



Impact
that matters



WASH in Health Care Facilities

Practical exchange on experiences and lessons learned within the framework of the 72nd World Health Assembly Resolution WHA72.7 on Water, Sanitation and Hygiene in health care facilities

A Learning event under the project “Water Voices United: strengthening Civil Society Organisations to advance the Human Right to Water and Sanitation in Zambia

Livingstone, 18 to 22 November 2024



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Contents

Executive Summary.....	1
Programme for the event.....	3
Introduction.....	6
Opening Remarks.....	6
Block 1: Setting the Stage – Information and Learning status of WASH in Healthcare facilities in Zambia: key concepts, facts and figures.	8
Overview and introduction to the topic	8
Presentation by Sharon Roose, SNV Netherlands.....	8
Presentation by Bwalya Nachula, UNICEF Zambia	9
Block 2: General exchange of practices and experiences of WASH in Health Care Facilities.	11
Overview and introduction to the topic	11
Presentation by Edgar Chaamwe, SNV Zambia.....	11
Presentation by Isaac Samunete, World Vision Zambia	14
Presentation by Adamson Sakala, WaterAid Zambia.....	16
Block 3: Field visit and assignment to Health Care Facilities.	22
Overview and introduction to the topic	22
Profile of Mambova and Siakasipa Health Care Facilities	23
Findings during the field visit to the Facilities.....	23
Recommendations	26
Lessons Learned	27
Block 4: Sustainable Operation and Maintenance of WASH in Healthcare Facilities.....	28
Overview and introduction.....	28
Key learning highlights.....	29
Reflections and takeaways: What did we put in our shopping bags?.....	30
Next Steps – what is next?.....	30
Appendix 1: List of participants.....	33
Appendix 2: Detailed outputs of field visit assignments	35
Mambova Health Care Facility.....	35
Testimonials from beneficiaries of the Health Care Facility at Mambova	35
Siakasipa Health Care Facility	36
Testimonials.....	36
Agness Kahale.....	36
Barbara Kahale	36
Case Study: Transforming Healthcare Through Strategic WASH Interventions at Mambova Rural Health Centre	37
Case Study 1: Transforming Siakasipa Health Care Facility Through WASH Innovations	40
Case Study 2: Strengthening Rural Health Facilities Through Effective Operations and Maintenance.	42

Figures

Figure 1: Edgar Chaamwe-SNV delivering a presentation during HCF Learning event	11
Figure 2: Officer from World Vision Delivering a Presentation.....	14
Figure 3: Kazungula District Health Office Team	21
Figure 4: Water storage tanks at Mambova Health Care Facility	23
Figure 5: L to R Old and New Toilets at Siakasipa Health Care Facility.....	24
Figure 6: Modern Incinerator at Mambova Health Care Facility	25
Figure 7: A handwashing facility at Mambova HCF without taps	26
Figure 8: Aerial view of Siakasipa Health Post	40

Acknowledgements: The learning event was co-organised by SNV in partnership with the NGO WASH Forum with funding from the European Union

Acronyms

APM	Area Pump Mender
CDF	Constituency Development Fund
CSO	Civil Society Organisation
DHO	District Health Office
GRZ	Government of the Republic of Zambia
HBC	Home Based Care
HCF	Health Care Facility
HMIS	Health Management Information System
IPC	Infection, Prevention and Control
LE	Learning Event
MoH	Ministry of Health
NGO	Non-Government Organisation
NWASCO	National Water Supply and Sanitation Council
O&M	Operation and Maintenance
RHC	Rural Health Centre
SDG	Sustainable Development Goal
SNV	Netherlands Development Organisation
SWASCO	Southern Water and Sanitation Company
UC	Universal Coverage
VWASHE	Village Water Sanitation and Hygiene Education
WASH	Water Sanitation and Hygiene
WHO	World Health Organisation
WV	World Vision
WVU	Water Voices United Project

Executive Summary

The WASH in Healthcare Facilities Learning Event, held in Livingstone, Zambia, from 18th to 22nd November 2024, was a significant platform for advancing water, sanitation, and hygiene (WASH) in healthcare facilities across the country. Organized under the Water Voices United Project by SNV in collaboration with the NGO WASH Forum, the event brought together diverse stakeholders to exchange ideas, address challenges, and explore sustainable solutions in line with the 72nd World Health Assembly Resolution WHA72.7.

Over the course of the event, participants reflected on Zambia's progress in integrating WASH into healthcare systems. Key discussions emphasized the eight practical steps toward universal access, highlighting achievements and persistent gaps. Presentations from leading organizations, including SNV, UNICEF, World Vision, and WaterAid, showcased innovative approaches, success stories, and actionable recommendations for scaling interventions. A recurring theme was the critical role of integrating WASH into broader health programs and national policies to enhance service delivery and improve public health outcomes.

Field visits to Mambova and Siakasipa Health Facilities provided participants with firsthand insights into the transformative impact of targeted interventions. Improvements such as reliable water supply systems, modern maternity annexes, waste management facilities, and enhanced sanitation infrastructure demonstrated how WASH investments can significantly elevate the quality of care, patient dignity, and community trust. These visits also highlighted the importance of involving communities and healthcare staff in sustaining the functionality and resilience of WASH infrastructure.



The event also featured a dynamic debate session exploring the sustainability of WASH operations and maintenance (O&M). Participants deliberated on key challenges, including inadequate funding, unclear roles, and weak accountability mechanisms, while proposing practical solutions such as clarifying responsibilities, leveraging community engagement, and adopting innovative financing models. The session underscored the need for robust collaboration among stakeholders to ensure long-term sustainability.

A critical outcome of the event was the collective realization of the importance of community involvement and ownership in sustaining WASH interventions. Participants recognized that integrating WASH into health and education programs amplifies impact, while robust monitoring systems and data-driven decision-making are essential for accountability and continuous improvement. The lessons learned during the event reinforced the need for strategic investments in resilient infrastructure and strengthened partnerships to address challenges comprehensively.

The event concluded with actionable strategies to address the gaps in WASH service delivery, including strengthening accountability mechanisms, expanding investments in infrastructure, and building the capacity of healthcare workers and communities. A comprehensive report documenting these insights and recommendations will guide future advocacy and implementation efforts.

This learning event emphasized the indispensable role of WASH in ensuring quality healthcare delivery, safeguarding public health, and upholding human dignity. Participants left with a renewed commitment to advancing sustainable WASH solutions, leveraging partnerships, and fostering accountability to achieve universal access to WASH in healthcare facilities across Zambia.

Programme for the event

Day 1 – 18 th November 2024		
Time	Session	Who does what
08.00 – 17.00	Travel to Livingstone – Check-In at David Livingstone Hotel	All
Day 2 – 19 th November 2024		
Time	Session	Who does what
08.00 – 08.30	Arrival and Registration	Susan registers participants
08.30 – 10.00	Opening Remarks Prayer Project Manager Water Voices United (Acting) – Davy Ngoma NGO WASH Forum – Nonde Lwatula	Intro & Facilitation by Davy
10.00 – 10.15	Coffee Break & Group Photo	Bangwe
10.15 – 10.40	Introduction & setting the stage Objectives & Structure of the Learning Event Menti on “What do you understand by integration of WASH in HCFs and the benefits” – 10 min Introduction to the event and global overview of WASH in HCFs and Recap of country commitments to WASH in HCFs from the R2R 2019 Global Meeting held in Livingstone, Zambia 9 – 11 September 2019– 15 min	Intro & Facilitation by Sharon Notes: Kundananji
10.40 – 11.50	Block 1 - Information and Learning Status of WASH in HCFs in Zambia - key concepts, facts and figures Speaker 1: MOH (Progress against the R2R commitments, policies and strategies supporting WASH in HCFs, roles and responsibilities of the different stakeholders – 30min Speaker 2: Unicef (Progress against the country commitments to WASH in HCFs) – 20 min Speakers Panel Q&A – 20 min	Intro & Facilitation by Davy Learning question: What is the current status of WASH in HCFs in Zambia? What are the current policies and strategies in place, what are the roles and responsibilities? How is Zambia progressing against the R2R commitments? How is Zambia progressing against the country commitments to WASH in HCFs? Notes: Kundananji & Sharon
	Block 2 - General exchange of practices and experiences (different organisations share their experiences)	Intro & Facilitation by Nonde

11.50 – 12.25	Speaker 2: World Vision (experiences of WASH in HCFs) – 35mn	Learning question: What are best practices, challenges and opportunities that exist in the WASH in HCFs sector? What are we doing well, what has room for improvement? Notes: Kondwani & Edgar
12.20-13.00	Speaker 3: SNV Zambia (experiences of WASH in HCFs from the WASH SDG project) – 35min	
13.00 – 14.00	Lunch	
14.00 – 14.35	Speaker 4: WaterAid Zambia (sharing of experiences of WASH in HCFs from the R2R project, site brief for Siakasipa and Mambova HCFs) – 35min	
14.35 – 14.35	Speakers Panel Q&A – 25 min	Intro & Facilitation by Costa & Sharon Learning question: How can we improve the sustainability of infrastructure for WASH in HCFs and ensure appropriate designs that are compliant to minimum standards? (assignment for the field visit is to have the group do a small -scale WASH FIT assessment)
15.00 – 15.15	Coffee Break	
15.15 – 17.00	Preparation for the field visit – who will go where, what will be the focus, what do we expect people to bring back to plenary, etc.	
	Day 3 – 20th November 2024	
08.00 – 08.30	Arrival and Registration	Susan
08.30 – 17.00	Field Visit – Focus on Sustainability - After 2 years of project closure, how are the HCFs fairing with the improvements done at each site. (Operational status of infrastructure, cleaning, O&M, Split group into 2 Team 1: Visit Siakasipa RHC Team 2: Visit Mambova RHC Depending on how the visit travel puns out, arrange for lunch in packs to eat while in the field Teams prepare summary presentations at the conference after visit for feedback session	
	Day 4 – 21st November 2024	
Time	Session	Who does what
08.00 – 08.30	Arrival and Registration	Susan
08.30 – 11.00	Field Visit Feedback To HCF In Charge, Kazungula WATSAN Coordinator & Kazungula DHD as a panel and their responses Team 1: Visit Siakasipa RHC – 50 min Team 2: Visit Mambova RHC – 50 min <ul style="list-style-type: none"> • Testimonials from users and HCF staff • Photovoice presentation 	Intro & Facilitation by Solomon Notes: Edgar & Kondwani

	<ul style="list-style-type: none"> • Case Study • PowerPoint Presentation (based on checklist) 	
	Plenary discussion of findings and recommendations	
11.00 – 11.15	Coffee Break & Group Photo	All
11.15 – 12.30	Advocacy for WASH in HCFs Debating Game: “Sustainable operation and maintenance of WASH facilities in HCFs cannot be achieved because accountability mechanisms are ineffective.” Divide the room randomly into: <ul style="list-style-type: none"> - Group in favour - Group against - Jury (decides based on the quality of the arguments presented, not on their own opinion) 10mn to prepare Round 1: five minutes each (10 in total) Round 2: five minutes each (10 in total) Round 3: three minutes each (6 in total) Jury (10mn to decide and pronounce the winner)	Intro & Facilitation by Solomon & Sharon Learning question: What issues exist in WASH in HCFs that could become part of the advocacy agenda for CSOs? Notes: Kundananji & Bangwe
12.30 – 13.30	Reflection and shopping bag – what are you taking away from the event and into your work and organisation? People will reflect and draft on a flipchart what they are taking away from the event, the so-called shopping bag (we can do this in pairs if preferred)	Intro & Facilitation by Kundananji
13.30– 14.15	Session Wrap up & Evaluation <ul style="list-style-type: none"> - Summary of key learning points - Evaluation: <ul style="list-style-type: none"> ➤ Use mentimeter to ask what is the most important take away ➤ Use mentimeter to describe the event experience in one word Thank you & future	Intro & Facilitation by Sharon
14.15 – 15.15	Lunch	
	Day 5 – 22nd November 2024	
Time	Session	Who does what
08.00 – 17.00	Travel to Lusaka	All

Introduction

This report documents the outcomes and insights from the Learning Event (LE) on WASH in Healthcare Facilities organised under the Water Voices United Learning Event: Strengthening Civil Society Organizations to Advance the Human Right to Water and Sanitation in Zambia. The LE was held in Livingstone from 18th to 22nd November 2024. The event, centred on WASH in Healthcare Facilities (HCFs), was convened to facilitate an exchange of practices, experiences, and progress regarding the implementation of the 72nd World Health Assembly Resolution WHA72.7 on water, sanitation, and hygiene in healthcare facilities.

