited success due to wide variability in the relationship between these two water-quality variables. Besides unlike COD, BOD₅ only characterizes the biodegradable component of organic matter in wastewater; as a result, it is the most important water quality parameter for assessing bio-treatability



To address all the mentioned challenges, a Software sensor for predicting BOD₅ was developed and validated with historical wastewater quality data for Kauma Sewage Treatment Plant, located in Lilongwe City, Malawi. The sensor which is driven by the principles of Artificial Intelligence (i.e. mimics human reasoning to make the decision) has an accuracy of $R=0.96$. The developed software sensor is expected to reduce treatment operation and testing costs, allow continuous monitoring, and consequently protect the environment. Future improvement of the developed software sensor



will include integrating it with hardware components through Supervisory Control and Data Acquisition (SCADA) system. Furthermore, the developed sensor will be updated with the data from rivers and other treatment facilities in Malawi to widen its application.

Strengthening wash in health care facilities



By Ulemu Mbengwani

Water, Sanitation and Hygiene (WASH) service in Malawi's Health Care Facilities (HCFs) falls short of World Health Organisation (WHO) standards. According to a Global progress report on water, sanitation, and hygiene in Health Care Facilities: fundamentals first (2020), 24% of public health facilities, including those providing maternal services, lack basic water supply; 23% lack improved and usable sanitation facilities; 32% do not have adequate hand hygiene facilities at points of care, and 58% do not have adequate waste management facilities.

WaterAid Malawi, with support from GIZ has managed to improve WASH in 15 HCFs in four targeted districts of Ntcheu, Lilongwe,

Mchinji and Dedza. The project called Strengthening WASH in HCFs, has been implemented in eighteen months, to a tune of £1 Million. It commenced in October 2021 and has been completed in March 2023. The project aimed at addressing inadequate and poorly managed WASH infrastructure, and weak hygiene and infection prevention control practices.

Kaigwazanga Health Centre in Mchinji is one of the targeted 15 HCFs that have received support. Gophius Chabwera, who is the assistant medical in charge at the facility is very thankful for this gesture. "Previously, our staff members used to find it difficult to relieve themselves during working hours due to lack of toilets. We had to walk all the way back home which is around 30-40 minutes away to relieve ourselves. That caused a lot of problems as we had to leave clients waiting, some



of which needed urgent medical attention." Said Chabwera.

This also applied to our clients who had to go out and most times utilise the nearby bushes as their





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toilets. This malpractice helped to spread diseases to surrounding communities. Added Chabwera.

Basic WASH services in HCFs are fundamental to providing the first line of defence against infections and are key in providing quality care and ensuring the safety of health workers, and patients against hospital-acquired infections. In addition, the availability of WASH services, especially in maternity and primary-care settings, also ensures equity and dignity of both health care workers and patients and the new-born babies.

Chileka Health Center is another facility that was supported under the Strengthening WASH in HCF project. According to Justin Chabwera, who is a Nurse (Midwife Technician) said that they are very thankful as a facility. “In the maternity section, water plays a huge role, and we mainly use it to clean our utensils. There are three buckets in the delivery room. The



first bucket contains soapy water, the second bucket contains water without soap, and we put placentas in the other bucket. We use water to clean all these utensils when they are soiled. Therefore, water is very important in the maternity section. Handwashing also happens at the maternity section because we can

spread infections if we do not follow Infection Prevention and Control measures”.

This project has supported a total of 15 Health Care Facilities in 4 districts with a combined catchment population of over 622, 786.

WHH donates water quality testing kit to Dedza district



By Angella Kashitigu

Welthungerhilfe (WHH) has supported the Dedza District's Water Development Office with a water quality testing kit comprising of equipment that will be used to obtain information on the physical, chemical, and biological characteristics of water.

Receiving the donation on 23 February 2023, the District Water Development Officer (DWDO) Sellina Kafansiyanji expressed gratitude saying the equipment will be beneficial to the district as it is a first of its kind.

She said for most water sources in rural areas there are no tests conducted regularly to determine if water is safe for human

consumption, but this will ensure safe water supply to the people in Dedza as they will be able to know when to treat water sources.

