



## The Ripple Effect

2023

# Building services that last

Clean water, decent toilets and good  
hygiene transform people's lives forever





# Water, sanitation and hygiene for a lifetime

Dear friend,

We want to solve the water, sanitation and hygiene crisis forever. To make a lasting impact, WaterAid's work goes beyond drilling wells, building taps and installing toilets. We must put people first and create sustainable solutions, which requires changing attitudes, behaviors and policies—the systems that keep the water running.

To begin building a strong system, we work with a broad range of people and organizations, including communities, governments, civil society, educational institutions and the private sector to understand the barriers to sustainable water, sanitation and hygiene, and identify solutions. Collaboration ensures that the people and institutions responsible for providing services also have the skills and financing needed to build and maintain infrastructure when it breaks down or provide community education if hygiene habits lapse.

We also work with community leaders on education campaigns, so that citizens understand their fundamental right to water and sanitation, gradually changing people's attitudes and behaviors around using toilets, practicing good hygiene and safely handling and storing drinking water. This includes educational and social activities like handwashing, sanitation and menstrual hygiene workshops, and training young leaders in best practices so they can share their knowledge with family, friends and classmates. These efforts lead to well-maintained toilets and handwashing facilities and less water waste. In time, communities become stewards and active participants in the future of their own water supply.

We also advocate at the local, regional and national levels of government to ensure appropriate policies, funding and regulations are in place so that utilities and governments provide consistent services and are held accountable to quality standards.

In this issue of the Ripple Effect, we'll walk you through our holistic approach to changing the entire system around water, sanitation and hygiene services to ensure that communities have access for a lifetime.

That's how we'll reach everyone, everywhere—for good—with your support.

With gratitude,



*L. Kelly Parsons*

**Kelly Parsons**  
CEO, WaterAid America

● Zainab, collecting water from a WaterAid-installed pump, Pakistan.



WaterAid/Sibtain Haider



WaterAid/Cenaye Eshetu

## We're all about community spirit

Because water is a shared resource—and a shared responsibility



# Community engagement

Mapping out a plan for success

When we begin working on a project, our first step is to meet with the community and assess their needs. This is called “community mapping.” By hearing from citizens first-hand, WaterAid can understand each community’s goals and the water, sanitation and hygiene challenges they face so that we can identify solutions.

Patterns begin to emerge from maps that illustrate homes, schools and health centers in relation to water sources and toilets. They reveal

if there are enough water points to serve the population, if they are close enough to people’s homes, and if they are accessible to everyone, including those with disabilities or special needs.

Mapping helps both WaterAid and the community understand what gaps need to be addressed and can also lead to prioritized government funding for water and sanitation services.



● An example of a community map detailing improved access to toilets and sanitation services.



WaterAid/Behailu Shiferaw

Muluken is the water utility manager in the town of Debre Tabor, Ethiopia. It’s a challenging role that requires him to oversee dozens of team members delivering water service to multiple neighborhoods. His biggest challenge, though, is providing dependable water access to his community’s poorest and most marginalized people, who sometimes have access as infrequently as once per week.

In order to solve this problem, Muluken’s team partnered with WaterAid as part of the 20 Towns Project across Ethiopia. Together they used community mapping to prioritize the most vulnerable households for initial support. Once a plan was in place, they mobilized the community to install a cost-effective, reliable piped water network that now delivers consistent clean water to all neighborhoods in Debre Tabor.

Working with WaterAid’s guidance, the water utility also improved its customer service, expanding their team of plumbers to one per neighborhood to quickly address leaks and other maintenance at any hour of the day. Muluken and his team also established a customer forum, 550 people in total, to create an honest discussion between the water utility and its customers. This process builds trusts and accountability within the system, and it gives voice to the community.

● Muluken Wondirad, Debre Tabor Water Utility Manager, assessing the water pipe network map, Amhara, Ethiopia.

“My vision for the people of Debre Tabor is to access clean water all day, every day of the year.”



# Behavior change

A model for sustained healthy hygiene practices

Good hygiene is one of the simplest, most cost-effective ways to promote health and bring about lasting change. It reduces stigma, prevents disease, reduces malnutrition, and enhances dignity and well-being.

WaterAid's hygiene behavior change model is a systematic approach to encourage the widespread adoption of safe hygiene practices. This approach keeps people healthy, productive and helps them realize their right to water and sanitation for a lifetime.

