

Global Task Force on Cholera Control (GTFCC) Working Group on WASH

Webinar, 24 March 2021

CONTENTS

2
3
3
4
6
8
8

Acronyms and abbreviations

СТС	cholera treatment centre
GTFCC	Global Task Force on Cholera Control
NCP	national cholera control plan
OCV	oral cholera vaccine
RRT	rapid response team
SBCC	social and behaviour change communication
WASH	water, sanitation and hygiene
WHO	World Health Organization
ZAWA	Zanzibar Water Authority
ZURA	Zanzibar Utilities Regulatory Authority

Participants

52 Members of different working groups and representatives of GTFCC with a strong representation of Tanzanian governmental authorities and NGOs who joined and shared their experience. The detailed list is in the annex

Ahmad Syed Yasir Alberti Kate Andemichael Ghirmay Awal Nurullah Barboza Philippe Blanc Damien **Bonnet Sophie** Bouhenia Malika Brunkard Joan **Bwalya Francis** Chifunda Chitimbwa Dhlandhlara Brian Dhoba Lovemore Dr. Abdalla Fadhil Dr. Vendelin Simon Drolet Adam **Ghatak Shanta** Gojon-Gerbelot Marianne Haag Justine Haji Mussa Hoko Nokuthula Kapaya Fred Kiberiti Stephen Lamond Elizabeth Lim Jacqueline Machado Soergel Aurea Alexandra Manyara John

Mapuranga Antonella Sarah Martinez Valiente Marion Mavhenyengwa Ishmael Md.Mahbubur Rahman Moyo Ernest Mr. Khatib Makame Msambazi Marko Muturi Caroline Mvumira Gladys Ndongwe Innocent Nevroud Francine Nunn Mark Nyamasve Juliet Oldfield John Olu-Daniels Ibiyemi **Picot Valentina** Placide Welo Rasheed Hussain Reichert Albert Schwinn Ylva Smith Kyla Truelove Julie **Twalipo Timah** Valingot Christophe Vallis Stuart Wilson-Jones Megan

Introduction

This was the first webinar organized by WaterAid upon taking the new chairing role of the WASH Working Group. With support from the GTFCC Secretariat, WaterAid organized this important discussion for the first in a series of four webinars looking at different aspects of Water, Sanitation and Hygiene (WASH) interventions and cholera control in the context of the Global Task Force on Cholera Control (GTFCC) global roadmap, *Ending cholera: a global roadmap to 2030*. Dr. Nurullah Awal, Health Adviser of WaterAid Bangladesh chaired the session.

The first two webinars as planned will be country showcases, of Zanzibar and Zambia respectively; the third will be on WASH research within the context of the GTFCC research agenda; and the fourth will be on technical aspects of WASH and resource issues. All the information related to the online events will be published on the GTFCC website.

This first webinar focused on Tanzania, and particularly on Zanzibar's cholera elimination plan. Historically, Zanzibar has shown very strong political leadership on cholera, and was one of the first administrations to update its multisectoral plan to align with the roadmap – with a strong emphasis on WASH and the strengthening of long-term prevention interventions.

Before the presentations began, participants were invited to fill in a short online survey to provide an idea of the locations of the audience and the organisations for which they worked. The results can be seen in the images below.



Status of ZACCEP implementation

Fadhil Abdalla, Ministry of Health, Zanzibar

Dr Abdalla presented an overview of progress in implementing the Zanzibar National Cholera Control and Elimination Plan, or ZACCEP.

Zanzibar is a semi-autonomous region of Tanzania with total population of 1.6 million, and consists of two major islands, Unguja and Pemba, and several smaller islands, some of which are inhabited. Zanzibar has recorded 17 outbreaks of cholera since 1978, though the history of cholera in Zanzibar goes back to 1886. The most recent outbreak was in 2019, during which transmission mainly took place in urban areas of Unguja and affected less than 100 people. In the previous outbreak, in 2016-17, 236 out of 334 Shehias (70.7%) were affected. Recognizing that these repeated outbreaks are a problem, the government set out to eliminate cholera from Zanzibar by 2027, and in 2019 launched the Zanzibar Comprehensive Cholera Elimination Plan (ZACCEP) with the slogan "Zanzibar without cholera is possible," or – in KiSwahili – "Zanzibar bila kipindupindu inawezekana".

