

WATER, SANITATION, AND HYGIENE: ZAMBIA



THE FACTS

- » Only 48% of the rural population in Zambia has access to a basic water service.
- » About 25% of the rural population has access to a basic or safely managed sanitation service. Half (49%) the rural population uses an unimproved toilet, while 19% practices open defecation.
- » Only 9% of the rural population has access to a basic handwashing facility (with soap and water), and 29% has access to a limited facility (lacking water or soap).

— World Health Organization/UNICEF Joint Monitoring Programme, 2020

About World Vision

World Vision is a Christian humanitarian organization dedicated to working with children, families, and their communities worldwide to reach their full potential by tackling the causes of poverty and injustice. World Vision serves all people, regardless of religion, race, ethnicity, or gender. Established in 1950, World Vision's global partnership operates in nearly 100 countries, including implementation countries, along with country offices focused on fundraising and technical support, as well as regional and global teams providing quality assurance. Nearly 40,000 staff members—95% of whom work in their own countries—work in health; education; livelihoods; food security; child protection; economic empowerment; and water, sanitation, and hygiene (WASH) programming.

Global WASH Program

Over the past 35 years, World Vision's work in the WASH sector has grown exponentially. With more than 1,200 technical WASH staff members guiding our work in 55 countries, World Vision has emerged a leader in its global commitment to accelerate universal and equitable access to WASH services under Sustainable Development Goal (SDG) 6. Over the last five years alone, we have reached an estimated 20 million people with clean water and hygiene promotion, as well as 12.5 million people with improved sanitation.

Driven by the vision of transformative WASH for child well-being, World Vision's strategic direction is laid out in our global WASH business plan (2021-2025), which outlines World Vision's intent to increase impact in priority countries, including Zambia, with an emphasis on reaching the world's most vulnerable. The business plan uses a diversified funding approach, pooling multiple financial streams to accomplish activities and leveraging a flexible revenue base of private funding to raise additional funds.

World Vision's four global WASH business plan goals are:

- Accelerating universal and equitable access to WASH services under SDG 6
- Deepening our focus on the most vulnerable, especially in fragile contexts
- Demonstrating sustainable impact
- Leveraging a \$1 billion business plan to mobilize financing for WASH services

WASH in Zambia

World Vision's work in Zambia started in 1981 with three small community developments projects in Mkushi district, north of Lusaka, Zambia's capital. Today, World Vision Zambia (WVZ) operates in nine of 10 provinces in the country, in partnership with district/municipal assemblies, decentralized government agencies, nongovernmental organizations (NGOs), faith-based organizations, and communities. Improving the well-being of children continues to be the focus of everything we do. WVZ's multisectoral strategy focuses on catalytic interventions in the sectors of WASH, health and nutrition, food security and economic resilience, primary education, and child protection. This strategy is realized through an annual national budget of approximately \$40 million from local revenue, public and private grants, and child sponsorship.

WVZ began scaling up its WASH program significantly in 2008. From 2010 to 2020, WVZ built or rehabilitated nearly 8,500 water points, including wells with hand pumps and taps from more than 200 piped-water systems, serving more than 1.5 million people. In addition, WVZ reached 1.7 million people with improved sanitation facilities and educated 1.4 million people in healthy hygiene practices, resulting in 3,335 communities being certified Open Defecation Free (ODF).

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World Vision's community-based approach and 40-year presence in Zambia gives us the longevity and experience to take quality, sustainable WASH interventions to scale. Sustainable, equitable access to and management of clean water, dignified sanitation, and appropriate hygiene behaviors contribute to World Vision's ultimate goal of improved child well-being. WVZ is committed to reaching the SDGs and has created a new five-year (2021-2025) WASH strategy to ensure significant progress toward universal coverage of WASH services in Zambia.

As one of World Vision's largest WASH-focused countries, the footprint of World Vision's Zambia WASH Program includes 122 wards within 30 districts across nine provinces, and is staffed by 56 experts in water supply engineering, sanitation, behavior change, hydrogeology, and monitoring and evaluation. The country-wide reach of our WASH program is supported by 30 operational offices and an annual budget of \$9 million. The map at right provides an overview of World Vision's geographic footprint for WASH in Zambia.