For communities to thrive, practices like handwashing with soap and menstrual hygiene management should be integrated into all parts of society—at school, in healthcare facilities and at home. When WaterAid includes educational and social activities that promote hygiene, water systems are more likely to be used and maintained by the community for generations.



● Bushra with her friends at school in Muzaffargarh District, Pakistan.

## Champions for change

Bushra, 10, is a local water hero. When she learned that good hygiene prevents illness, Bushra got to work.

"Knowing that our community has such low awareness about basic hygiene, I became

determined to change this for everyone," she says. Since then, Bushra has spread the word about handwashing to her family, school friends and other local communities. And the knowledge has changed her future, too. "I want to be a doctor so that I can treat people who get ill from dirty water."

## A proud legacy

The rural community of Tomarrazón in La Guajira, Colombia, is a close-knit community made up of 420 families. Talking about menstruation, however, is still considered a taboo subject. Many women and girls in rural communities don't have access to menstrual pads at all and, if they do, they struggle to afford them. The lack of information about healthy menstrual hygiene practices means girls in Colombia can miss up to 20% of the time they could be in school and are at increased risk of infection from using the wrong hygiene products.

To manage menstruation hygienically and with dignity, women and girls need access to water and sanitation. They need a bathroom with a lock, clean water and soap for washing and a place to clean or dispose of menstrual products.

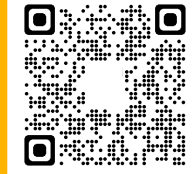
WaterAid Colombia launched the Proud Legacy project in 2022, promoting healthy menstrual hygiene practices to women in Tomarrazón and teaching them how to sew and sell reusable sanitary pads. They also conducted workshops on menstrual hygiene management, built safe toilet blocks with locks and opened a sanitary pad sewing studio.

Today, Tomarrazón is the first town in Colombia with universal menstrual hygiene coverage. Women and girls can discuss menstruation openly, leading to improved health and wellbeing. They're also learning new skills that can be passed down from generation to generation.

That's the power of changing attitudes, beliefs and behavior.



WaterAid/Frédéric De La Houssaye



Watch the short film: Proud Legacy

● Jacqueline, tenth grade, Tomarrazón Educational Institution, La Guajira, Colombia.



"It's no secret that talking about menstruation is a taboo, but I am not afraid or ashamed."

– Jacqueline

● Jacqueline, tenth grade, learning to sew sanitary pads at a Proud Legacy workshop, La Guajira, Colombia.



# Training and employment

Building skills for a lifetime

## Pipe Dreams

For women like Tahmina in Dhoomgat village, coastal Bangladesh, finding clean water is increasingly hard. Rising sea levels and storm surges pollute fresh water sources with salty sea water, leading to diarrhea, severe cramps and skin allergies. The search for clean water takes hours and often falls to women and girls, taking them out of school and paid work.

The clean water that is available for sale is often priced beyond the reach of many families. They are forced to drink contaminated water, and the cycle of illness, reduced productivity and reduced income continues.

But Tahmina and other women in her community are fighting back – by becoming water entrepreneurs. Thanks to your donations, we have worked with Rupantar, our local partner organization, to construct a reverse osmosis plant which removes high levels of salt from water so that it is safe to drink.

Then, with training on bookkeeping and business management, the women formed a cooperative to manage the plant and distribute clean water at a much cheaper rate for 300 local families, greatly reducing the risk of disease from polluted water. The profits go back to the community, so they can support their children's education, buy food and essentials – and invest in a better future.

**“Now the community believes that safe water can reduce disease. We feel happy as we’re contributing financially to our families – now we want to expand the business.”**

– Tahmina Begum

● Tahmina Begum is the president of a women's water cooperative group in Dhoomgat, Bangladesh.





**“When I heard about a WaterAid project giving the opportunity to train as a mason, I immediately took it,” says David. “I’m very proud because I have acquired lifelong skills which I have started using to generate income.”**



## **Local labor skills build a better future**

Solutions to the water crisis don't need to involve complex maintenance, expensive parts or chemicals. With the training WaterAid provides, local people are able to operate and maintain their own water and sanitation systems for years to come.

It starts with making sure materials used in water infrastructure—pipes, water pumps, solar panels—are locally available and affordable. Often, this helps the local economy as well, by creating demand for spare parts and tools.

WaterAid uses local labor to drill deep wells and install hardware. We train community members in skilled trades like plumbing and welding so that if something breaks, there is a local expert on hand with the tools and know-how to fix it.