With participation from Kazungula District Health Office, Civil Society Organizations, and healthcare stakeholders, the event aimed to advance the integration of WASH in healthcare settings. Another key objective of the event was to strengthen the capacity of the NGO WASH Forum and its member CSOs in addressing WASH in healthcare facilities, aligning with the established capacity development trajectory.

CSOs are essential for achieving universal WASH access (SDG6), advocating for water rights, mobilising communities, and holding governments accountable. To be effective, CSOs need strengthened organisational, advocacy, and programmatic capacities, which the Water Voices United project aims to develop through tailored training for the NGO WASH Forum and its member CSOs. This learning event was organised as part of that capacity development trajectory.

The sessions focused on Zambia's progress against global and national commitments, sharing of best practices, and fostering sustainable solutions to improve WASH infrastructure, maintenance, and accountability.

This report outlines the key discussions, findings, and recommendations from the event, serving as a resource to guide future efforts in ensuring that WASH becomes a cornerstone of healthcare delivery in Zambia.)

Opening Remarks

SNV - Mr. Davy Ng'oma, Deputy Programme Manager for the Water Voices United Project

The learning event was officially opened by Mr. Davy Ng'oma, Deputy Programme Manager for the *Water Voices United Project*. In his welcome address, Mr. Ng'oma emphasized the significance of the event, which was organized by the *Water Voices United Project* in collaboration with the *NGO WASH Forum*. He highlighted that the project aims to foster dedicated learning and joint advocacy initiatives to advance the realization of the human rights to water and sanitation in Zambia.

He underscored the importance of bringing together key stakeholders in the WASH sector to share knowledge, deliberate on critical issues, and develop actionable solutions for improving WASH in healthcare facilities (HCFs). Mr. Ng'oma encouraged participants to actively engage, exchange ideas, and contribute openly, noting that the event's recommendations would form the foundation for developing an advocacy agenda to enhance access to WASH services in HCFs which is key for improved health outcomes.

NGO WASH Forum - Mr. Bangwe Navile, on behalf of Board Chairperson Marlon Phiri

Representing the *NGO WASH Forum*, Mr. Bangwe Navile, on behalf of Board Chairperson Marlon Phiri, further elaborated on the significance of the learning event. He explained that it was made possible through the *Water Voices United Project*, a transformative four-year initiative co-funded by

the *European Union* and *Danish People's Aid*. Spearheaded by SNV in partnership with the NGO WASH Forum, the project aims to strengthen the capacities and coordination of WASH-focused Civil CSOs in Zambia to promote the right to water and sanitation. Mr. Naviley emphasized the project's commitment to enhancing collaboration among stakeholders and driving collective action to address critical WASH challenges in Zambia, especially within healthcare facilities.



Block 1: Setting the Stage – Information and Learning status of WASH in Healthcare facilities in Zambia: key concepts, facts and figures.

Overview and introduction to the topic

This block centred on the critical role of WASH in healthcare facilities (HCFs), with presentations outlining both the global and national context, achievements, and challenges. Participants explored Zambia's progress toward WASH commitments, including baseline data collection, infrastructure upgrades, and multisectoral coordination. Key facts and figures were given on both global and national level data for WASH in HCFs. The session emphasised actionable steps, such as enhancing community engagement, resource mobilisation, and adherence to standards, to further drive sustainable improvements and ensure equitable access to WASH in healthcare facilities.

Presentation by Sharon Roose, SNV Netherlands

The presentation, delivered by Sharon Roose, Senior Water Advisor for the *Water Voices United Project*, served as an introductory session to set the stage for the learning event. The primary focus was to outline the global and national status of water, sanitation, and hygiene (WASH) in healthcare facilities (HCFs), emphasizing achievements, challenges, and alignment with the eight practical steps toward universal access to quality care.

Key highlights of the presentation included:

- a) **Importance of WASH in HCFs:** The session underlined that provision of adequate WASH services in healthcare facilities is crucial to prevent infections, support occupational health, ensure quality maternal and child health services, and uphold the dignity of vulnerable populations.
- b) **Global Context:** Participants were introduced to the global momentum around institutional WASH since the inception of the Sustainable Development Goals (SDGs), particularly the World Health Assembly Resolution WHA72.7 (2019). The resolution emphasizes the need for countries to assess the WASH conditions in all health care facilities. The resolution also calls for the development of national road maps to improve WASH in health care facilities. This resolution urged nations to assess WASH conditions in all HCFs and develop national roadmaps for improvement.
- c) **Common Challenges:** Ms. Roose highlighted obstacles in achieving sustainable WASH in HCFs, including limited funding, outdated infrastructure, insufficient staff training, weak accountability mechanisms, and climate change impacts.
- d) **Engagement Activity:** To foster active participation, Ms. Roose used Mentimeter to gauge participants' understanding of WASH in HCFs, inviting them to share their insights on integration and its benefits.

The session provided a comprehensive overview of the challenges and opportunities in advancing WASH in healthcare facilities, setting a collaborative tone for subsequent discussions and activities during the event.

Part 1

Presentation by Bwalya Nachula, UNICEF Zambia

The session, led by WASH Specialist Bwalya Nachula, provided a comprehensive overview of the status of WASH in healthcare facilities (HCFs) in Zambia as of 2023. The aim was to assess national progress against commitments made during the 2020 meeting to secure improvements in WASH services, aligned with the eight practical steps for universal access.

Key Commitments

In 2020, Zambia outlined specific targets to improve WASH in HCFs, including:

- By 2022, achieving basic water and sanitation services in 90% of healthcare facilities.
- Ensuring 80% of facilities have adequate healthcare waste management and handwashing stations at critical points.
- Strengthening health systems by increasing WASH-competent health workers and implementing the National Health Strategic Plan (2017–2021).
- Integrating WASH into disease-specific programs, such as malaria, TB/HIV/AIDS, maternal and neonatal health, and cholera.
- Establishing a national coordination mechanism and incorporating WASH into the national budget to ensure sustainable funding.

It was further indicated that some achievements that have been scored with regards WASH in Health Care facilities during her presentation.

Highlights of Achievements

The presentation showcased notable progress, including:

- Formation of an active, multi-sectoral coordinating committee.
- Baseline data collection and the development of WASH standards and assessment tools.
- Creation of a technical field guide and water quality monitoring protocols.
- Resource mobilization for WASH initiatives and mentorship programs for healthcare staff.
- Strong collaboration between government ministries and WASH partners.
- Development of a scorecard for Infection Prevention and Control (IPC) indicators.

Progress on the Eight Practical Steps

- Situation Analysis and Assessment: Assessments initiated in Lusaka and extended to six provinces, covering 125 healthcare facilities.
- National Roadmap Development: Targets and timelines established for WASH improvements.
- Baseline Assessments: Comprehensive baseline studies conducted to inform planning.
- Community Engagement: Strong involvement through community health workers and partners.
- Infrastructure Development: Ongoing efforts in facility maintenance, workforce development, and data monitoring through HMIS.

Challenges Identified

Despite progress, significant challenges remain:

- Insufficient financing for WASH services in many facilities.
- Inadequate handwashing stations and waste treatment facilities.

- Limited compliance with established guidelines and standards.
- Weak community engagement in planning processes.
- A need for more inclusive infrastructure to accommodate people with special needs.

Best Practices for Scaling Up

- Enhancing multisectoral coordination led by the Ministry of Health.
- Strengthening community engagement and advocacy for vulnerable groups.
- Promoting compliance with WASH guidelines among all stakeholders.

Next Steps

To accelerate progress, the following actions were recommended:

- Finalize WASH indicators in the Health Management Information System (HMIS).
- Expand WASH assessments across all nine provinces using updated tools.
- Increase resource mobilization and capacity building efforts.
- Provide piped water supply to HCFs.
- Expedite the construction of fixed handwashing facilities with support from partners like the World Bank and WaterAid.
- Install final waste treatment and disposal facilities.

This presentation underscored Zambia's commitment to improving WASH in healthcare facilities while acknowledging the gaps that require urgent attention to achieve universal access. It emphasized the need for sustained collaboration, innovative resource mobilization, and adherence to national standards to create lasting solutions.

Following the presentations, the following questions and comments were made:

Q&A – Block 1: Information and Learning Status of WASH in HCFs in Zambia-key concepts, facts and figures	
Question/comment	Response
Basic access to water There is a difference between basic access to water in HCF and community level.	
About the TWG Participants requested for more information about the technical working group for WASH in HCFs.	The specialist indicated that the working group is open to organisations implementing WASH in HCFs. For more details CSOs encouraged to see the chairperson of the TWG from MOH.
WASH Fit trucking tool. “If possible, consider developing a contextualized tool for the country. This will not only be used for trucking, but a tool to identify gaps and possible actions to promote universal access”.	
Training healthcare workers Who is responsibility for training Health care facility in the WASH fit trucking tool.	DHO has the capacity to train, however, due to limited resources, most of the health care facility staff have not been trained.

Block 2: General exchange of practices and experiences of WASH in Health Care Facilities.

Overview and introduction to the topic

This block focused on the general experiences and practices of NGOs implementing WASH in Health Care Facilities. Highlighting how these organisations have been supporting the government in the roll-out of their policies and plans. Focus was on sharing of practical approaches, key achievements, challenges, and opportunities for improvement.

Presentation by Edgar Chaamwe, SNV Zambia

SNV Zambia shared their experiences in implementing WASH in Health Care Facilities highlighting the approach that was used, the challenges encountered, areas that needed improvement and the opportunities available in WASH in HCF. During the presentation, an overview of the WASH SDG project was given. It was indicated that it's a citywide and inclusive sanitation service implemented in five (5) towns under the support of DGIS. It was a WASH SDG Sub programme locally known as Chambeshi-Lukanga Sanitation Project with the ambition to improve sustainable access to sanitation and hygiene practice for 460,000 people (200k = peri-urban | 260K = urban area). It was mentioned that it was a partnership of diverse stakeholders: Chambeshi-Lukanga Water and Sanitation Utilities, local authorities in 5 towns, National Water Supply and Sanitation Council (NWASCO), Ministry of Health (MoH) and Ministry of Local Government (MLG).