Program Approaches

The following sections describe our core WASH technical approaches in communities, schools, and healthcare facilities (HCFs), summarizing capacities and achievements over the past five years, and presenting highlights of our upcoming plans in Zambia.

Our four prioritized intervention areas are:

- Water supply and quality
- Sanitation and hygiene
- Governance and finance
- Water security and resilience

Behavior-change practices and the themes of disability and gender inclusion are integrated across all intervention areas.

The WVZ WASH Program provides integrated, innovative, and inclusive WASH programming, within a backdrop of long-term (10-15 year) multisectoral programming in target communities.

Five-year targets (2021-2025) of the Zambia WASH Program include the following:

- 800,000 people gaining access to safer, more accessible drinking water and improved sanitation and hygiene facilities
- 350 schools gaining access to clean drinking water on-site
- 125 healthcare facilities gaining access to water on-site, providing water essential for cleaning and handwashing

Water Supply and Quality

Since the inception of World Vision's WASH programming in Zambia, bringing life-changing clean water to the forgotten, the marginalized, and the vulnerable has been central to our mission and organizational identity. This distinctive, unwavering focus has guided WVZ as we reached more than 1.5 million people with safer, more accessible drinking water since 2010, including nearly 900,000 people over the last five years. Importantly, World Vision embraces a holistic approach to helping communities advance up the SDG drinking water ladder, supporting targeted investments in new infrastructure while strengthening the systems that sustain water supply and ensure quality.



122 wards from the following districts

CENTRAL Chibombo District Kapiri Mposhi District	MUCHINGA Isoka District	SOUTHERN Chikankata District Kalomo District Mazabuka District Monze District Namwala District Pemba District Sinazongwe District
EASTERN Chipata District Katete District Lundazi District Nyimba District	NORTHERN Kasama District Luwingu District Mbala District Mporokoso District Mungwi District Senga Hill District	
LUAPULA Nchelenge District		
LUSAKA Chongwe District Luangwa District Rufunsa District	NORTHWESTERN Manyinga District Mufumbwe District Mwinilunga District Solwezi District	WESTERN Kaoma District Nkeyema District

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Prioritize piped-water systems

In recent years, WVZ's strategy for drinking water systems has shifted from boreholes with hand pumps to piped-water systems with distribution networks that deliver water as close to the household as possible. Piped water close to home relieves women and girls of the disproportionate time spent and physical burden of water collection and significantly benefits hygiene by empowering families to improve cleaning practices with increased availability of water.

An important element of this shift is the mechanization of high-yield boreholes using solar-powered pumps. WVZ takes into consideration the population density and the community's ability to manage and sustain facilities when deciding which boreholes can be mechanized. Notably, piped-water systems have played an important role in equipping HCFs with water and sanitation services in WVZ operating areas, addressing a critical gap in the quality of care in rural HCFs by piping water directly to points of care for handwashing, bathing rooms for mothers after delivery, and flush toilets for all patients.

Build evidence for sustainable management practices

Given the sector-wide challenges with the long-term functionality of rural and small-town water supply services, WVZ has doubled-down on strengthening management systems and building evidence for which interventions are the most effective. The text box at right provides an illustrative list of impact evaluations associated with water system governance in Zambia. In this regard, World Vision works with the University of North Carolina (UNC) to rigorously assess programmatic sustainability and adapt approaches in the field.

A 2019 UNC evaluation report provided valuable insights on the general strengths of water point management in World Vision intervention areas, especially in communities with wells equipped with hand pumps. Water points in World Vision areas in Zambia showed an average of 67% with fee collection in place, compared with only 25% in non-World Vision areas.

Similarly, a study examining resource mobilization for community-managed rural water systems (see sidebar) identified the importance of developing a portfolio of revenue streams to fund maintenance and repairs, supplementing user fees through the mobilization of nonmonetary community and institutional assets. Such findings have informed WVZ approaches, leading to long-term sustainability of drinking water systems.