WHH has supported the district following a successful implementation of the "Strengthening Water Supply System and Hygiene Promotion in Primary Schools in Dedza District" project that saw the construction and rehabilitation of up to 100 boreholes in primary schools and surrounding communities in the district.

The project was implemented from August 2019 to December 2022 with financial support from Krombacher Brewery of Germany.

Mpatawamilonde CDSS Receives Water Supply System

Welthungerhilfe (WHH) with

financial support from the All for All Foundation from Germany handed over a reticulated water supply system to Mpatawamilonde Community Day Secondary School (CDSS) in Dedza district on 8 February 2023.

The water supply system uses a hybrid technology that allows water pumping through solar or electrical power.

Currently the system uses solar power, the water is being supplied to the school, toilets and to staff houses.

WHH facilitated the construction of the water supply system under its Hygiene and Nutrition Education project, which aims to promote nutrition behaviours while also creating a safe and conducive learning environment for students and teachers.

Breaking the barrier in borehole maintenance

By Chrispin Chavula

Being born a woman does not mean you can't do what men do. Stories have been told of great women who have done greater things than men. In the area of T/A Masumbankhunda their lives an energetic woman who has great passion towards what men do. Felida Kadangwe is the name. She is tall, brown in complexion, a mother of five children and a grandmother of 3 children.

She is 43 years old. Through the project that HFHM is implementing in Lilongwe District in T/A Masumbankhunda, Felida was trained to be an Area Mechanic. She has gained skills and knowledge in borehole maintenance and repairing. She is the only female member amongst 7 Area mechanics that were trained. Through this training, Felida said she will now be able to work in villages whose boreholes are not functioning, and, at the end, she will be able to earn money that will help to sustain her family.

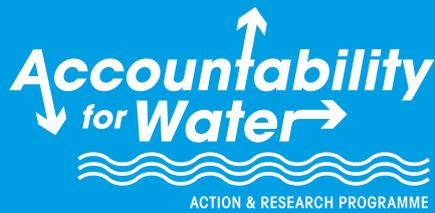
“I am very glad and happy to be trained as an Area Mechanic. At first, I had the perception that borehole maintenance and repairing is only for men. I never knew that I will be the only female



person to be trained. In my village people are very proud of me. I know that the skills and knowledge that I acquired during the training will enable me to rehabilitate the boreholes that are not in operation and in turn I will be able to earn

money which will help to sustain my family. I would say that my life now will change because I will be a self-reliant, independent woman and be able to support my family and take care of myself” Felida Kadangwe narrating the story.





Stronger water governance for Malawi's water sector

A new study from Water Witness

Introduction

How well is accountability provided for across Malawi's legislative frameworks for water resource management (WRM), overarching sector governance (OSG) and water supply and sanitation (WSS)?

Stronger accountability drives improved governance and services, with benefits for the most vulnerable¹.

To support **stronger water governance**, to help overcome Malawi's water security challenges, and unlock improved environmental protection, health and wellbeing, and economic growth, Water Witness makes the following constructive recommendations derived from the findings of our study:

What should change?

- 1** The NWRA should be given the authority powers to implement its crucial WRM and WSS functions, without political or executive interference.
- 2** Through **Government leadership**, the management of sewage treatment works needs to be transferred from city councils to water boards and regulation, roles and responsibilities for water supply services delivery need to be clearly defined.
- 3** The establishment of the Water Tribunal by the Government is essential to ensure oversight in promoting accountability.
- 4** Bottom-up processes of community-driven social accountability monitoring must be supported by CSOs to ensure these necessary participatory processes function.
- 5** The annual JWSR process needs to be strengthened as a performance reporting mechanism under the leadership of the MoWS with the support of Government bodies, CSOs, development partners and the private sector.

¹ Hepworth, N. D., Brown, B. D. and Brewer, T. (2020) *Accountability and advocacy interventions in the water sector: a review of global evidence. Part 1. Overview and Summary Results*. Edinburgh, UK. www.waterwitness.org.

Methodology

The study uses a methodology developed by the global Accountability for Water programme.