Figure 1: Edgar Chaamwe-SNV delivering a presentation during HCF Learning event

The project adopted a non-infrastructure focus, prioritizing innovative solutions that extended beyond physical construction. Emphasizing adaptability and flexibility, the initiative was designed to tackle challenges without relying on traditional infrastructure development. Where construction was involved, it served a strategic purpose, functioning solely as a demonstration to showcase practical applications of the proposed strategies. This forward-thinking approach underscored the project's commitment to exploring alternative, scalable solutions that maximize impact while minimizing dependence on physical structures.

Key WASH Interventions in Health Care facilities

SNV through the WASH SDG project supported Kasama District Health through the construction of an ablution block at Kasama Urban Clinic. The construction of the Kasama Ablution Block delivered a modern, inclusive sanitation facility tailored to diverse user needs, setting a benchmark for WASH infrastructure. To further promote equity, a comprehensive disability audit tool was developed to ensure toilets are accessible and inclusive, addressing the needs of persons with disabilities. Leadership in embedding Operations and Maintenance (O&M) practices in healthcare facilities included structured cleaning rosters, fostering accountability among staff to uphold hygiene standards and ensure infrastructure longevity.

Comprehensive Infection Prevention and Control (IPC) training was facilitated for healthcare facility staff in target districts, equipping them with essential skills to maintain hygiene, prevent infections, and enhance patient safety. Collaboration with the Ministry of Health's Provincial Team in Northern Province led to the adoption of a replicable toilet model, advancing sustainable and standardized sanitation solutions. Additionally, the installation of inclusive, foot-operated handwashing facilities in healthcare settings enhanced accessibility, hygiene, and infection control for all users, promoting health equity across the board.

Challenges

Limited financial resources for maintenance and upgrades - Healthcare facilities often faced budget constraints that limited their ability to maintain or upgrade WASH infrastructure. This led to the deterioration of existing infrastructure, such as broken water systems, leaking pipes, or malfunctioning toilets, compromising service delivery.

Insufficient water supply and poor sanitation facilities in remote areas - Remote areas often experience acute challenges in accessing clean water and adequate sanitation due to their geographical isolation, lack of infrastructure, and limited government reach

Inconsistent monitoring and evaluation of WASH practices - Inadequate monitoring and evaluation (M&E) systems hindered the ability to track the effectiveness and sustainability of WASH interventions by the Local authority and HCF staff. This inconsistency made it difficult to identify gaps, measure progress, and ensure accountability.

To strengthen overall effectiveness of implementing similar projects, it's important to focus on:

Enhancing Funding Mechanisms for Long-term Sustainability: Health care facilities often face challenges in maintaining WASH infrastructure due to insufficient and inconsistent funding. Developing sustainable financing mechanisms is critical for ensuring long-term functionality. This includes advocating for increased budget allocations at national and district levels, exploring public-private partnerships to mobilize additional resources, and establishing maintenance funds specifically

for WASH-related expenses in healthcare facilities. A robust financial framework would help address recurring costs such as maintenance, water supply, cleaning supplies, and training of staff, ensuring uninterrupted service delivery and hygiene standards.

Improving Coordination Between Stakeholders to Avoid Duplication: Effective WASH interventions in healthcare facilities require seamless collaboration among implementing partners (IPs), government agencies, NGOs, and local communities. Poor coordination often results in resource wastage, project overlap, and inconsistent service delivery. Establishing a centralized coordination platform or task force for WASH in healthcare settings can streamline efforts, align objectives, and foster data sharing among stakeholders. Regular coordination meetings, joint planning sessions, and harmonized implementation strategies can ensure that interventions are complementary and cater to gaps rather than duplicating efforts in the same areas.

Strengthening Monitoring and Evaluation Systems for WASH Interventions: Robust monitoring and evaluation (M&E) systems are essential for tracking the effectiveness of WASH interventions and ensuring accountability in healthcare facilities. Current M&E mechanisms often lack comprehensive tools or standardized indicators to measure impact. Strengthening these systems requires the development of tailored WASH performance metrics for healthcare settings, regular audits, and real-time reporting systems. Capacity building for staff on data collection and analysis, combined with digital tools for monitoring, can enhance oversight and inform timely decision-making. Evidence-based feedback loops will allow for continuous improvement in WASH services.

Addressing Gaps in Sanitation Infrastructure in Underserved Areas: Many healthcare facilities, especially in rural and underserved regions, lack basic sanitation infrastructure, posing risks to patient safety and infection control. Addressing these gaps necessitates a targeted approach that includes mapping underserved facilities, prioritizing investments in sanitation infrastructure, and ensuring compliance with national WASH standards. Infrastructure upgrades should consider inclusivity, sustainability, and local context, incorporating features like accessible toilets, waste disposal systems, and water-saving technologies. Engaging local communities and authorities in the planning and implementation process will promote ownership and long-term upkeep of sanitation facilities.

Opportunities for Improvement

Leveraging partnerships with local stakeholders is crucial for effectively addressing the multifaceted challenges of WASH in healthcare facilities. Building and strengthening collaborative relationships with local organizations, community leaders, and government agencies can provide the support and resources needed to overcome infrastructure deficits and ensure the long-term sustainability of water, sanitation, and hygiene initiatives.

Advocacy for increased investment in WASH infrastructure is another key opportunity to drive meaningful change. Through targeted advocacy campaigns, awareness can be raised among policymakers, donors, and the public about the critical role of WASH in healthcare settings. This will not only encourage funding but also ensure that WASH is prioritized in healthcare planning and budget allocations, leading to improved health outcomes.

Scaling up the use of innovative technologies presents a significant opportunity to enhance efficiency and sustainability in WASH services. In resource-limited settings, innovations such as solar-powered water pumps and smart monitoring systems can help streamline operations and ensure that water and sanitation services are both cost-effective and reliable. Implementing these technologies can lead to more sustainable, environmentally friendly solutions for healthcare facilities.

Lastly, strengthening policy frameworks and enforcement mechanisms is critical to establishing clear and consistent standards for WASH in healthcare facilities. By reinforcing policies and ensuring rigorous enforcement, disparities in service delivery can be reduced, creating more equitable healthcare access for all. This will help to ensure that all healthcare facilities adhere to established WASH standards, promoting better health outcomes and improved sanitation in healthcare settings.

Presentation by Isaac Samunete, World Vision Zambia

World Vision Zambia shared their experiences in implementing WASH in Health Care facilities. During the presentation, it was mentioned that each year WVZ with support from donors constructs and equips maternity annexes in health care facilities installation of piped water systems and sanitation facilities with flushable toilet Infrastructure. The project successfully constructed 12 ablution blocks across healthcare facilities in Rufunsa, Mbala, Mazabuka, and Kasenengwa districts, while also installing 15 piped water systems in facilities located in Cifunabuli, Chama, Nyimba, Lumezi, Kalomo, Monze, and Mazabuka districts. Additionally, 105 taps and handwashing basins were installed at critical points of care to enhance hygiene practices. Capacity-building initiatives were conducted to



Figure 2: Officer from World Vision Delivering a Presentation

train committees on the operation and maintenance of the piped water systems, ensuring their sustainability. Furthermore, the project oversaw the construction of eight maternity annexes and eight incinerators in Mbala (80% completion), Nyimba, Namwala, Mwinilunga, Katete, Mazabuka, and Kasama districts, all of which were completed at 100% except for Mbala.

The WASH interventions significantly increased the number of institutional deliveries in healthcare facilities, as expecting mothers were encouraged by the provision of improved water supply, sanitation, and hygiene conditions. This progress contributed to a marked reduction in neonatal and maternal deaths, highlighting the life-saving impact of these measures.

By ensuring an adequate water supply for cleaning, disinfection, and proper handwashing at critical moments, the interventions also played a pivotal role in preventing the spread of infectious diseases within healthcare settings.

These achievements were realized through strong collaboration with government and community partners, enabling the successful completion of the interventions with minimal challenges, demonstrating the power of collective effort in advancing public health outcomes.

Challenges of WASH in Health Care facilities

Despite significant progress, the persistent inadequacy of WASH facilities in certain healthcare facilities continues to hinder the delivery of quality healthcare services. The lack of reliable water

supply, functional sanitation infrastructure, and adequate hygiene provisions compromises infection prevention and control measures, placing both patients and healthcare workers at risk.

In these settings, essential activities such as safe childbirth, wound care, sterilization of medical equipment, and hand hygiene are severely affected, undermining the overall effectiveness of healthcare delivery. This gap not only increases the likelihood of healthcare-associated infections but also erodes public trust in health services, discouraging people from seeking timely medical care.

Addressing these challenges requires targeted investments to upgrade WASH infrastructure, strengthen maintenance systems, and ensure equitable access to these critical services in all healthcare facilities. Collaboration among stakeholders, including governments, donors, and communities, is essential to close these gaps and guarantee safe, dignified, and effective healthcare for all.

Lessons Learned

Some of the lessons learned from World Vision include the following.

The increase in institutional deliveries underscores the need for strengthened community engagement and hygiene behaviour promotion to raise awareness about the importance of mothers delivering at healthcare facilities. Collaborative efforts involving healthcare workers, community leaders, and local organizations are vital to ensuring that communities understand and prioritize safe, facility-based childbirth.

To ensure the sustainability of piped water systems in healthcare facilities, the introduction of a piped water system insurance strategy has been a game-changer, enabling reliable maintenance and reducing system downtime.

Furthermore, experience has shown that a 10,000-liter tank is insufficient to meet the water demands of healthcare facilities, particularly those sharing resources with schools and surrounding communities. In response, the standard has been revised to install a minimum of 20,000-liter tanks in such facilities, ensuring an adequate and uninterrupted water supply to support both healthcare services and community needs.

Recommendations

Advocating for the Ministry of Health (MOH) to support the construction of maternity annexes is essential to ensuring healthcare facilities are fully equipped to provide quality maternal care. Refurbishing these facilities with essential medical equipment will not only enhance their functionality but also guarantee that they can meet the growing needs of expectant mothers, ensuring safer, more reliable maternal care for the community.

Strengthening collaboration with the MOH is another critical step towards ensuring the timely and adequate disbursement of funds to healthcare facilities. A consistent and well-managed financial flow is vital for sustaining WASH interventions and upholding high standards of healthcare service delivery. By ensuring that funds are available when needed, healthcare providers can maintain and improve sanitation and hygiene infrastructure, essential for the well-being of patients and staff alike.

Encouraging both partners and the government to invest in reliable and sustainable energy sources for powering piped water systems and healthcare facilities is a crucial necessity. This investment is vital to eliminating the challenges currently faced by healthcare staff, such as delivering babies in poorly lit conditions or working with limited water supplies. Sustainable energy solutions, like solar

power, would not only ensure consistent operations but also enhance the overall quality of healthcare provided.

Fostering partnerships among various stakeholders to implement comprehensive WASH interventions in healthcare facilities can offer a full, sustainable package of services. By pooling resources and expertise, these partnerships can support Universal Coverage (UC) objectives, ensuring that healthcare facilities meet sanitation and water standards across the board, benefiting the entire population.