Improve water quality outcomes

WVZ helps the government provide drinking water that meets World Health Organization and the government of Zambia's water quality standards. The WVZ WASH Program conducts timely routine water quality monitoring and analysis at the water source and household levels. Every new water system is tested and analyzed before service to the community begins.

World Vision's 14-country study of WASH service progress demonstrated the continued challenge faced by the sector in supporting water systems that deliver water free from bacteria and chemical contamination. WVZ conducts education



A nurse at Bundabunda HCF in Rufunsa district washes her hands using water from a piped-water system installed in 2021 by World Vision.

LEADING WITH EVIDENCE

World Vision partners with the University of North Carolina's Water Institute to evaluate and strengthen our approaches. The following represents a sample of recent studies on community-based water supply management:

- » Behnke, N.L., et al., 2017. [Resource mobilization for community-managed rural water systems: Evidence from Ghana, Kenya, and Zambia](#). *Journal of Cleaner Production*. 156, 437-444.
- » Klug, T., et al., 2017. [Water system hardware and management rehabilitation: Qualitative evidence from Ghana, Kenya, and Zambia](#). *International Journal of Hygiene and Environmental Health*. 220, 531-538.
- » Klug, T Kelly, E., et al., 2018. [Seasonality, water use, and community management of water systems in rural settings: Qualitative evidence from Ghana, Kenya, and Zambia](#). *Science of the Total Environment*. 628-629, 715-721.

sessions on water quality, including safe water handling from source to point of use and water treatment technologies. Messages on the selection of appropriate containers for water collection, transport, and storage of drinking water, and the need to separate drinking water from that which is used for other purposes such as cleaning, laundry, and bathing is emphasized. These interventions have greatly increased community knowledge on how to treat drinking water at the household level, thereby reducing water-related diseases such as diarrhea, especially among children younger than 5.

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Sanitation and Hygiene

World Vision embraces a multipronged approach to improving sanitation and hygiene services, simultaneously working to bolster demand for sanitation products through tested and emerging methodologies; identify and fill supply gaps and inequities; and engender behavior change through people-centered approaches. Over the past five years, WVZ helped 820,000 people gain access to sanitation services while also reaching 870,000 people with contextualized hygiene promotion on critical topics such as handwashing, food hygiene, and safe water storage and handling practices. Key aspects of WVZ's sanitation and hygiene programming are as follows.

Seek to end open defecation

Over the past five years, WVZ's demand-creation efforts, including implementing Community-Led Total Sanitation (CLTS), resulted in the certification of nearly 2,200 ODF communities. Notwithstanding the significant progress made, WVZ continues to work closely with the Ministry of Water Development, Sanitation and Environmental Protection to support the Zambia ODF strategy scale-up by assisting with funding for key project interventions and ensuring quality implementation of the CLTS approach. This includes training, monitoring, verification, and certification of ODF communities, which is done by building the capacity of and coordinating with the District Water, Sanitation, Hygiene and Education (D-WASHE) department under local government and other government extension workers.

Strengthen sanitation enterprises

Building on demand creation efforts, WVZ has built the capacity of sanitation entrepreneurs through business development services and promoting the expansion of product offerings, bringing robust sanitation facilities closer to communities. To address inequalities in sanitation access, WVZ uses existing data on community vulnerability and government guidelines to identify and support vulnerable households with robust latrine facilities, thus leaving no one behind in the achievement of SDG 6.2 (to achieve access to adequate and equitable sanitation and hygiene for all and end open defecation by 2030).

Focus on healthcare facilities

Between 2016 and 2020, WVZ improved access to sanitation and hygiene facilities in 44 HCFs by constructing flushable toilets, handwashing basins, and showers. Handwashing improvements have been key in preventing disease transmission, especially in the era of the COVID-19 pandemic. Between April 2020 and June 2021, 337 HCFs were provided with handwashing facilities to help improve hand hygiene for infection, prevention, and control.