The methodology involves the following steps:

- 1 Identify **key functions** the water sector should perform in WRM, OSG and WSS.
- 2 Assess performance of each function across a simplified **accountability cycle** (Figure 1).
- 3 Review of the current **de jure**, or ‘on paper’, performance and scoring based on how well policy, legislation, regulations and statutory guidance provide for accountability.
- 4 Review of the **de facto**, or ‘in practice’ performance to assess how well each performs.
- 5 Generate **recommendations** for strengthening accountability and performance in water resource management across the sector.

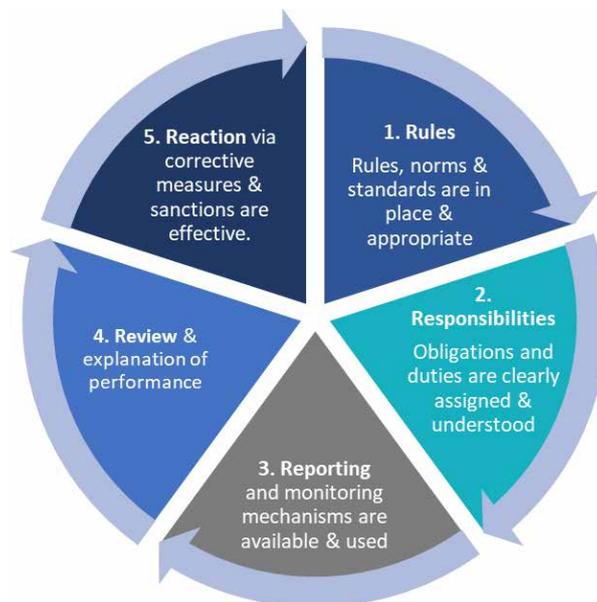


Figure 1: The 5 R's of a simplified accountability cycle applicable to water sector function

During the de jure component, **the following documents were reviewed:** Communications Act 2016, Corrupt Practices Act 2004, Environmental Management Act 2017, Malawi Public Service Management Policy 2018 to 2022, National Environmental Policy 2004, National Meteorological Policy 2019, National Sanitation Policy 2008, National Water Resources Master Plan 2017, National Water Policy 2005, Ombudsman Act 1996, Public Audit Act 2018, Public Finance Management Act 2003, Public Service Act 1994, Water Resources Act 2013, Water Resources Regulations 2018, Water Works Act 1995.

During the de facto component, senior and technical **officials from the following organisations were interviewed:** Ministry of Water and Sanitation, National Water Resources Authority, Office of the Ombudsman, Anti-corruption Bureau, Public Procurement and Asset and Water, Environment and Sanitation Network.

[Download the reports here](#)



Increasing access to maternal health: saved from a “deathbed”



By Gloria Nyirenda

Thonje Health Centre (HC) in Dowa-Malawi is one of the facilities that SHA/UP has supported with the provision of WASH services. According to Elisha Maunika, the Officer in charge of the facility; the clinic’s latrines were full, there was intermittent water supply due to power outage which forced the patients and guardians to fetch water from the neighboring community water points. Again, Thonje HC did not have a bathroom for the maternity wing and a placenta pit.

“Due to the poor sanitation levels, the Medical Council of Malawi

(MCM) deemed the facility unfit for operations and ordered its closure. As we were in the process of negotiations with the MCM, SHA/UP through the District Council committed its support to health centers through the provision of WASH facilities such as rehabilitation. Knowing that we were desperate, the district officials recommended Thonje facility, and this support saved the facility from it’s deathbed

SHA/UP has since rehabilitated and expanded a solar powered water system which supplies water to Thonje HC & expanded to WA Primary School and three surrounding communities. The system complements the already existing electrified system, thus; it

is used during electricity outages. UP/SHA has also constructed a bathroom for the maternity ward, latrines and a placenta pit.

In a Malawian setting, placenta disposal is one of the human processes that is characterized with myths and taboos that are associated with witchcraft. Women like Loveness believe that the placenta and human blood are used for fertility rituals. She believes that people use placentas and the blood from women that have given birth to cause misfortunes to either the mother or the newborn. Therefore, the absence of a placenta pit and a maternal bathroom exposed the blood and placentas which was a



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cause for concern for mothers that had come to the health facility.

Previously, Loveness delivered her three children at home. It is until she learnt that the facility has a placenta pit and a maternal bathroom that she decided to deliver her fourth baby at the healthy facility.