This plan calls – and provides a roadmap – for multisectoral control to end cholera on the island with a strategy to improve WASH and other interventions, including oral cholera vaccine (OCV). The ZACCEP is implemented and coordinated through the Vice President's Office (SVPO) and emphasizes the need for key ministries and partners to join efforts to end cholera. It is financed through the government, mainly through government resources, loans, bilateral agreements and donor support. The total budget is USD 51.7 million, of which 35.2 million is for WASH.

The goal of ZACCEP is to eliminate local cholera transmission by 2027/2028. It is designed around three pillars with 13 objectives: the enabling environment pillar (covering multisectoral coordination, regulations, surveillance, capacity, monitoring and evaluation (M&E), risk assessment and resource mobilization); the prevention pillar (covering water supply, sanitation infrastructure (liquid and solid waste), social and behaviour change communication (SBCC) and OCV); and the response pillar (covering case management, surveillance during outbreaks and logistics). For a baseline, a number of surveys and assessments in Zanzibar (which has been affected by cholera since before 1978) outlined

key areas to target, and the plan builds in regular epidemiological assessments to assess implementation and its effect. The WASH assessment was done with WHO support.

The enabling environment pillar addresses multisectoral coordination of government agencies and partners and mapping of stakeholders, with quarterly meetings of a task force to receive and discuss the ZACCEP quarterly implementation plan. This is complemented by an advocacy and communication strategy to eliminate cholera. On the regulatory side an assessment of acts, laws and regulations for cholera elimination has been done at all levels, with regulations and bylaws enforced by local leaders at Shehia level. Monitoring and evaluation is addressed through regular mentorship and supportive supervision by a team of experts.

Most surveillance is implemented through the Integrated Disease Surveillance and Response (IDSR) framework. An IDSR guideline has been reviewed and disseminated and an IDSR training curriculum has been developed for training of trainers. Continuous on-the-job IDSR training is available for health workers, laboratory staff and port health staff, and supplies for diagnostic laboratories are prioritized and supported to ensure surveillance. A community-based surveillance system has also been established and an accompanying guide developed, so community leaders are now oriented on surveillance guidelines for timely reporting of cholera cases.

The prevention pillar is mainly implemented by the Zanzibar Water Authority (see next section) and has four objectives: safe and adequate water supply; management of sanitation infrastructure; Social and Behaviour Change Communication (SBCC); and cholera vaccination. On the vaccination side (see next section but one), priority areas have been identified (covering 327 000 people in 33 Shehias); awareness-raising and mass vaccination campaign logistics are ready; training of field teams and supervisors is underway; and a policy brief and post-vaccine survey logistics have been completed. Assessments of behavioural and cultural risks were done in 2020 to underpin the SBCC work, and an SBCC strategy for prevention is being implemented through communication channels including social and traditional media outlets. Community engagement is ongoing through the media, engagement of influential persons and key leaders, a campaign using mobile vans, and hygiene promotion in schools.

The response pillar is activated during outbreaks and has three main objectives: case management, surveillance during outbreak response and management of logistics and supplies. For case management, there are functional multi-disciplinary rapid response teams (RRTs) in all districts that have been trained on response and prevention. Advocacy and sensitization are done targeting local government authorities. Functional cholera treatment centres (CTCs) have been established and CHVs have been empowered through a national CHV plan to produce homemade oral rehydration salts (ORS). There is onsite mentorship and supervision for surveillance, the IDSR framework has been revised to improve surveillance during outbreaks, and IDSR focal persons have been trained. Logistics is oriented to provide and facilitate supplies throughout the response.

ZACCEP faces a number of challenges. Foremost among these is the fact that the notion of multisectoral implementation of the ZACCEP is not well understood by all stakeholders. Coordination of a wide range of partners therefore remains a challenge, especially given the fact that there is no single responsible person or unit leading the cholera elimination campaign. Resource allocation to implement ZACCEP is limited (though it is hoped that this will increase over time): in the last quarter of 2020, a total of USD 176 206 was allocated for ZACCEP in different areas, and efforts to secure annual budgets for cholera activities among ministries have been inadequate.

To address these issues inter-ministry coordination for cholera elimination will be strengthened, with a plan to have a dedicated unit in each ministry coordinating ZACCEP activities, and regular coordination meetings of the heads of each ministry.

WASH implementation progress in Zanzibar

Mussa R. Haji, ZAWA Director General

The functions and mandate of the Zanzibar Water Authority (ZAWA) are stipulated in the Water Act No. 4 of 2006 and include controlling, managing, and protecting catchment areas for water resources; securing and maintaining water supplies; collecting fees for water and related services; specifying and monitoring standards for water and water equipment; and treating water for domestic use.

