HELPING HAND
FOR RELIEF AND DEVELOPMENT

Water And Sanitation Hygiene

GLOBAL ANNUAL REPORT - 2024

together WE ARE | SERVING. HEALING. EMPOWERING.

Table of Contents

Executive Summary

The challenges faced by our organization in 2024 were outweighed by the challenges our beneficiaries experienced. This year saw an unrelenting siege in Gaza, crises in Lebanon and continuing climate disruption across Africa and Pakistan. No matter where we turned, hundreds of thousands of people needed both water and sanitation solutions to survive in dire conditions.

Helping Hand for Relief and Development (HHRD) provided emergency drinking water via truck to drought-affected communities in Africa, Syrian refugees in Jordan and internally displaced people in Gaza. We delivered portable toilets to survivors of natural and manmade disasters in Palestine and Morocco, and built permanent sanitary facilities in Laos and Malaysia.

Our ongoing work in Pakistan and Bangladesh included both water wells and washrooms, ensuring that vulnerable communities have access not only to fresh drinking water, but are protected from water borne disease.

The Water and Sanitation Hygiene Program functions in partnership with many other HHRD departments, including the Emergency Relief and Development Management (ERDM) and Shelter Relief Program (SRP). At the onset of a disaster, WASH is on the ground with emergency provisions of water and sanitation projects. As the dust settles, we transition to more permanent solutions including water wells and tanks.

We would like to take this opportunity to thank our gracious donors. Without your support, more than three million people worldwide would continue to suffer from drought and disease. Your blessed contribution has made all of our work possible, and we encourage you to reflect on your gift as you read this annual report.

The need for our services continues to grow. As the shifting climate brings greater challenges and violence spreads throughout the world, more and more people will require assistance. Please consider donating once again to support our emergency and long term projects. Allah will surely reward you for your charity.

2024 Data by country

Region	Country	Water Projects	Water Beneficiaries	WASH Projects	WASH Beneficiaries	Hygiene Kits
	Afghanistan	31	7,870	8	2,220	440
	Bangladesh	50	10,200			
	Nepal	27	14,000	25	560	
	Pakistan	734	2,111,804	4	1,159	63
Africa	Djibouti	50	71,400			
Africa	Kenya	797	430,182	3	4,200	200
Africa	Mali	2	3,954			
Africa	Somalia	172	278,316			
Africa	Tanzania	57	95,112			
Africa	Uganda	17	31,188			
ASEAN	Cambodia	20	544	10	180	
ASEAN	Indonesia	17				
ASEAN	Laos	1	250	1	5	
ASEAN	Malaysia			2	10	
ASEAN	Thailand			10	180	
MENA	Gaza	13,516,320ltrs via truck	1,000,000+	288	5,760	704
MENA	Jordan	165	1,335	768	3,840	
MENA	Lebanon	1	750	20	100	
MENA	Northern Syria	11	7,500			
Total	**19**	**2,152**	**3,065,455**	**1,139**	**18,424**	**1,407**

Beneficiary Stories

Safeguarding Health: Clean Water Solutions in Bangladesh

Mariam Begum manages her household, including caring for her children and elderly parents. Her family had been reliant on a nearby contaminated water source, which frequently led to illnesses and disrupted their daily lives. Medical expenses further strained their limited financial resources. Mariam and her family faced recurring health issues due to unsafe drinking water. The children often missed school, and her elderly parents' health deteriorated because of waterborne diseases. The lack of a clean water source close to their home meant long walks to fetch water that was still unsafe for consumption.

The installation of a deep tube well near Mariam's home has significantly improved her family's quality of life. With access to clean and arsenic-free water, her children are healthier and able to attend school regularly. Her parents' health has also improved, reducing the family's medical expenses and giving them peace of mind.

"This well has transformed our lives. We no longer worry about illnesses caused by dirty water. I feel hopeful for my children's future," Mariam shared with gratitude.

Relief in Every Drop: Tharparkar's Journey to Clean Water

Tharparkar, the largest desert in Pakistan and the fifth largest in the world, spans an impressive 22,000 square kilometers. Home to approximately 1.2 million resilient individuals, most of whom reside in remote villages, the region is defined by a tropical desert climate. Chronic poverty, inadequate sanitation, and poor hygiene are part of everyday life. Water scarcity is a serious issue. The limited groundwater available is often laden with high salinity and dangerous levels of metals, posing severe health risks, particularly for women and children.