“I now feel safe to deliver my baby here knowing that my body tissues are in full custody of medical officials and are safely disposed. Much as I admit that home deliveries are not safe and that many women have lost their lives due lack of professional care during delivery, allowing such crucial organs to be carelessly disposed and accessed by anyone and anything including dogs was a risk I could also not take. I am just glad that now most women in my community are now able to deliver under the care of a medical personnel,” Loveness commends.



Elisha attest to the increased numbers of pregnant women that are accessing medical care at the facility since the installation of the placenta pit and construction of the bathrooms for the maternity wing.

“Since the installation of the placenta pit, we now have an average of 20 deliveries in a week

unlike before where we never had maternal patients. All placentas were previously discarded at dumping sites.” Elisha shares.

The water systems at the healthy centre serves over 500 people from the three neighboring communities and about 1000 learners at Thonje Primary school



During the 2023 WASH Innovation Fair, we recognised various innovations



SOAP MAKING- WORLD VISION INTERNATIONAL

World Vision International expresses its profound gratitude to Wesnetwork for the special recognition as one of the best NGOs at the recent WASH Innovations Fair.

World Vision International is a child centred Christian organisation which works with children to ensure they enjoy life in all its fullness.

Our WASH Programming engages children and youths to make the become Change Agents in Water, Sanitation and Hygiene and influence behaviour change in their various communities.

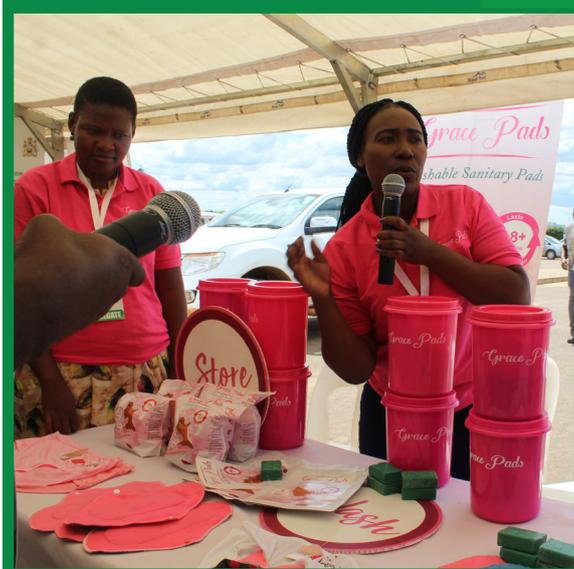
The award will therefore encourage WVI and the children at large to promote WASH in the country.

AUTOMATED WATER QUALITY MONITORING SYSTEM-MALAWI UNIVERSITY OF SCIENCE AND TECHNOLOGY

The project aims at tackling flaws in the water delivery system by focusing on after filtration and en-route contamination of water. Due to the recent incidences that have occurred in Malawi, particularly Lilongwe; residents have been experiencing dirty water coming out of taps in their homes. It is clear that more action needs to be taken to ensure safe clean drinking and multipurpose water is adequately delivered. To address this problem, the water quality monitoring

system prototype was created. The system uses a sensor which measures the transmittance and scattering rate which is affected by the amount of total suspended solids. The results showing the properties of the water being held or travelling en-route are displayed and appropriate action is taken according to the values being displayed. Given enough funding for further development, the system can be used on a water treatment plant level, industrial level and even household level to ensure safe drinking water for all Malawians.





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REUSABLE PADS MAKING-GRACEPADS

Grace Pads produces low cost reusable sanitary pads and hygiene kits through a network of partners. Our purpose at Grace Pads is to effectively combine sanitation, education and business and to empower young Malawian women to reach their full potential.

We accomplish this through direct distribution of sanitary kits via donations, NGO’s, raising awareness and educating girls on menstrual health and importantly by helping communities to become empowered. We reinvest 100% of the profits back into Grace Pads. This enables us to remain sustainable and to fulfill our purpose to donate pads to vulnerable girls across Malawi.

This year we have honored to receive such an important award as the best in the WASH innovation and technology sector, as grace pads we are extremely grateful for the recognition we have received for our work, because we had people who were more capable of winning this award.