Zanzibar's Vision 2050 has the following aspirations for WASH:

- Sustainable access to safe and clean drinking water, achieved through a water resource management master plan and associated strategies
- Diversified potable water sources reinforced by the exploration of undersea freshwater, rainwater harvesting, reuse technologies, and seawater desalination
- Optimal water supply management for agriculture, tourism, industry, and other economic activities supported by continuous research and development on sustainable sources
- Sustainable provision of sanitation services through effective sanitation interventions, including enforcement of the "polluter-payer" principle and the construction of sewerage treatment systems
- Creation of a strong institutional framework for the sustainable and responsible collection, processing and disposal of solid, liquid, and hazardous waste focused on empowering local government authorities and other relevant institutions.

ZAWA therefore supports the implementation of ZACCEP by increasing access to safely managed water, with a target of 70% coverage by 2027 for improved on-premises supply, available when needed, free from contamination. The target for access to "basic" water services (i.e. water from improved sources with a collection time of no more than 30 minutes round trip plus queuing) is 93% coverage by 2027. ZAWA is also working with relevant institutions to ensure 100% coverage of safe water supply in schools and healthcare facilities.

Mr Haji outlined current water service coverage in Zanzibar, where in 2015-16 98% of households were accessing water from improved water sources, but with questionable quality and availability (58% of households reported they had not received piped water for at least one day in the fortnight preceding the survey). The coverage of household water treatment and safe storage is 24%. There are more than 1500 registered private boreholes in Zanzibar, reflecting the inadequacy of the piped water supply. As far as sanitation is concerned, coverage of improved toilets is 59%, but open defecation is at 17%. Geographical disparities are large, however – in some districts, such as Micheweni, open defecation is estimated at 62%. Zanzibar has no sewerage treatment system: sewage from areas with a sewer system is discharged directly and untreated into the sea. About 27 discharge points have been identified, mostly situated in the business region of Urban/West. In urban areas, sewage overflow from septic tanks is an additional major problem.

Mr Haji outlined major infrastructure projects undertaken between 2018 and 2021 to construct, rehabilitate and/or improve water and sanitation systems, before summarizing in detail ZACCEP's WASH activities in 2019-21. These included, but were not limited to, school WASH promotion including installation of hand washing facilities in primary schools, entailing water connections from ZAWA system and the construction of raiser tanks; COVID-19 emergency measures including enhancing water availability in poor coverage areas through distribution; and development of an evidence-based SBCC strategy including training of teachers on SBCC skills, formation of school WASH clubs, TV and radio advocacy, and scaling up of hand hygiene in communities, schools and health care facilities. Monitoring of WASH indicators has been strengthened, with a new WASH-Management Information

System established by the ministry of health and integrated into DHIS-2. This will be followed by routine WASH data collection at household level and in primary schools in five project districts. A water quality monitoring programme has also been initiated to determine levels of free residual chlorine and microbial contamination in water vendors' tanks and the ZAWA piped network. Community empowerment work has started in 375 out of 388 planned villages in project districts (94% of the target), each of which is provided with a WASH register to monitor quarterly progress. 198 facilitators have been trained at Shehia level to follow up in villages.

ZAWA has also undertaken a number of important innovations, including fabrication and piloting of a design for an inline mechanical chlorinator for use in borehole outlets. These facilities are a cost-effective alternative to imported chlorine dosing systems that cost USD 21 000 – 30 000 each. ZAWA has also been encouraging local entrepreneurs to design and produce further hygiene, hand washing and chlorination devices and facilities.

ZAWA's work faces a number of challenges. Providing safe drinking water to all is still a challenge, as not all houses are connected to the piped network. ZAWA is unable to meet the full cost of chlorine and depends on subsidies; raising revenue for water is problematic as infrastructure is outdated and only 13.6% of customers are metered. Groundwater resources in Zanzibar tend to be overexploited. There are inadequate skilled human resources in the water sector, and Zanzibar's water policy, last reviewed in 2004, is obsolete. Finally, because ZAWA has no sanitation department, it cannot address sanitation issues.

In the future ZAWA intends to lobby development partners and ministries for increased WASH resources to ensure that the most vulnerable populations – especially in rural and unplanned areas – can access adequate services. Advocacy will be for increased funding for WASH interventions in all aspects (with priority for schools and health facilities) and for development partners to continue supporting ZAWA in upgrading infrastructure for underserved areas and slums. Hand hygiene to households, public primary schools and health care facilities will be scaled up. Specific new projects include strengthening the water supply and wastewater treatment system, a USD 35 million initiative in collaboration with Zanzibar Urban Municipal Council, and development of a new water policy aligned with the Sustainable Development Goals (SDGs).