Pioneer new approaches for behavior change

Faith leaders are uniquely trusted and thus are important influencers when it comes to changing behaviors and attitudes that have a significant impact on community health. Where appropriate, WVZ works with faith leaders (pastors, imams, chiefs, and other traditional authorities) as influential voices that can further bolster WASH messaging within and through their congregations. For example, over the last five years (2016-2020), WVZ trained 1,989 faith leaders on sanitation and hygiene messages to share with their congregations and

SESAME WASH UP!

School communities represent powerful agents for community-wide awareness and behavior change. In 2015, WVZ launched WASH UP!, a school-based hygiene and sanitation program in collaboration with Sesame Workshop, the nonprofit organization behind the popular children's program Sesame Street. The program conveys key behavior-change messages and teachings to early primary grade students using play-based learning materials featuring 6-year-old Raya and her friend Elmo. Sesame Workshop contextualizes the materials to fit country contexts and later trains local teachers to facilitate the curriculum.

Program objectives include the following:

- Improved sanitation and hygiene knowledge and practices, helping to prevent the spread of germs and diseases
- Student empowerment to encourage sustainable WASH behaviors at school, home, and in their communities
- Improved attitudes toward girls' intellectual abilities and societal value through Sesame WASH UP! character Raya's leading role

After an initial pilot in 25 schools, the program has now been scaled up to 318 schools across 23 districts in Zambia.



Schoolchildren at Chalimbana Primary School in Chongwe, Zambia, have fun learning about clean water and sanitation principles while playing WASH UP! games featuring Sesame Street Muppets Raya and Elmo.

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communities. These trained leaders were instrumental in improving latrine coverage and handwashing rates in communities.

INSURING PIPED-WATER SYSTEMS

Sustainability of rural water systems in Zambia is a critical challenge because communities often lack capacity and resources to repair water systems and procure needed parts. World Vision is responding to this challenge by leading the development of private insurance policies for mechanized water systems in Zambia. This innovation is helping to strengthen water system resiliency and governance, reduce downtime, decrease the financial burden on communities, and shield communities from water shortages that cause families to use unsafe water.

World Vision began collaborating with the Professional Insurance Corporation Zambia (PICZ) in 2017. PICZ showed interest in supporting community projects and agreed to insure water systems as part of their expansion plans. Insurance policies currently are covering water systems built by World Vision across the Southern and North Western provinces. These areas were selected based on the high number of mechanized water systems there and community enthusiasm to implement the insurance coverage innovation.

Insurance policies cover high-cost components of piped-water systems, including solar panels, pumps, and water tanks. The policies pay for claims related to theft, vandalism, and accidental damage.

Through awareness creation on the importance of water system insurance, the program successfully facilitated insurance of 37 water systems in World Vision intervention areas over the past five years. So far, only one system has required repair, and the repair was successfully funded by the insurance company.

Governance and Finance

Improved WASH governance—including re-engineering community-based management approaches, strengthening regulatory oversight, and implementing innovative financing approaches—are critical enablers for achieving progress under SDG 6 and ensuring long-term sustainability of our work. Embracing a systems-based approach to build sustainable and resilient WASH solutions is linked to the capacities of local stakeholders and national governments as critical components of that system. Government must provide or allow for an enabling environment for WASH services to remain viable enterprises and expand to meet the needs of the unserved and under-served.

To succeed, governments, the private sector, nonprofits, and civil society all need to leverage additional financing for WASH, recognizing that no single actor in the sector has the resources to independently achieve the SDGs. Important elements of WVZ's approach in WASH governance and finance are as follows.



Beatrice and her stepfather, Patrick, water the family's cabbage plants. The water is pumped from the nearby river using a treadle pump, which Patrick was able to buy using a VisionFund microfinance loan.

Engage at the national level for systemic change

World Vision has prioritized engagement and advocacy with the national government as a critical component of our broader WASH strategy. WVZ currently serves as vice-chair of the Coalition of NGOs in Water and Sanitation (NGO-WASH Forum), which is a platform that enables all WASH players to participate in and contribute to important WASH policies and reforms. WVZ participates in all national and local WASH events, which includes planning and financial support.