Engaging proactively with the government to advocate for the increased allocation of Constituency Development Funds (CDF) toward WASH projects in healthcare facilities is key to prioritizing and resourcing these critical interventions. By making these services a financial priority, the government can guarantee that healthcare facilities across Zambia receive the support they need to deliver essential WASH services that will improve public health and prevent the spread of disease.

Presentation by Adamson Sakala, WaterAid Zambia

In a presentation of their 2023-2028 strategic plan, WaterAid outlined their goal to improve the health and well-being of communities, especially women and girls, by empowering them to demand access to resilient, inclusive, and sustainably financed WASH services.

The presentation highlighted several key contributions made by WaterAid in healthcare facilities. This included their support to the Ministry of Health (MoH) by developing the Infection Prevention and Control (IPC) strategy and guidelines, along with comprehensive training materials aimed at building capacity and ensuring effective implementation at all levels. WaterAid also rolled out Home-Based Care (HBC) and IPC initiatives in Lusaka, Western (Nkeyema), and Southern Provinces (Monze—Mujika, Nalutanda, Nampeyo, Nteme), integrating these efforts into key government programs like Child Health Week to maximize impact.

Additionally, the presentation highlighted WaterAid's development of the Hand Hygiene Roadmap for All (HHRM), a strategic framework designed to achieve universal hand hygiene compliance across various settings. The organization also constructed four piped water networks in Monze, Southern Province, along with maternity annexes and ablution blocks in targeted communities, significantly improving access to water and sanitation.

WaterAid's efforts included distributing essential hygiene materials, such as chlorine, to healthcare facilities, schools, and communities in Matero, helping to reinforce sanitation practices and reduce the risk of waterborne diseases. Lastly, the presentation showcased their successful commemoration of IPC Week, including Global Handwashing Day (GHD), which raised awareness and promoted best practices in infection prevention and hand hygiene at the national level.

Additionally, WaterAid Zambia has been able to complete the following works prior to the implementation of the R2R project:



**41 water
supply
networks**

Installed new and rehabilitated **41** water supply networks, sanitation facilities and hand washing facilities.



**41 maternity
annexes**

Installed new, rehabilitated and retrofitted **41** maternity annexes and incinerators.

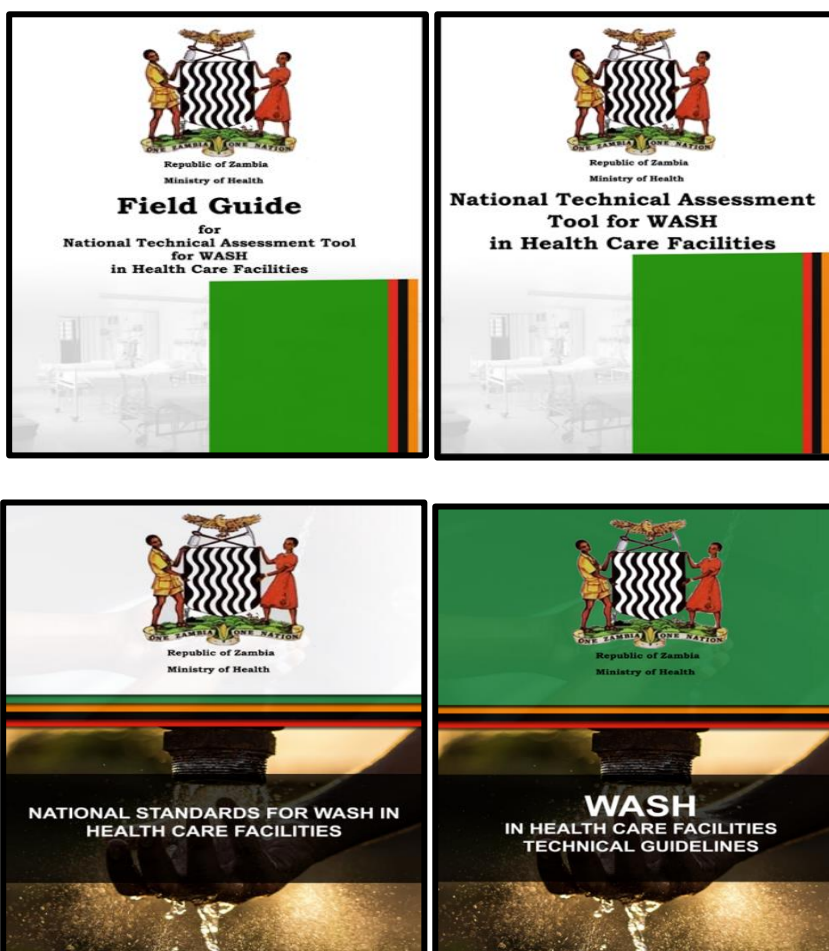


**512,500
beneficiaries**

Achieved an estimated **512,500** direct and indirect beneficiaries of clean water and sanitation

The presentation highlighted the construction of three facilities with Terrazzo flooring installed in select rooms. However, it was noted that extending Terrazzo flooring to all rooms would have been a better approach, as it offers greater durability and ease of maintenance. The main challenge with Terrazzo floors is their higher cost compared to sand screed finishes, which can make widespread implementation difficult. Nevertheless, if Terrazzo flooring were established as a standard for construction, it would allow for more accurate budgeting and planning to accommodate this superior option.

In addition to the Water, Sanitation and Hygiene facilities they have supported the HCF to improve WASH in HCFs, they have supported the government in the development of key WASH guidelines such as Field Guide for National Technical Assessment Tool for WASH in Health Care Facilities.



It was highted that the R2R project in western province was implemented in Western and Southern Province. Following the implementation of this project the following progress was made:



To ensure the long-term sustainability of water systems and sanitation facilities, several initiatives were implemented to empower local communities and ensure the long-term sustainability of water, sanitation, and hygiene (WASH) systems. The formation and training of WASH Committees played a crucial role in fostering local ownership and enabling communities to manage and maintain water and sanitation facilities effectively. In parallel, community-level capacity-building efforts, such as training Community Project Support Teams, equipped individuals with essential skills for ongoing maintenance, thereby ensuring the longevity and functionality of WASH systems.

Promoting the recognition of water, sanitation, and hygiene as fundamental human rights, the program organized WASH rights training and interface meetings, encouraging community members to actively engage in advocating for sustainable practices. Furthermore, the initiative rolled out a Home-Based Care (HBC) champion program, strengthening advocacy at the grassroots level and ensuring that hygiene and sanitation practices were incorporated into healthcare delivery. The capacity-building of Area Pump Minders was another key aspect, aimed at ensuring proper management and maintenance of local water systems, thereby guaranteeing reliable water access for communities.

Training programs for healthcare workers and school staff were also conducted, enhancing their ability to promote hygiene, prevent infections, and integrate WASH practices into healthcare and educational settings. These efforts aimed to foster behaviour change and improve health outcomes. To complement these activities, continuous monitoring of the WASH interventions was implemented, allowing for the assessment of effectiveness, identification of gaps, and the assurance that systems continued to function properly, with an emphasis on achieving sustainable, long-term impacts.

These efforts play a pivotal role in creating sustainable, community-driven solutions for water and sanitation, ensuring that essential facilities continue to operate effectively over time. At the policy level, these initiatives have been crucial in facilitating scale and sustainability by engaging with the Zambian government to integrate WASH in healthcare facilities (HCFs) into the national development frameworks, with a specific focus on the 9th National Development Plan. This proactive engagement aims to position WASH as a critical component of both health and overall national development.

To guide these efforts, a commitment to comprehensive technical assessments for WASH in healthcare facilities has been prioritized. These assessments provide evidence-based insights that will inform the creation of a Costed Roadmap, supporting the integration of sustainable WASH services across Zambia's healthcare facilities. Additionally, the program works to influence local governments, particularly District Health Offices, urging them to prioritize and allocate Constituency Development Funds (CDF) for WASH interventions. This ensures that essential resources are directed towards enhancing water and sanitation systems in healthcare facilities.

Advocating for WASH in healthcare facilities is also central to national policy and budgeting, with active efforts to track progress through Technical Working Groups (TWGs), WASH and Infection Prevention Control/Water Quality cluster meetings, and health policy dialogues. These efforts are designed to promote accountability and ensure measurable, impactful outcomes. Collaborating with district authorities is equally essential in strengthening their capacity for effective planning, budgeting, and implementation of sustainable WASH services. By leveraging the Decentralization Policy, this partnership empowers local governments to champion long-term, community-centered solutions that will have lasting benefits for healthcare settings.

Challenges in WASH in Health Care Facilities

WaterAid has critically examined the challenges faced in the implementation of WASH interventions in healthcare facilities, highlighting several key barriers. One of the primary challenges is financial constraints and resource limitations. Many healthcare facilities struggle to secure sufficient funding, which hampers their ability to fully equip facilities, maintain existing infrastructure, and scale up WASH interventions to reach all communities. Addressing these financial gaps requires the establishment of sustainable funding mechanisms that ensure continuous service delivery and long-term impact.

Another significant challenge is achieving community ownership and ensuring the sustainability of WASH projects. Community involvement in the planning, implementation, and maintenance of water and sanitation systems is crucial for the long-term success and durability of these projects. When communities take active ownership, they are more likely to ensure the proper upkeep of facilities, fostering a sense of local accountability that supports the continued functioning of WASH systems over time.

The cascading of Infection Prevention and Control (IPC) training to all healthcare facility staff is also a major challenge. Due to staff turnover, time constraints, and limited resources for ongoing training, it has been difficult to ensure that all staff members receive consistent and adequate IPC training. For IPC standards to be effectively upheld, it is essential to implement structured training programs backed by dedicated resources to ensure that every staff member is well-equipped to meet these critical health and hygiene standards.

Finally, monitoring and data collection present significant challenges in many healthcare facilities. Inadequate monitoring systems, inconsistent data collection tools, and gaps in local capacity limit the ability to track the effectiveness of WASH interventions. Strengthening data management practices and ensuring the availability of accurate, real-time information are critical for assessing the success of WASH programs, identifying areas for improvement, and making data-driven decisions for ongoing enhancements in healthcare settings.

Lessons Learned

Community Engagement and Ownership are Crucial: Actively involving local communities in the planning, implementation, and management of WASH projects is fundamental for their success and sustainability. When communities are at the forefront of maintaining water points and sanitation facilities, they take greater ownership of the project, ensuring its longevity. These community-driven models empower locals, offering context-specific solutions that meet their unique needs and ensure that resources are used effectively for the long term.

Integrating WASH with Health and Education Programs Increases Impact: Coordinating WASH with the health and education sectors significantly amplifies the benefits of each initiative. Hygiene promotion in schools enhances student health, boosting attendance and academic performance,

while WASH facilities in healthcare settings reduce infection rates and protect vulnerable populations, including mothers and infants. Such integrated approaches help to achieve greater public health outcomes by addressing fundamental needs in both health and education environments.

Behaviour Change is a Long-Term Process: Achieving sustained behaviour change in hygiene and sanitation requires continuous engagement, education, and awareness campaigns, as well as visible improvements in community health. Collaborating with local leaders and educational institutions reinforces positive hygiene practices over time. Community-led initiatives help solidify these practices into the daily routines of individuals, ensuring that behavioural changes become ingrained and durable, improving long-term health outcomes.