Addressing sustainability, ZAWA will continue discussions with the government and the Zanzibar Utilities Regulatory Authority (ZURA) to review tariffs and increase metring of water consumers, with a target for 2021/22 of 6,000 new metred customers from a current total of a total of 15 806 (13.7%).

To help create and sustain an atmosphere conducive to these changes, national and subnational WASH campaigns and commemorations will take place – notably around world hand washing day, toilet day, and water week – and an environmental cleanliness competition will be introduced. WASH will be integrated with poverty reduction strategies to ensure increased access to sanitation and hygiene for the most vulnerable. On the regulatory front, enforcement of the Water Act and Public Health Laws will be strengthened, including through use of the "polluter-payer" principle.

In discussion, questions were asked about the price to consumers of ZAWA water, which costs 667 shillings for 1000 litres – as compared to the 1000 shillings cost of a 1.5 litre bottle in shops. ZAWA water is not, however, currently safe to drink untreated, because of infrastructural challenges and leaks that mean it is exposed to potential contamination during the distribution process. Treated water from ZAWA cannot be guaranteed drinkable, but plans are in place to rehabilitate infrastructure inside and outside cities to ensure that water can move from source to destination free of contamination.

Oral Cholera Vaccination and WASH Integration in Zanzibar

Fadhil Abdalla, Director Preventive Services & HP

As a basis for Zanzibar's most recent OCV campaign, which was scheduled to commence on 15 February 2021 but has been delayed due to the COVID-19 pandemic, 33 hotspot Shehias (with a total population of 327 853), have been identified and targeted for intensive interventions including provision of OCV and WASH. The majority of these Shehias are in Urban/West district and are home to high risk populations including fishermen and inhabitants of small islands.

Zanzibar conducted its first OCV campaign in 2010, targeting 50 000 people in six shehias, of whom 26 000 were vaccinated. Dukoral was used and WASH was not integrated into the campaign. The vaccine seemed to have a preventive effect, and there were no outbreaks between 2010 and mid-2015. From September 2016 to July 2017, however, an outbreak took place that infected 4330 people and killed 68 (a case fatality rate of 1.6%).

The new plan will integrate OCV and WASH. All schoolchildren in target areas will be educated on hand washing, hygiene and sanitation, and promotion of these approaches will be done through radio, TV, print and social media. A bar of soap will be provided to all children under five and all women of reproductive age who come to vaccination sites. Construction and use of latrines will continue to be promoted for households and communal toilets in small areas. Most health care facilities in Zanzibar have water supply – more than 70% – but often experience problems with water rationing. There is also a shortage of other washing facilities: a recent survey showed that 50% of facilities have poor washing facilities.

A number of challenges are anticipated. These are likely to include confusion between the OCV and COVID-19 vaccines; demand for OCV from people in Shehias that are not target areas; a lack of funds for WASH activities, including provision of soap; competition for media space with other priorities; and low demand due to conflicting messages about vaccines.

To address these, the plan is to continue advocacy for integration of OCV and WASH at all levels; to design and implement media messages targeting myths and misconceptions about vaccines; to mobilize further resources for OCV and WASH interventions, with the engagement of multiple partners and sectors including non-governmental, civil society and religious organizations and others; to engage schoolchildren, youth and community volunteers for OCV and WASH activities; and to document and disseminate best practices.

Closing comments

Philippe Barboza, GTFCC

These presentations provide an interesting overview of the challenges in implementing national cholera control plans (NCPs). Zanzibar has been a pioneer and a champion for NCP implementation and deserves congratulations for the excellent work that has been done, and for being so transparent about the challenges faced. The strategy of innovation is particularly interesting.

Zanzibar is, of course, a very specific context: the high level of health coverage within walking distance is amazing and would be a dream in many places; so the things that can be achieved in Zanzibar cannot necessarily be extrapolated for other areas.

It is nonetheless good to have an idea of what is taking place there, not just in WASH but also in surveillance, OCV campaigns and other areas – and it is to be hoped that the currently suspended OCV

campaign does indeed prove to be suspended and not cancelled. It is commendable how Zanzibar is approaching OCV as a method by which to buy the time needed to implement longer term strategies.

Dr Barboza finished with thanks to all present for joining, particularly given the inevitably high incidence of "zoom fatigue"; it is important to remain engaged, flexible and adaptable. We hope that face to face interaction will recommence soon.