Special thanks to the WESNET team for organizing such an amazing event

EVIDENCE ACTION INNOVATION

Evidence Action is implementing a Safe water program whose goal is to increase access to safe water among rural communities to reduce cholera and other diarrhoea diseases. The initiative delivers free and reliable safe water to people in rural communities in Zomba, Balaka, Mangochi, Blantyre, Chiradzulu, Mwanza, Neno and Machinga through chlorine dispensers and In-line chlorination devices and has proved to be cost effective. The innovation is cost effective and is based on research findings. Chlorine dispensers are installed at eligible water points and community members access chlorine from dispensers as they draw water and water is treated as they go home within 30 minutes. The innovation has addressed

the huge gap of limited access to safe water among the rural communities.

It was great to receive an Award as Best Innovative Civil Society in the WASH Sector during 2023 WASH fair organized by Ministry of Water and Sanitation in collaboration with WESNET that took place from 30-31 March 2023 in Lilongwe. This shows that our stakeholders and communities are able to appreciate our innovations and efforts in the WASH sector and also the impact of our program in the communities. We are geared to install and manage up to 15,811 chlorine dispensers in the eight targeted districts and reach over 2.7 million people by end June 2023 and continue supporting the communities in the next 5 years.



Minister asks WASH stakeholders to enhance collaboration

Minister of Water and Sanitation Honorable Abida Mia has called for collaboration among stakeholders in the WASH sector saying it is one way of addressing the challenges being faced by the sector.

She made the remarks in Lilongwe when she officially opened the two-day National

Joint Sector Review meeting under the theme “Forging concerted efforts to accelerate change in the WASH sector”.

Mia asked the stakeholders to discuss solutions to the current problems that in a certain way continue to contribute to the spread of WASH related pandemics like Cholera and Covid-19.

Representing CSOs in the WASH sector, Wesnetwork board

chairperson Yankho Mataya said the JSR meeting gives WASH players an opportunity to reflect on the sector’s performance in the year 2022 and to plan for the coming years.

Mataya, however, asked the Ministry to speed up processes of reviewing the 2008 Sanitation Policy as it will guide operations regarding sanitation.

APHRC and African Renaissance engages government and other stakeholders on gender mainstreaming in Sanitation policies



The African Population and Health Research Centre and the African Renaissance in March engaged the Ministry of Water and Sanitation and other stakeholders in the water, sanitation and hygiene sector in Malawi on gender mainstreaming in sanitation policies and practice.

Malawi currently relies on an outdated sanitation policy which is currently under review and this was an opportunity to discuss some of the missing gaps in the policy when it comes to gender mainstreaming.

Among others, African Renaissance shared a snapshot of the State of Gender Equality & Social Inclusion in Sanitation Policies & Practice, a survey which was undertaken in 14 countries including Malawi to understand how current policies/frameworks: - recognize/ and or respond to intersectional issues in sanitation, prevent/ or perpetuate discrimination or disadvantage to the detriment of vulnerable populations, diminish/ or sustain power and privilege through social & decision making structures, render marginalized and vulnerable groups visible/

invisible throughout the policy cycle and assess the impact of sanitation policies on access, usage, experiences by vulnerable users.

On the other hand, APHRC made a presentation which indicated the need for the improvement of institutional wash in the country.