In addition, WVZ developed and signed a Memorandum of Understanding with the Ministry of Water Development, Sanitation and Environmental Protection for WASH infrastructure development. World Vision also has developed strong relationships with water utility companies; Ministry of Health; Ministry of Education; Ministry of Chiefs and Traditional Affairs; and other relevant national institutions working in the WASH sector.

Forge agreements with district governments

Working alongside district government and community institutions during the community engagement process supports sustainability, creating connections between communities and the respective government units. In Mbala, Kasama, and Nkeyema districts for example, the districts have signed a Memorandum of Understanding with WVZ, the water utility, and sanitation companies that codifies roles and responsibilities in support of achieving universal service coverage, including responsibilities for resource management and sustainability of the facilities. In these districts, this partnership approach enabled the use of water meters for revenue collection, where community members pay for their fair share of water based on meters installed at their homes.

Partner locally for sustainable WASH

At the local level, WVZ programs have strong ties with a range of partners, including: community-based organizations (for joint work on conducting community analysis, identifying vulnerable groups, and implementing community-level activities); NGOs working in specific districts through the D-WASHE structure; local mechanics; and the private sector through water supply and sanitation technologies and hygiene products. World Vision helps build capacity of these

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government and community-based organizations to improve their ability to implement, monitor, and sustain WASH interventions within their jurisdictions.

Mobilize communities to advocate for change

WVZ uses our hallmark Citizen Voice and Action (CVA) model to complement WASH interventions, informing and empowering communities to advocate for improved WASH services with public officials. WVZ employs this approach in all operational areas, enabling citizens to demand the right to safe water and hold local governments accountable. The model begins by making communities aware of the roles and responsibilities of local government in WASH service provision and then transitions to a scorecard approach, whereby communities evaluate the performance of local government against key service delivery indicators. Communities then use the scorecards to engage public leaders and highlight areas of weak performance.

Over the last five years, WVZ helped form and train 47 CVA groups. One example of CVA advocacy was when a CVA group in Mwachisompola advocated with the district health office to build a maternity annex in response to the high number of monthly deliveries conducted at the rural health center. “The construction of this maternity annex gives mothers privacy during and after delivery, and expectant mothers are no longer shunning [refusing] to deliver at the clinic,” said Iris, a nurse at Mwachisompola Rural Health Center.

Water Security and Resilience

WVZ is working to not only increase access to WASH services, but also to improve the environment in which the program operates to ensure resilience of water resources and sustainability of services.

World Vision’s approach to water security requires looking at the broader integrity of ecosystems and water catchment areas, with upstream interventions to improve watershed management as a critical aspect of safeguarding the downstream drinking water supply. Closely related to water security, World Vision also seeks to build the resilience of households and communities by helping them prepare for, endure, and recover from recurrent crises.

World Vision is working toward addressing persistent flood risk and water-related shocks for people residing in disaster-prone areas. Planning for resilient WASH services takes many forms, including infrastructure siting in relation to flood zones, increasing water storage capacity for protracted drought, and maximizing solar power to reduce dependency on grid power.



Clean drinking water and good sanitation and hygiene are essential to the realization of all human rights.

GENDER INTEGRATION IN WASH

To address gender inequities, World Vision’s WASH program ensures the engagement of women, girls, men, and boys in the design of facilities so as not to exclude any person or group of people from enjoying their rights. One important example is the prioritization of menstrual hygiene interventions across the Zambia WASH portfolio.

Over the past five years (2016 to 2020), WVZ has constructed 1,407 ventilated improved pit latrines in schools, benefiting 66,501 students across its operational areas. Ninety schools were supported with access to safe water to facilitate improved hygiene. Sanitation facilities included ventilated improved pit latrines for girls and women to manage menstruation while in school, coupled with menstrual hygiene education. Trainings encouraged an open discussion to create a supportive environment for women and girls to manage menstruation with dignity. Such discussions involved the active participation of boys and men in communities as part of gender-mainstreaming efforts.