Resilience Building for Climate Change is Essential: As climate variability increasingly affects access to water, building climate-resilient WASH infrastructure is crucial in areas vulnerable to extreme weather events. Incorporating features like rainwater harvesting systems and flood-resistant water points allows communities to cope better with droughts and water scarcity. Sustainable water resource management practices ensure that communities can access clean water, even during difficult climate conditions, thereby building long-term resilience.

Strengthening Local Capacity Improves Sustainability: Strengthening the local capacity of communities is key to the sustainability of WASH programs. Investing in the training of local technicians and community health workers equips them with the skills needed to maintain WASH infrastructure effectively, reducing reliance on external resources. Encouraging local entrepreneurship in WASH services fosters job creation, enhances local ownership, and ensures that communities can maintain and manage their water and sanitation systems independently.

Partnerships with Government and Stakeholders Enhance Program Reach: Effective collaboration with government bodies, NGOs, and the private sector leads to better coordination, resource sharing, and policy alignment. Such partnerships ensure that WASH projects are scalable and aligned with national strategies. When various stakeholders come together, their collective resources and expertise amplify the impact of WASH programs, enhancing their reach and effectiveness, ensuring that services benefit larger populations.

Monitoring and Evaluation Drive Continuous Improvement: Implementing strong monitoring and evaluation systems is crucial for tracking progress and adjusting strategies in real time. Robust data collection through digital tools and community involvement ensures transparency and accountability, enabling service providers to respond promptly to challenges and gaps. Continuous monitoring ensures that WASH projects evolve with changing community needs and challenges, delivering sustained improvements in water and sanitation services.

Gender-Sensitive WASH Interventions are Essential: WASH interventions that address the specific needs of women and girls, such as providing menstrual hygiene management facilities, are vital to ensuring gender equity. When women are actively involved in community-level leadership of WASH projects, the interventions become more effective and impactful. A gender-sensitive approach ensures that women's health, dignity, and participation in community development are prioritized, improving the overall outcomes of WASH initiatives.

Innovative Financing Models Increase Access and Sustainability: Exploring alternative financing models, such as micro-financing, community savings schemes, and pay-as-you-go options, ensures that communities have consistent and long-term access to WASH services. These innovative financial solutions enhance sustainability by offering flexible, affordable options for water and sanitation

repairs and improvements. By encouraging local investment and ownership, these financing models ensure that the cost burden is shared, and that infrastructure is maintained over time.

Summary of Block 2

SNV Zambia's WASH SDG project made transformative strides in improving sanitation across five towns, delivering modern, disability-inclusive facilities, conducting accessibility audits, and offering vital infection prevention training to benefit local communities. The initiative tackled significant challenges, such as funding gaps and unreliable water supply, by emphasizing the need for enhanced financing mechanisms, strengthened coordination, and more robust evaluation systems. Prioritizing scalable technologies and collaborative partnerships, the project aimed to secure equitable and sustainable WASH access for all.

World Vision Zambia complemented these efforts by developing critical infrastructure, including 12 ablution blocks, 15 piped water systems, and 8 maternity annexes. This intervention significantly contributed to reducing maternal and neonatal deaths, showcasing the impact of WASH improvements on health outcomes. However, ongoing issues such as insufficient funding and poor water supply underscored the importance of sustainable community engagement and maintenance strategies. Recommendations called for increased advocacy for Ministry of Health involvement and strategic investments in reliable energy solutions to support WASH infrastructure.

WaterAid Zambia concentrated its efforts on expanding WASH access in healthcare facilities, spearheading the construction of essential infrastructure while championing hand hygiene as a cornerstone of improved public health. Despite financial constraints and high staff turnover, the organization leveraged community ownership to drive sustainability. Moving forward, WaterAid highlighted the need for closer collaboration with government bodies, greater financial investments, and rigorous monitoring systems to ensure long-term impact and resilience of WASH interventions.

Collectively, these organizations showcased the power of partnerships and strategic investments to address systemic challenges in WASH, demonstrating scalable solutions and laying the foundation for improved health and dignity in underserved communities.



Figure 3: Kazungula District Health Office Team

Block 3: Field visit and assignment to Health Care Facilities.

Overview and introduction to the topic

The workshop participants broke up into two groups to visit locations around Livingstone and explore real-life issues relating to WASH in HCFs. Each group prepared their assignment on the Tuesday afternoon and spent the next day visiting key stakeholders and observing issues related to the sustainable implementation and management of WASH in HCFs.

The objectives for each group were to:

- Describe the current situation
- Describe the strengths, weaknesses, opportunities, and threats for the future?
- Provide modest feedback and recommendations.

The participants were asked to share their findings through a photo diary, a two-page case description, a testimony of a key stakeholder, and a PowerPoint presentation with impressions and recommendations. These more detailed outputs are available in Annex 2.

The two sites visited by the groups were:

1. Mambova Health Care Facility.
2. Siakasipa Health Care Facility.

On the second day, field visits were organized to two health care facilities being Mambova and Siakasipa Health Care facilities. The participants were divided into 2 groups. Each team was provided with an adjusted WASHFIT tool to use in assessing the HCF. In addition, to assessing the HCF, each team was required to write a case study of the HCF and capture some testimonials from the beneficiaries of the interventions. The following are some of the works that have been performed at both Mambova and Siakasipa HCF with the support of WaterAid:

- Standardized Waste Management Systems: Established comprehensive waste management areas, including placenta pits, ash pits, and incinerators, to ensure safe and environmentally sound disposal of medical and hazardous waste.
- Enhanced Water Storage Capacity: Added supplementary water storage tanks to existing systems, significantly boosting the availability of water to support sustainable WASH services in healthcare facilities.
- Fully Equipped Maternity Annex: Constructed and equipped maternity annexes with robust WASH infrastructure, creating a safe and hygienic environment for mothers and newborns.
- Permanent Handwashing Facilities: Installed durable handwashing stations at key locations to promote consistent hygiene practices and reduce the risk of infections.
- Optimized Hygiene in Outpatient Departments (OPD): Provided strategically placed hand hygiene facilities within OPD buildings to ensure infection prevention and control at critical care points.

Profile of Mambova and Siakasipa Health Care Facilities

Mambova health care facility, located within Kazungula District of Southern Province, has a total population of 5,559 individuals residing in 1,484 households. Situated 37 kilometers from Livingstone and 107 kilometers from the District Health Office in Kazungula, Siakasipa Health Post has served the community since its establishment in 2000. The health facility caters to a catchment population of 3,259 individuals, according to recent data, with a slightly lower figure of 2,885 reported by ZamStats. Despite its remote setting, Siakasipa Health Post continues to play a critical role in addressing the healthcare needs of the local population.

Findings during the field visit to the Facilities

Water Supply

Mambova benefits from a reliable 20,000-litre water system, ensuring adequate supply for handwashing at critical points and enhancing hygiene in healthcare facilities. The system also serves three staff houses, supporting healthcare workers. Quarterly water quality monitoring, supported by SWASCO and the District Health Office, ensures water safety through timely assessments and remedial actions, fostering sustained access and infection prevention.



Figure 4: Water storage tanks at Mambova Health Care Facility

On the other hand, Siakasipa health care facility is powered by a solar-operated piped water system, delivering a reliable 24-hour supply via a solar pump and two 10,000-liter tanks. It serves the

healthcare facility, a nearby school, and surrounding homes, addressing critical water and sanitation needs while improving community health. Drinking water is chlorinated to prevent waterborne diseases, with biannual quality monitoring ensuring compliance with stringent health standards. Recent Q1 2024 tests, supported by the Local Authority, confirmed the water's safety and reliability.

Sanitation Facilities

The sanitation facility at Mambova health care facility offer diverse options, including flush toilets and pit latrines, to cater to varying needs. Fully accessible flush toilets which ensure inclusivity for persons with disabilities, while gender-specific facilities promote privacy and dignity for all users.

In contrast, the facility at Siakasipa features four fully functional flush toilets in the maternity annex and three pit latrines in the OPD, with additional toilets under construction to enhance sanitation. Gender-inclusive designs provide separate male and female facilities, maintained to high hygienic standards by a government-employed Classified Daily Employee (CDE).



Figure 5: L to R Old and New Toilets at Siakasipa Health Care Facility

Handwashing facilities

Fixed and mobile handwashing points are strategically placed at both facilities, consistently stocked with soap, supported by imprest funds, and partnerships. These measures ensure cleanliness, accessibility, and effective hand hygiene practices

Management of Waste

Both facilities prioritize proper waste segregation, safely managing infectious, sharps, and chemical waste to minimize health risks. Securely lidded bins are strategically placed for safe disposal, while a dedicated waste management area with an incinerator, ash pit, and placenta pit ensures environmentally responsible handling of medical and hazardous waste.



Figure 6: Modern Incinerator at Mambova Health Care Facility

Health Care Facility Design and Standards

The facilities are built to rigorous standards, ensuring safety, durability, and functionality. Quality-assured materials have undergone thorough testing and formal approvals to guarantee performance. Designed to withstand extreme weather, the infrastructure is tailored to local environmental and cultural conditions, with terrazzo flooring chosen for its temperature resistance and low maintenance. Optimized ventilation and provisions for air conditioning prioritize comfort and air quality for occupants.

Operation and Maintenance in the Facilities

Mambova health care facility has established operation and maintenance (O&M) schedules, supported by a dedicated team and stocked spare parts for minor repairs. Despite challenges, the community contributes K150 quarterly towards maintenance costs, demonstrating shared commitment to sustaining the facility's functionality.

Similarly, at Siakasipa health care facility, they have a skilled maintenance team, including a pump minder, ensures optimal functionality and quick response to technical issues. The team meets quarterly to review performance and streamline operations, while a transparent, regularly updated weekly O&M schedule ensures accountability. However, a critical resource gap was noted, as no spare parts were available during the visit, emphasizing the need for better inventory management to ensure system reliability.



Figure 7: A handwashing facility at Mambova HCF without taps

Recommendations

To address the challenges faced by the healthcare facilities, several critical recommendations have been made to enhance their effectiveness and sustainability. First, repairing the permanent handwash facility at Mambova Health Care Facility is essential to ensuring consistent access to hygiene. This will not only prevent infections but also contribute to better overall health outcomes for patients and staff by promoting proper sanitation practices.

Security is another major concern, and fencing both Mambova and Siakasipa Health Care Facilities will significantly improve safety. This will protect the infrastructure, secure the resources, and safeguard the individuals who rely on these vital healthcare services, ultimately contributing to a more stable and secure environment for both patients and staff.

Addressing waste disposal practices, it is recommended that the correct accelerant, such as diesel, be supplied to both facilities to ensure proper waste combustion. This will help minimize environmental harm while promoting the adoption of appropriate waste disposal methods that support overall hygiene and environmental sustainability.

Water usage at Siakasipa Health Care Facility should also be carefully managed by implementing separate systems for the health post, school, and surrounding community. This will optimize water distribution, ensuring equitable access for all stakeholders while promoting efficient resource management across the different areas.