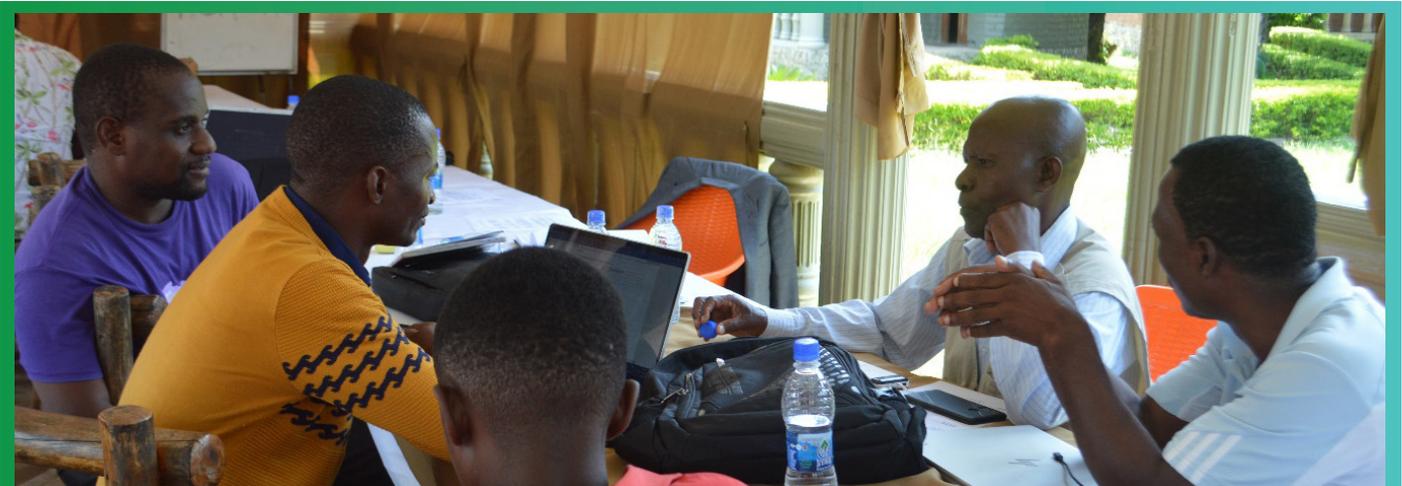
The meeting had representatives from both the public and private sector and in the end a consensus was made to make sure that gender issues are mainstreamed in various policies including those on sanitation and hygiene.

Wesnet engages wash stakeholders on sanitation issues

Wesnetwork has for the past two months engaged various stakeholders in the WASH sector including District Water Officers, District Environmental Health Officers and non-governmental organisations implementing WASH projects in the Central, Northern, Southern and Eastern regions to deliberate on how challenges affecting Sanitation and

Hygiene can be addressed. The meetings aimed at identifying key challenges leading to low progress in sanitation and hygiene coverage in various districts and gave the participants the opportunity to recommend policy and programmatic solutions that can lead to improvements in sanitation and hygiene coverage at national level. The participants were also privileged to get a snap shot of the African Sanitation Policy

Guidelines which was developed by African Councils Ministers of Water and Sanitation (AMCOW). Wesnet with funding from the African Population and Health Research Centre (APHRC) is implementing the Sanitation Policy Development Support Project which aims to support the review of the national water, sanitation and hygiene policies.





“Accessing safe and clean water was like a dream to our community,” says Katherine.

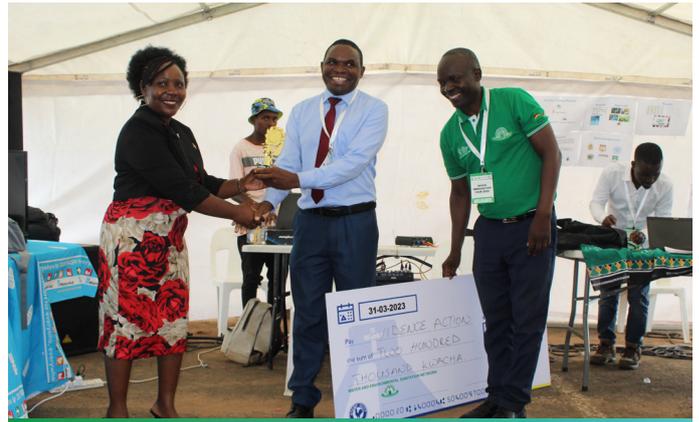
“We used to wake up very early in the morning to go fetch water which was dirty and smelled bad,” Katherine says. She and others in her community of Kabota village would lose hours walking to fetch water for the day’s tasks. “We drank water from swamps and this

water caused me and my family to suffer from abdominal pains and many children in our community suffered from diarrhoea diseases”

Kabota village is located in T/A Masumbankhunda in Lilongwe rural. It is one of the villages among

the 24 villages that HFHM, with funding from the Federal Ministry for Economic Cooperation and Development (BMZ4) and HFHD has supported with safe water source.

PICTORIAL FOCUS



Benson Botha of Evidence Action receiving the trophy and dummy cheque



World Vision involves children in various innovations



Arkay was also present at the Fair



CRWB showcasing their innovation



UP-SHA staff explaining about their innovation



MUST students were recognised for their innovation



WHH staff explaining their work