For the people of Jesso Jo Par, a small village in Tharparkar, survival is a constant struggle. In Jesso Jo Par, obtaining drinking water was an arduous daily chore. Women and children walked three to four kilometers to collect water from distant sources, only to return with unsafe water that caused health issues. The lack of access to clean water hindered education, economic growth, and overall well-being, deepening the cycle of poverty.

Initially, HHRD began water trucking operations, transporting safe drinking water from Umer Kot to Tharparkar—a hard 120-kilometer journey conducted regularly for one year. This immediate relief was important in reducing the daily burden on villagers.

However, there was a need for a permanent solution, so HHRD conducted an underground water investigation across the village. Guided by geological findings, a trial bore hole was drilled to a depth of 600 feet. After successful testing, a Reverse Osmosis (RO) water filtration plant was designed and installed. To extend its reach, a 3,300-feet pipeline was laid to deliver water to Mohalla Ghulam Muhammad.

Alhamdulillah, the RO water filtration plant now provides clean drinking water to over 2,500 individuals across two areas. The initiative has significantly reduced the burden on women and children, who no longer must walk long distances for water. Improved access to safe water has also contributed to better health and hygiene, particularly for children, and enhanced the overall quality of life in the community.

Graduating with Honors: BioSand Filtration Supports Student Education

Shree Basic School, in Chainpur, Nepal used to depend on a handpump for water. Before the water dried up, it would cause recurring diseases among the students. Many children suffered with diarrhea and stomach pain and as a result, school absenteeism was quite common. The lack of pure water was not only a problem for health but an obstacle to education as well.

This year, HHRD installed a Bio-Sand Filtration Plant connected to a community hand-pump. Along with this transformative initiative, HHRD also conducted a Sanitation and Hygiene Campaign and provided hygiene kits to school students, providing them with knowledge and tools for better health practices.

Rukhsana Parveen is one of the students at Shree Basic. She explains, “Earlier, we lacked pure water in our school, but now Helping Hand has installed a clean and safe drinking water plant. This water benefits all students and community members, and I even carry it home daily for my family. This priceless gift has improved our lives so much. Thank you so much, Helping Hand!"

Description of Services

Program Mission

To improve access to clean drinking water, and combat water borne diseases through better sanitation & hygiene conditions.

Program Objectives

- To provide safe drinking water in areas where people struggle with poverty or displacement.
- To minimize risks of waterborne diseases and improve health conditions of inhabitants of the selected areas where access to potable water is limited.
- To provide efficient solutions for sustainable infrastructure for water projects and to make structures disaster resilient and more comfortable through innovative designs.
- To minimize the environmental impact of our projects through sustainable power and water sources.

5 Types of Drinking Water Solutions Were Deployed in 19 Countries

Emergency Water Supply

In response to natural or manmade disasters, WASH delivers emergency water via truck in many key locations including Gaza, Jordan and Africa. This temporary solution ensures that vulnerable families receive the water they need for daily consumption as well as cooking and hygiene purposes.

Water Storage Tanks

To address water scarcity, water storage tanks were installed in areas lacking consistent access to clean water. Provided primarily in Jordan, Lebanon, Africa and ASEAN countries, this project focuses on ensuring that people have a clean, stable, accessible source of water for daily use.

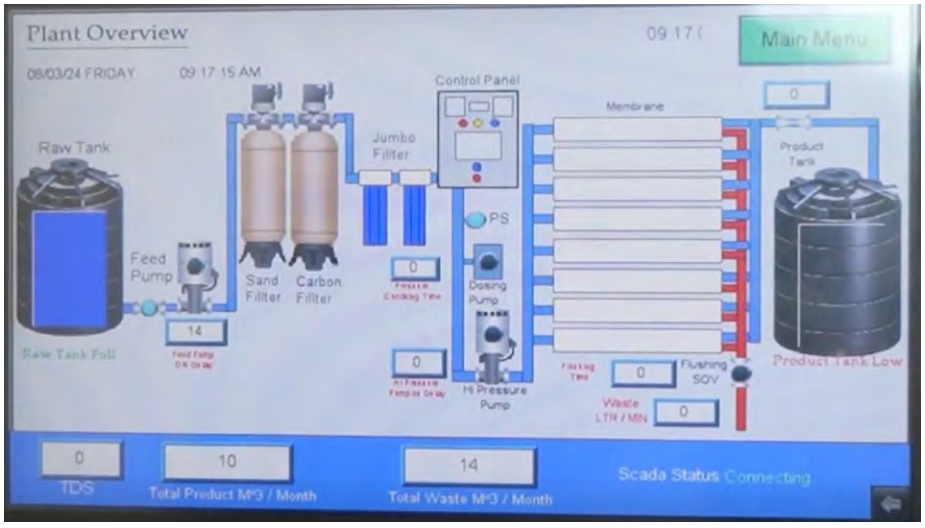
ASEAN	MENA	Africa
Cambodia, Indonesia	Jordan, Lebanon	Kenya
		