In addition to water management, installing a 20,000-litre water storage tank at Siakasipa Health Care Facility will help support external needs, such as gardening at the neighbouring school. This will not

only enhance the facility's sustainability by providing a reliable water source but also contribute to improved community resilience and resource availability.

Financial sustainability and reliable service delivery require regular and consistent funding, so ensuring monthly grant disbursements will help maintain ongoing facility operations. This steady funding stream is essential for continuous service and the upkeep of healthcare infrastructure.

Expanding income-generating activities through the establishment of gardens at both facilities presents a dual opportunity. Not only will it create sustainable sources of revenue, but it will also contribute to environmental responsibility, fostering a sense of environmental stewardship within the local communities.

Lastly, ensuring continuous community involvement through active participation in established committees is critical for the long-term success of these interventions. When communities take ownership of the management and development of these healthcare facilities, they are more likely to sustain the improvements and work collaboratively toward the ongoing success and development of their local healthcare services.

Lessons Learned

Community ownership is a key driver of success in healthcare infrastructure projects. When the local community is actively engaged in the construction of facilities, it fosters a sense of responsibility and ownership. This involvement ensures not only the sustainability of the project but also long-term support from the community, as they become invested in maintaining and protecting the infrastructure they helped build.

Equally important is adherence to standard building plans. Deviation from approved designs can lead to severe, often tragic, consequences. The unfortunate incident at the Siakasipa maternity annex, where the removal of a duty room resulted in the death of a healthy newborn, underscores the critical need to follow original plans meticulously. This event highlights how deviations can jeopardize both safety and the quality of care, making strict adherence to building standards a non-negotiable aspect of facility design.

Adequate space is another fundamental consideration in healthcare facility design. The maternity annex at Siakasipa has shown the detrimental effects of insufficient space, with the facility being too small to accommodate necessary medical equipment. This limitation significantly impacts the ability to deliver efficient and effective healthcare, reinforcing the need for facilities that are properly scaled to meet the operational needs of healthcare professionals.

Finally, overlooking essential components in facility planning compromises the overall quality of care. The absence of an examination room in Siakasipa's maternity annex has hindered the provision of adequate care, making it clear that all critical spaces, such as examination rooms, must be included in healthcare facility designs. A holistic approach to facility planning ensures that healthcare delivery is comprehensive, with all necessary elements in place to support patient well-being and effective care.

Block 4: Sustainable Operation and Maintenance of WASH in Healthcare Facilities

Overview and introduction

Block 4 aimed to explore key issues affecting the sustainability of WASH facilities in healthcare facilities (HCFs) through an engaging exchange of perspectives. The deepening of the discussion was done through a debating game. The purpose of the game was to encourage participants to explore the ideas emerging from the event and possibly to challenge their own internal views on the topic.

The debate

Participants were divided into two teams: one arguing in favour of the motion and the other against it. A panel of three participants was selected to serve as the jury, tasked with assessing the arguments and determining the winning team.

Debate Statement

Sustainable operation and maintenance (O&M) of WASH in HCFs cannot be achieved because accountability mechanisms are ineffective.

Objective

The session aimed to deepen understanding of the challenges and solutions related to sustainable O&M in WASH facilities while encouraging participants to convincingly articulate their positions to persuade the jury.

Key Issues Identified

Different issues emerged from the debate and can be summarised as follows:

Challenges to Sustainable O&M

The challenges to sustainable operations and maintenance (O&M) of WASH facilities are multifaceted and complex. A key issue is unclear roles and responsibilities, with weak enforcement where roles are defined. This often leads to inadequate planning and budgeting, with limited funds allocated or disbursed for O&M activities.

There is an overreliance on community involvement, while higher-level actors such as District Health Officers (DHOs) and the Ministry of Health receive insufficient attention. This results in a disconnect among stakeholders, with responsibilities often shifting between healthcare facilities (HCFs), local authorities, and communities, creating confusion and inefficiency.

Ownership ambiguity further complicates matters, particularly regarding the responsibility for water points at healthcare facilities.

Additionally, community engagement lacks standardization, leading to limited responsiveness. Insufficient monitoring and a lack of cost guidelines hinder decision-making related to sustainability.

Finally, policy inconsistencies and contradictory regulations undermine effective O&M, exacerbating the overall challenges.

Recommendations for Sustainable O&M

To ensure sustainable operations and maintenance (O&M) of WASH facilities, it is essential to define clear roles and responsibilities at all levels, including VWASHE, at HCFs, and higher authorities.

Targeted training for relevant personnel and structures is necessary to enhance O&M practices. Additionally, responsible entities must plan, budget, and allocate funds for O&M to ensure long-term sustainability. Clarifying ownership of water points will help resolve conflicts and improve accountability. Finally, leveraging existing funding opportunities, such as Constituency Development Funds (CDF), while building local capacity to prioritize needs, is critical to addressing resource gaps and strengthening local involvement in O&M efforts.

Wrap up of the Learning Event on WASH in Health Care Facilities

After all block sessions, the event was nearing its completion. A revisit of the reasons for the event was given as well as some additional background to remind ourselves of the overarching aim of the event: to deepen the Forum's, and its member CSOs, understanding of proper WASH service delivery in HCFs, the roles and responsibilities in this service delivery and what is needed to further advance the integration of WASH in healthcare settings.

Key learning highlights

Per block the key learning highlights were given, these were as follows:

Block 1 – Key concepts, facts and figures

- Access to water and sanitation is a human right, including in HCFs. Health (and health care) is also a human right, which cannot be realised without WASH.
- Proper WASH in HCFs will prevent the spread of disease and infections among patients, staff, and communities (particularly new-borns and their mothers)
- World Health Assembly Resolution in 2019 on WASH followed by the global meeting from Resolution to Revolution → 8 practical steps (guiding steps)
- Zambia is progressing on these steps, but there are issues around baseline data, monitoring, roles and responsibilities.
- A lot is happening at national level, but how does that cascade down to district level?
- WASH FIT as a quality improvement tool for HCFs? Covering key aspects of WASH services: water; sanitation; hand hygiene; environmental cleaning; health care waste management; and selected aspects of energy, building and facility management.

Block 2 – General exchange of practices and experiences of WASH in Health Care Facilities: What are best practices, challenges and opportunities that exist in the WASH in HCFs sector?

- WASH infrastructure development follows clear guidelines and criteria, and involvement of different stakeholders during the whole implementation period ensures proper quality control
- NGOs stepping into the role of service provider and support government with construction of WASH infrastructure in HCFs (Strengthening of duty bearers to discharge their functions)
- Community engagement in monitoring and O&M is important. Possibly too important?
- Issues around sustainability of O&M of WASH facilities/services in HCFs
- Defining the roles and responsibilities to enhance effective implementation of WASH services in the health sector.

Block 3 – Field assignment and reporting back: How can we improve the sustainability of infrastructure for WASH in HCFs and ensure appropriate designs that are compliant to minimum standards?

- Modernising and integrating WASH in HCFs in Mambova and Siakasipa have seriously improved health service delivery.
- Transparency in project implementation and involvement of community (as well as other stakeholders) was seen as an enabler to enhance community ownership.

- Roles and responsibilities of the duty bearer(s) is not always evident and well-defined.
- Partnership with SWACSO (mandated and licensed to provide water services to all districts).
- Long term sustainability of O&M remains an issue (planning, budgeting and proper disbursement).
- Checklist gives a clear and structured overview of WASH situation in the HCFs.
- Constituency Development Fund can be an interesting funding model for further WASH investments (starts with capacity strengthening of community).

Block 4 – Sustainability: How can effective accountability mechanisms support sustainable operation and maintenance of WASH facilities in HCFs?

- Have clear roles/responsibilities at all levels for O&M (VWASHE, HCF and above the facility level).
- Provision of targeted training on O&M to identified structures/personnel.
- Responsible entity to plan, have budget and make disbursements for O&M.
- Clarify ownership of water points.
- Leverage existing funding opportunities such as CDF – coupled with capacity strengthening of community and local structures to prioritise needs.
- Constant monitoring, follow up and feedback provision.
- Installation of resilient WASH facilities that are also quality (durable).
- Involvement of local structures during installation of the facilities to ensure quality and durability

Reflections and takeaways: What did we put in our shopping bags?

At the end of the learning event participants were asked to consider what they have learned that they will take back and either apply in their work or share within their organisations. Each group (as per table setting) discussed their key takeaways and presented them to the workshop participants.

The reflections and takeaways from this session highlighted several important aspects regarding the implementation and sustainability of WASH in HCFs. A comprehensive WASH facility package is crucial to ensuring quality healthcare services. The effective community engagement and involvement of key stakeholders during the establishment of WASH facilities guarantees better results and ownership, while district staff involvement in supervision and quality assurance is essential for maintaining high standards. Coordination among different organisations is necessary to avoid duplication of efforts and streamline interventions. While community involvement is key to sustaining WASH infrastructure, it's important not to over-rely on them, as other institutional actors must also play their part. A major challenge remains the operational and maintenance (O&M) of facilities, requiring clear roles, responsibilities, and effective monitoring mechanisms. Sustainability must be addressed through collaboration across all levels, not just at the grassroots. WASH in healthcare facilities is fundamental to ensuring good health outcomes, and mandated institutions need to be involved, particularly in decentralized supervision. There's a need to look beyond the current funding structure to ensure long-term O&M sustainability. Lastly, accountability and transparency must be prioritized, and the WASH NGO Forum should continue to serve as a unified civil society voice to advocate for the sector.

Next Steps – what is next?

Building on the insights and discussions from the Health Care Facility Learning Event, the following steps outline a focused roadmap to translate key insights into action. With clear priorities, responsibilities, and timelines, these actions aim to enhance collaboration, build capacity, and drive impactful progress toward sustainable WASH outcomes.

The team then outlined key activities and initiatives moving forward:

1. **Develop a Comprehensive Learning Event Report:** Produce a detailed and actionable learning event report to capture key insights, outcomes, and best practices from the discussions. The report will include a critical analysis of the issues raised, clearly articulated recommendations, and prioritized next steps to drive future progress.
2. **Conduct Targeted Training on the WASH FIT Tool:** Facilitate hands-on training sessions for NGO WASH Forum members to build their capacity in applying the WASH FIT tool. Pilot the tool in selected healthcare facilities, systematically document implementation experiences, and compile lessons learned to inform strategies for scaling up and institutionalizing the tool.
3. **Foster High-Level Cross-Sectoral Collaboration for WASH:** Actively engage key stakeholders, including the Ministries of Health, Water Development and Sanitation, and Infrastructure, to promote integrated planning and execution of WASH initiatives. Establish structured mechanisms for cross-sectoral collaboration, leveraging ministry support to align resources and policies for impactful WASH programming.

Conclusion

The WASH in Healthcare Facilities Learning Event served as a crucial platform for stakeholders to critically assess Zambia's progress and the persistent challenges in achieving sustainable WASH services within healthcare facilities. It provided an invaluable opportunity for participants to engage in rich knowledge sharing, field visits, and dynamic discussions, underscoring both the global trends and national realities surrounding WASH in HCFs. The event highlighted the complex interplay of factors that impact the accessibility, quality, and sustainability of WASH services, and reaffirmed the necessity of comprehensive, cross-sectoral approaches to address these challenges.