In Namutumba, Uganda, the few available safe water points are crowded with people, leading to frequent breakdowns and long wait times. Most of these water points dry up seasonally, forcing people to drink unsafe water from swamps. After working with the community and listening to their concerns, WaterAid determined that collecting rainwater was a simple way to ensure people have clean water, year-round.

WaterAid is now training people like David to build rainwater harvesting tanks using locally sourced, environmentally friendly materials. This provides income for David and other trainees, who maintain the storage tanks to keep them operating.

Today, David and other skilled workers in Namutumba have a hand in protecting the community's water supply through the dry season.

**David Okello, 40, builds a rainwater harvesting tank in Namutumba District, Uganda. He leads a group of local masons who have been trained by WaterAid.**



# Learning and adaptation

Improvement through lessons learned

## Untapped potential

Almost 20 million people in Uganda depend on handpumps for their basic water needs. But because pipes in Uganda are typically made of galvanized steel, more than half of the handpumps in the country are in danger of corrosion.

Pipe corrosion can cause pumps to break down. It also contaminates water, making it look, taste and smell bad. This makes people look for an alternative water source, which is often unsafe.

“Galvanized steel pipe always needs replacing,” says Peter Babyesiza, a pump mechanic in the Masindi district. “When the pipes get rusty, water from the hand pump turns brown. Steel pipes are also heavy and get frequent breakdowns.”

To protect access to clean water in Uganda, WaterAid and the Conrad N. Hilton Foundation worked to design a plastic pipe prototype made of PVC instead of metal. This new technology eliminates the problem of metal pipe corrosion. It’s also affordable and easy to install and maintain. After 16 months of testing, it proved to be very reliable, delivering sustained improved water quality.



● Mechanics fit a PVC pipe to a handpump at Rukondwa Primary School in Masindi District, Uganda.



WaterAid/ James Kiyimba

● Kunihira Sauda, teacher, washing her hands using water collected from the school borehole fitted with PVC pipes, Uganda.

### Why WaterAid's prototype PVC pipes work

- Non-corrosive, safe and last up to 20 years
- Cheaper than steel
- Can be installed deeper than standard PVC pipes
- Available locally, adding value to the Ugandan economy
- Easy to install and maintain

**“It is now a year since our school borehole was fitted with plastic pipes, changing from metallic pipes – it has had no problems.”**



# It takes a village

Lasting change that works for everyone needs everyone to play their part: local residents, community organizations, government officials – and you. A life-changing project to bring clean water and a new health center to a community in Malawi shows us how.



## The resident

Rhoda Chikanda from Kapyanga, Malawi, was forced to give birth on the long journey to her nearest hospital some 28 miles away, putting her and her newborn baby at serious risk of infection. “It was a frightening experience,” she says. “And it was the last straw.”

Her community was determined to get a new health center close by, with clean water and decent toilets.

**“We told the government that we were tired of empty promises. It was time to deliver.”**

– Rhoda



● Rhoda Chikanda, speaking on behalf of her community at the Joint Parliamentarian Committee meeting with the people of Kapyanga, Kasungu, Malawi.

WaterAid/ Dennis Lupenga

## ● The government official

Local official Madalitso Kazombo told the community he would build a health center if elected to office, and was true to his word. He worked with the community, and recognized that involving them creates lasting change.

## ● The local community

With training from WaterAid teams on how to engage decision makers, the community marched to the district council to present a petition, and organized a vigil to press for action.

## ● You

Thanks to your support, and after tireless community campaigning, we worked with our local partner and the Malawian government to construct a health center fitted with toilets, bathrooms and incinerators. Solar-powered pumps provide clean water so women like Rhoda can give birth safely.

## ● The national government

Representatives of the national government visited Kapyanga to see how a community can come together to demand clean water and how this model for sustainable change could be replicated across Malawi.



## About WaterAid

WaterAid is working to make clean water, decent toilets and good hygiene a reality for everyone, everywhere within a generation. WaterAid works in more than 30 countries to change the lives of the poorest and most marginalized people. Since 1981, WaterAid has reached 29 million people with clean water, 29 million people with decent toilets and 28 million people with good hygiene.



● (Front cover) Students drinking water from the school tap, Nepal.

WaterAid/Mani Karmacharya

● (Back cover) Isabel, in front of the solar powered water scheme being constructed in Mossuril District, Mozambique.

WaterAid/Chileshe Chanda

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