Cutting Edge Technology

Solar Based Drinking Water Solutions

Solar power is a key technology in many of the locations HHRD supports. Designed to work without access to dedicated electrical infrastructure, solar power allows children, the elderly and people with disabilities to operate pumps without manual labor. Solar electricity may also be used to power the attached filters, making sure that any water drawn from the well will be safe and healthy to drink. Biosand filtration plants, RO plants and portable RO plants may all be powered by solar panels.

SCADA Control



Recently implemented in Pakistan, the Reverse Osmosis and Ultra Filtration plants with SCADA control combine a small water project with advanced technology that allows the community members to monitor and operate the facilities remotely.

Rainwater Harvesting

Rainwater harvesting (RWH) provides a sustainable and cost-effective solution to the increasing scarcity of ground water by capturing and storing rainwater. This method not only conserves surface water but also contributes to recharging underground aquifers, helping to stabilize the water table and ensure long-term water availability.

Water Filters and Plants

Even when groundwater is available, it is often contaminated and unsafe to drink. HHRD delivers both home based and community based water filtration solutions including reverse osmosis plants, home water filters and community water filtration plants.

Home-based Water Filters

In refugee camps in Jordan, HHRD provides Palestinian families with home water filters to ensure that what comes out of the faucet is free from bacteria and chemical pollutants. This has the potential to save lives and provides a cost-effective way for displaced people to meet their needs.

Water Filtration Plant

These large projects draw water from underground and filter it, removing salt, bacteria and other contaminants before people drink. Typically, this kind of project can support tens of thousands of individual beneficiaries. They have been established in multiple countries including Afghanistan, Pakistan and Nepal.

Biosand Filtration Plant

This type of filtration relies on sustainable, naturally available sand rather than commercial filters to remove harmful contaminants from drinking water. Throughout Nepal, HHRD's remarkable biosand filtration plants deliver fresh water for thousands of people daily.

Reverse Osmosis

Reverse Osmosis (RO) is a water purification technology that uses a semi-permeable membrane to remove ions, molecules, and larger particles from drinking water. In the RO process, water is forced through the membrane under pressure, leaving behind contaminants such as salts, heavy metals, and other impurities. This method is highly effective in producing clean, safe drinking water, especially in regions where groundwater contains high levels of salinity or pollutants.

Traditional Water Wells and Solutions

Submersible Water Project with Water Tank in Pakistan

Submersible water project efficiently pumps water from underground sources to a reinforced cement concrete storage tank. This solution is ideal for remote areas or locations. The system benefits 250 people per tap, with 107 households served.

Water Well

Traditional wells are excavated to access water, using methods such as drilling and blasting. Cemented rings are placed in open wells to ensure longevity and sustainability. Water is drawn using motors or hand pulleys to lift water from the depths of the well.

Afridev Hand Pump

Afridev pumps are ideal for rural communities relying on underground water sources, providing an affordable and efficient solution to meet the water needs of low-income families. These durable, easy-to-install, and maintain suction hand pumps, made from cast iron, require no specialized components or expertise. HHRD delivers Afrediv hand pumps in Afghanistan and Pakistan.

Community Hand Pump

Community hand pumps are perfect for villages with common underground water sources, providing an affordable and simple solution for families with limited resources. These suction hand pumps, made of durable cast iron, are easy to install, maintain, and repair at the village level without specialized parts. Each unit consists of two local hand pumps to serve the community's water needs efficiently.