Key insights drawn from the event include the urgent need to integrate WASH initiatives into broader healthcare systems to improve service delivery, boost infection control, and enhance overall public health outcomes. The discussions also highlighted the critical necessity for stronger accountability mechanisms, consistent policy frameworks, and adequate financing to support ongoing infrastructure maintenance and scale up service delivery. Participants also identified the importance of fostering robust collaborations between government agencies, civil society organizations, and international development partners, to overcome the persistent barriers related to limited resources, insufficient political will, and weak community participation.

This learning event further underscored that access to clean water, sanitation, and hygiene is not just about maintaining infrastructure; it's integral to providing high-quality healthcare and protecting the dignity of all patients, particularly vulnerable groups such as women, children, and those with pre-existing health conditions. The knowledge and experiences shared will guide future advocacy efforts, catalyse policy reforms, and inspire innovative solutions for realizing the goal of universal access to safe and adequate WASH services in all healthcare settings across Zambia.

Looking ahead, the learning event has sparked renewed enthusiasm among participants to take actionable steps toward addressing existing gaps and expanding upon successes already achieved. Equipped with new strategies and insights, stakeholders are now better positioned to advocate for systemic changes, mobilize resources, and work collaboratively across sectors, ensuring that WASH becomes an essential pillar of healthcare excellence and a fundamental right for all individuals in

Zambia. The collective energy and commitment generated during the event are sure to drive meaningful progress in the years to come.

Appendix 1: List of participants

	Organisation	Representative	Position	Sex
1	Zambia Humanitarian Platform	Steven Nyirenda	Coordinator	M
2	Centre for future Generation	Gilbert Kalombo	Chef Executive Officer	M
3	VAREN	Jackson Mwenya	Chief Executive Officer	M
4	Vision Outreach Zambia	Hope Maleshia	Programmes Director	F
5	BORDA	Angela	Project Manager	F
6	Compassion International	Janet Njovu	Health Specialist	F
7	Shambayi Initiative	Geoge Mazambani	Coordinator	M
8	Development Aid from People to People	Chris Mupechi	Partnership and Resources Mobilization officer	M
9	BARAKA	Micheal Phiri	Education Manager	M
10	NECOS	Gift Situmbeko		M
11	Ukazipalile Integrated Project	Kafula Daka	Chief Executive Officer	M
12	Reformed Open Community Schools (ROCS)	Kennedy Musonda	Monitoring and Evaluation Manager	M
13	World Vision	Isaac Samunete	Project Manager	M
14	The Salvation Army	Joshua Dube	Hygiene specialist	F
15	Seeds of Hope	Essau Banda	Finance Officer	M
16	Water Aid	Adamson Sakala	Manager	M
17	Water Aid	Shaffi Andrea	Engineer	M
18	SNV	Davy Ngoma	DPM	M
19	SNV	Kundanaji Mwamulima	WASH Governance	F
20	SNV	Egar Chaamwe	WASH Governance	M

21	SNV	Solomon Mbewe	Senior WASH Expert	M
22	SNV	Susan Chisapi	Administration	F
23	SNV	Lauren Muchemwa	Procurement	F
24	SNV	Philimon Zimba	Finance	M
25	SNV	Chipo Munkombwe	IT	M
26	SNV	Costa Chitanda	WASH Services	M
27	SNV	Chongo Chifunda	Driver	M
28	SNV	Sharon Roose	Senior Advocacy Officer	F
28	NGOWASH Forum	Nonde Lwatula	Advocacy Officer	M
29	NGOWASH Forum	Bangwe Naviley	Communications Officer	M
30	Kazungula DHD	Mwango Mwaba		M
31	Kazungula DHD	Mathews Silwamba	Public health Officer	M
32	Kazungula DHD	Adrian Kakoma	Community Health Assistant	M
33	Kazungula DHD	Sunday Siamugoza		M

Appendix 2: Detailed outputs of field visit assignments

Mambova Health Care Facility

Testimonials from beneficiaries of the Health Care Facility at Mambova

1. Inonge Muhamubi



"As a lifelong resident of Kandela village, I've seen the struggles women faced at Mambova Health Care Facility," says Inonge Muhamubi, a 38-year-old malaria community volunteer and farmer. "With only two beds in the maternity block, expectant mothers often had no choice but to sleep on the floor. Postnatal care was nearly impossible in such conditions."

The challenges didn't end there. *"The maternity block lacked even the most basic facilities—a toilet, a bathroom, and running water. Mothers had to fetch water from the Zambezi River to wash nappies and*

used pit latrines for bathing and relieving themselves," she recalls.

Thanks to WaterAid, everything has changed. *"The construction of a new maternity annex with a functional water reticulation system has transformed our healthcare facility. Now, mothers can deliver their babies safely and with dignity," Inonge shares.*

The impact is profound. *"This upgrade has drastically reduced home deliveries, ensuring safer outcomes for mothers and their babies. It's a game-changer for our community," she concludes with pride*

2. Charity Simulundu

Testimonial: A Life Transformed by Access to Clean Water



For 32 years, Charity Simulundu has called Kandela Village home, enduring the harsh realities of life without access to clean, safe water. She vividly recalls the daily struggles—long, exhausting walks to the Zambezi River to fetch water, often unsafe for drinking or domestic use. The local maternity facility mirrored these hardships. Charity remembers the single bed shared between the maternity room and the outpatient department (OPD), forcing mothers to deliver in conditions

that lacked dignity and privacy. There was no postnatal room, no running water, and no bathrooms. It was a place of survival, not care.

In 2022, hope arrived. WaterAid transformed the facility, constructing a modern maternity annex with a functional water reticulation system, a borehole, and 20,000 liters of water storage. The changes were nothing short of life changing.

"Today, we don't just have a health facility; we have a place where mothers are treated with care and dignity," Charity shares, her voice filled with emotion. "The clean water now flows freely, and it's not just for the facility—it's for the entire community. What once felt impossible is now our reality."

The impact of these changes is immeasurable. Women no longer fear giving birth in unsanitary conditions. The community now has continuous access to safe water, improving health, hygiene, and daily life. Charity says it best:

"This water is more than just water—it's hope, health, and a better future for our children and generations to come."

Siakasipa Health Care Facility Testimonials

Agness Kahale

"Before, our healthcare post faced countless challenges," shares Agnes Kahale, a 38-year-old Community Health Assistant. "Without power, we relied on candles or lamps for nighttime care, even during childbirth. The lack of water and privacy made it difficult to provide dignified care for mothers before, during, and after delivery."

Today, thanks to critical infrastructure improvements, everything has changed. "Water access has transformed how we work," Agnes explains. "We can now properly disinfect, wash hands, and maintain sanitation after delivery, providing safer and more respectful care for mothers."

Beyond healthcare, water has brought life to the community. A gardening project combats malnutrition with diverse crops and cooking demonstrations. "We are not only delivering babies," Agnes says, "we are nurturing healthier futures." The mother's shelter, with its enhanced amenities, has also become a cornerstone for supporting pregnant women from eight months onward. "SMAGs value this space immensely—it gives mothers a safe, supportive environment as they await their delivery," Agnes concludes. "It's more than a shelter; it's a symbol of hope and care for our community."



Barbara Kahale



"As a mother of six, I've experienced the struggles firsthand," shares Barbara Kahale, 36. "When I delivered my first five children, the facility lacked power, running water, and privacy. These conditions were so discouraging that some women opted for the risks of home births instead."

Barbara recalls the challenges vividly. "The communal toilets were 20 meters from the delivery room, often dirty and unsafe. Accessing them after giving birth was a struggle, and the risk of infection was always on my mind."

However, everything changed in September 2023, when Barbara delivered her sixth child in the newly upgraded facility. "This time, it was completely different," she says with relief. "The facility now has power, running water, and proper sanitation. It wasn't just safe—it was a pleasant and dignified experience."

For Barbara, the transformation represents more than just infrastructure; it's a lifeline for mothers and their babies. "Every woman deserves to deliver in a place that prioritizes her safety and well-being. Now, we finally have that."

Case Study: Transforming Healthcare Through Strategic WASH Interventions at Mambova Rural Health Centre

Introduction

This case study underscores the transformative potential of partnerships and strategic interventions in driving progress toward realizing the human right to water and sanitation in Zambia. Mambova Rural Health Centre, situated approximately 10 kilometres from the Central Business District of Kazungula in Southern Province of Zambia, has been a cornerstone of the community since its official opening in January 1960. Over the decades, this health centre has grown to serve a significant population, with a total head count of 5,959 people under its care as of January 2024.

For a long time, Mambova Rural Health Centre faced a dire water crisis. Reliant on nearby SWASCO water point, the facility often experienced shortages that were particularly devastating for its maternity ward. The lack of reliable water supply compromised the hygiene and safety of childbirth, exposing mothers and newborns to significant health risks.

Compounding the water issues, waste management at the health centre was in a deplorable state. The incinerator, essential for disposing of medical waste, was in disrepair. This did not only exposed health staff and patients to hazardous air but also posed serious environmental and health risks to the surrounding community.

Without consistent access to clean water and proper waste disposal, maintaining hygienic conditions was nearly impossible.

What it was

Since 1960 Mambova Rural Health Centre faced a dire water crisis due to growing population in the area until SWASCO came in to support the health centre and its surrounding areas with piped water supply though it never provided water supply to the maternity wing which posed a challenge to effective provision on maternal health care

services. The situation was compounded with the challenge of waste management at the health centre which were in a deplorable state. The incinerator, essential for disposing of medical waste, was also in disrepair. This did not only expose health staff and patients to hazardous air but also posed serious environmental and health risks to the surrounding community.

What it is now



Mambova Health centre is no longer the same despite its age; the facility has seen substantial improvements through the intervention of Water AID Zambia in 2022. Recognizing the critical need for modern healthcare amenities, Water AID Zambia constructed a state-of-the-art maternity wing and installed a 20,000-liter capacity solar borehole through the project called R2R Project's investments). This advancement has resolved the long-standing water challenges, ensuring a reliable supply for the health centre, especially the maternity ward.

The maternity wing has become a beacon of hope for many, enabling the facility to manage an average of eight (8) successful birth deliveries each month compared to two or three deliveries before the project. Additionally, the health centre is equipped with a modern incinerator, enhancing its capability to manage medical waste effectively. Mambova Rural Health Centre continues to be a vital healthcare provider for the local community, upholding its commitment to improving health outcomes and providing essential services to those in need.

The health centre now boasts flush toilets coupled with hand washing stations, replacing the previously inadequate pit latrines. These toilets are gender-segregated, accessible to individuals with disabilities, and strategically located to ensure convenience for both staff and patients. The modern facilities have drastically improved sanitation standards and promote the dignity of users.

The experiences at Mambova Rural Health Centre (RHC) serve as a valuable learning opportunity for stakeholders seeking to replicate similar outcomes in other settings.

The project also addressed waste management by introducing designated disposal facilities for medical and general waste. These include secure bins for infectious waste and an improved and larger incinerator which is for safe waste disposal, reducing environmental and health hazards in the surrounding community.

The R2R project trained facility staff and community members as Area Pump Menders (APMs) in the operation and maintenance of the new WASH infrastructure, ensuring its long-term functionality and sustainability.

Financing of the Health Care Facility

The funding for the construction of the modern maternity wing at Mambova Rural Health Centre was generously provided by Water Aid.

In addition to the financial support from Water Aid, the success of the project was greatly bolstered by the active participation of the community. Local community contributed through community up fronts and labour, demonstrating a collective commitment to improving their health infrastructure.

Lessons Learned

- Integrating comprehensive WASH infrastructure in health facilities has proven to be a powerful catalyst for improving health service delivery, playing a crucial role in realizing the fundamental human rights to water and health.
- Active community involvement in every stage of infrastructure development—planning, implementation, and evaluation—has proven essential to delivering quality services, as evidenced by the success of Mambova Maternity Annex.
- Adequate WASH infrastructure in healthcare facilities significantly enhances facility-based deliveries, empowering pregnant women to access safe, clean care. This improvement also serves as a key motivator for health workers, increasing their job satisfaction and efficiency.
- Transparency throughout the project implementation process has been a critical enabler, fostering trust and ensuring robust community participation in the development of sustainable, community-driven solutions.
- The provision of WASH in healthcare facilities requires substantial investment, underscoring the need for continued financial commitment to ensure long-term health outcomes and equity in access to quality healthcare.

Conclusion

The transformation of Mambova Rural Health Centre demonstrates the power of strategic interventions and partnerships in addressing critical healthcare challenges. By prioritizing WASH infrastructure, the facility has improved health outcomes, fostered community trust, and restored dignity to patient care. This case study serves as a blueprint for scaling similar interventions in other underserved communities across Zambia.

Case Study 1: Transforming Siakasipa Health Care Facility Through WASH Innovations

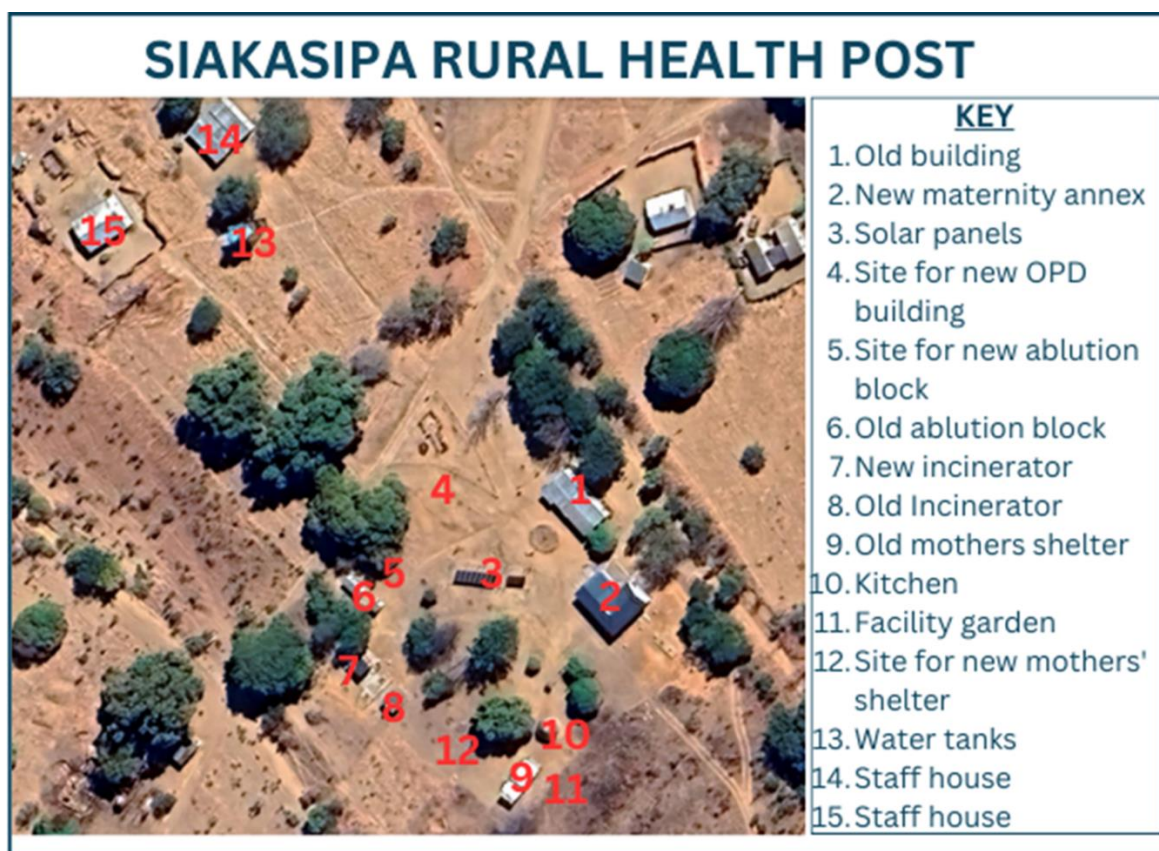


Figure 8: Aerial view of Siakasipa Health Post

Background of Siakasipa Health Post

Established in 2000, Siakasipa Rural Health Post (RHP) began as a modest facility with a single building, one staff house, and a lone staff member supported by Community Health Assistants (CHAs). The infrastructure was rudimentary and strained:

- Inpatient Care: A single room served as a shared ward for male, female, and postnatal patients, compromising privacy and dignity.
- Delivery Room: Located near the Outpatient Department (OPD), it lacked privacy, creating an undignified setting for childbirth.
- Sanitation Facilities: Ablution blocks were distant from the main building, making them inconvenient for pregnant women, especially at night. Gender separation existed but was poorly designed, with male and female facilities adjacent to one another.

By 2018, staffing levels improved with the addition of an Environmental Health Technologist (EHT) and an enrolled nurse. However, the infrastructure challenges persisted, hindering service delivery.

Developments to the Facility

A collaborative effort among stakeholders has driven transformative improvements, particularly since 2023:

- i. Maternity Annex Construction: WaterAid funded the construction of a maternity annex with separate toilets and showers for staff, patients, and guests.
- ii. Water Reticulation System: WaterAid and SWASCO installed a 20,000-liter water system powered by four solar panels, ensuring consistent water supply.

- iii. Lighting Solutions: On Call Africa enhanced the facility's general lighting by installing solar-powered systems.
- iv. Expanded Infrastructure: Ongoing projects include a new mothers' shelter, an OPD department, and accessible ablution blocks designed for people with disabilities.
- v. Facility Equipment: The Council and District Health Office (CDF) equipped the maternity annex with essential tools and supplies.

Current Status

The facility now serves 3,259 people and sees an average of 20 patients daily. Since January 2024, 20 deliveries have been recorded 19 at the facility and one at home. Despite these advancements, lingering perceptions of inadequacy among community members stem from memories of the old facility. Additionally, the facility's remote location presents accessibility challenges for some residents.

Waste Management: A Critical Transformation

Historically, waste management was a major concern:

- Open pits were used for waste burning, and new pits were dug as needed.
- Improper burial of placentas at a local graveyard led to contamination and animal disturbances.

Key Improvements:

- a. Community-Led Initiative: In response to District Health Office (DHO) guidance, the community constructed a basic incinerator at a cost of ZMW 7,000, which, although functional, lacked critical features.
- b. Modern Incinerator: In 2023, WaterAid built a standard incinerator with an ashpit and placenta pit, ensuring proper waste segregation and disposal.
- c. Enhanced Practices:
 - Waste is now segregated at the source using coded bin liners.
 - Safe boxes are provided for needles and syringes.
 - A trained cleaner with protective gear manages waste handling.
 - An infection prevention committee oversees waste management, fostering accountability and compliance.

Outcomes

The facility has seen notable advancements, including:

- Infection Control: Improved waste segregation and disposal minimize infection risks.
- Enhanced Patient Care: The maternity annex and new infrastructure provide greater privacy and dignity for patients.
- Boosted Staff Morale: Access to water and better working conditions encourage staff motivation and retention.
- Strengthened Community Engagement: Collaborative efforts foster a sense of ownership and trust between the community and facility.

Challenges

Despite progress, certain challenges persist:

- i. Infrastructure Limitations:
 - The maternity annex lacks space for essential equipment, such as resuscitators.
 - It also requires an examination room and a duty room for efficient operations.
- ii. Waste Quantification: The absence of a weighing scale limits the ability to measure waste generation effectively.
- iii. Planning Gaps: Some infrastructure decisions lack sufficient planning and data-backed insights.

Lessons Learned

- **Community Ownership:** Community-led initiatives play a crucial role in ensuring the sustainability of health facility improvements.
- **Thoughtful Planning:** Infrastructure development requires comprehensive planning and adherence to standards for maximum impact.

Conclusion

The transformation of Siakasipa RHP highlights the profound impact of WASH interventions on healthcare delivery. From the construction of a maternity annex and water reticulation system to the establishment of modern waste management practices, these developments have enhanced patient care, reduced infection risks, and strengthened community trust. However, addressing remaining challenges, such as infrastructure limitations and waste quantification, will be critical to sustaining these gains and building a resilient health facility for the future.

Case Study 2: Strengthening Rural Health Facilities Through Effective Operations and Maintenance

Efficient Operations and Maintenance (O&M) systems are the backbone of sustainable service delivery in rural health facilities. This case study highlights the achievements, challenges, and lessons learned from a Rural Health Centre's (RHC) effort to improve its O&M practices.

Water System Maintenance

In June 2023, a 20,000-liter water system was installed to serve the health post, 12 staff houses, and a nearby school. Community households contribute ZMW 50 monthly, accumulating a maintenance fund of ZMW 3,400. This fund has been instrumental in maintaining the water system.

However, unauthorized gardens established by teachers at the school have overburdened the water supply and violated the original usage agreement. This misuse has placed undue stress on the system, threatening its sustainability and efficiency.

Committees and Training

Three active committees—WASH, Maintenance, and Neighbourhood Health—are tasked with addressing O&M issues. Training sessions, delivered through the R2R project, emphasized WASH Infection Prevention and Control (IPC) standards for staff and committee members.

Despite these efforts, the lack of a comprehensive, written O&M manual has limited the committees' ability to implement standardized practices consistently.

Water Quality Monitoring

Water quality monitoring is conducted in collaboration with the district health office, ensuring compliance with public health standards through chemical and bacteriological testing in Lusaka. The facility promotes hygiene with strategically placed handwashing stations stocked with soap, fostering good practices among staff and visitors.

Localized O&M Plan

The facility has an informal O&M plan for its solar-powered energy systems. This includes regular cleaning of solar panels, power system monitoring, and direct communication with contractors for troubleshooting. However, the reliance on verbal instructions poses risks for long-term sustainability, emphasizing the need for formalized documentation.

Outcomes of Improved Operation and Maintenance

The adoption of robust O&M practices has led to transformative results:

- i. Infection Prevention: Enhanced waste management systems have reduced risks of infection from improper disposal practices.
- ii. Dignified Patient Care: A new maternity annex provides privacy and dignity for mothers during childbirth.
- iii. Eradication of Outdated Practices: Unsafe practices, such as burying placentas, have been replaced with proper disposal facilities.
- iv. Increased Staff Efficiency: Access to running water eliminates the need for manual water fetching, allowing staff to focus on patient care.
- v. Community Trust: Active engagement with the community has built trust and increased support for facility operations.