Deep Tubewell

A tube well is a water well with a stainless steel pipe, 100–200 mm wide, drilled into an underground aquifer, typically 20–150 meters deep, with a strainer at the bottom. The materials involved include stainless steel for the pipe, a strainer for filtration, and solar panels for renewable energy. This setup ensures a sustainable and reliable water supply in areas with limited access to electricity. These tubewells are deployed throughout Africa, Pakistan, Bangladesh and ASEAN communities.

Mega Water Project

Designed to support hundreds of people, the Mega Water Project draws from deep underground, eliminating the risk of water borne disease from sources closer to the surface. In Bangladesh's Cox's Bazar refugee camp, this important development was completed in 2024, allowing women ad children to fetch water conveniently closer to home.

Borehole

A borehole is a narrow shaft bored in the ground, either vertically or horizontally. Boreholes have been an alternative source of water in areas where there is no ready supply of fresh water. This project has the capacity to support an entire village with fresh drinking water, improving the lives of thousands of people.

2 Types of Sanitation and Hygiene Projects Were Provided in 11 Countries

Restroom Construction

Hygiene and washroom construction ensures safe and sanitary environments, preventing the spread of diseases and promoting public health. Proper facilities with clean water, waste disposal, and accessibility enhance overall well-being, especially in underserved areas. HHRD delivers sanitary solutions in many different ways including portable toilets, restrooms for schools, restrooms for refugees and private facilities in or near homes.

Portable Toilets

These toilets provide dignity and privacy for people in emergency situations. Built off site and driven to the location, they resemble the porta-potties that US residents might recognize from outdoor social events. This is the easiest way to combat disease in the immediate aftermath of a crisis and HHRD has deployed them in Morocco and Gaza.

Restrooms for Schools

When there are no restrooms in schools, children cannot learn. Girls are especially vulnerable to this reality, causing major disruptions in their lives. In Africa and Pakistan, HHRD builds multiple unit restrooms to support learning.

Restrooms for Refugees

In refugee camps in Bangladesh, Jordan and Lebanon, and in the devastated communities in Gaza, families are forced to relieve themselves outside, encouraging disease and violence. HHRD delivers permanent, sturdy restrooms with water tanks for those in vulnerable conditions.

Private Restrooms

In ASEAN countries such as Cambodia, Laos and Indonesia, many rural families lack sanitary facilities in or near their own homes. This situation increases the risk of disease and goes against Islamic teaching. HHRD delivers permanent restrooms for individual families or groups of families so that residents can maintain dignity and cleanliness.

Hygiene Kit Distribution

Each hygiene kit contains essential items like soap, sanitizer, toothpaste, toothbrush and hygiene education materials, delivered through community outreach programs. These supplies are essential in cases of natural or manmade disaster, or for refugee populations that lack the funds necessary to purchase these supplies on their own.

Future Plans

As the climate crisis continues to evolve, new solutions are needed to address the needs of populations living in vulnerable locations. In 2025, HHRD's WASH program intends to increase the number of sustainable initiatives including solar powered solutions and rainwater harvesting. We will be offering several new water solutions including the Water Purifier (Package Unit) in Pakistan.

The water purifier (Package unit) will channel dirty or contaminated water from waterfalls or other sources through pipes by gravity to a filtration unit. The system has a capacity of 500 liters per hour and includes piping, two settling tanks (HDPE), one buffer tank (HDPE storage), and a containerized solar-powered treatment unit.

In Nepal, the HHRD team will incorporate innovative technologies including bio-toilets.

In Afghanistan, plans are underway to install three new water filtration plants.

In Middle East and North Africa, we will focus on strengthening hygiene education programs, delivering much needed emergency water supplies to refugees in the deserts of Jordan and Lebanon and focusing on the water infrastructure of HHRD model villages in Pakistan, Northern Syria and Morocco.

Plans to help Palestinians recover from the 2023-2024 tragedy are already underway. WASH will likely provide more sanitary facilities and fresh drinking water as the Shelter Relief Program provides tents and the Emergency Relief and Disaster Management program delivers food and In Kind donations.

For a more comprehensive list of all the projects available for donor support, please download the WASH Catalog from the HHRD website. Jazak Allah Khair for your interested in this vital work. May Allah bless you and your family for all of your noble deeds.

Thank you

HELPING HAND
FOR RELIEF AND DEVELOPMENT

hhrd.org