



HELPING HAND
FOR RELIEF AND DEVELOPMENT



WASH Catalog

(Water for Life And Sanitation Hygiene)

2023

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WASH Mission

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

Water is one of the most important resources on Earth. Throughout the Quran, there are countless verses expounding on the miracle of water and its purpose in the creation and maintenance of life.

HHRD's WASH program provides access to clean drinking water and dignified sanitation through the construction of wells, pumps, rainwater collection units and bathrooms. Access to water and sanitation are recognized as human rights by the United Nations and the need just keeps growing.

Afghanistan



AFREDIV HAND PUMP

Number of beneficiaries: **100-170**
 Average time to completion: **4-6 months**
 Warranty of materials: **3-5 years**

Afrediv hand pumps are ideal for villages and households in which surface ground water sources are common. Only a basic pump is needed for poor families to meet their water requirements. This type of suction hand pump is economical and easy to install and maintain. Maintenance is done at the village level without the need for specialist parts. The pumps are made with galvanized iron.

WASHROOMS IN AFGHANISTAN

Number of beneficiaries: **50**
 Average time to completion: **6 months**
 Warranty of materials: **5 years**

A washroom will help more than two hundred students keep an eye on their studies in addition to their sanitation and hygiene. Without your assistance, students might have to miss classes due to sanitation issues, interrupting their schooling and impacting their future prospects.

Surah Al Baqarah says, "Truly Allah loves those who turn to Him constantly, and He loves those who keep themselves pure and clean." Washrooms are necessary in schools to teach children clean habits and to ensure that they can remain in the classroom for the duration of the school day.

HYGIENE KITS

• Number of beneficiaries:
5 families @ \$20/kit
 • Average time to completion:
3 days
 • Warranty of materials:
Consumable materials

After the outbreak of COVID-19, the world woke up to the need for basic hygiene necessities. In addition to soap, shampoo and detergent to fight viruses and bacteria, hygiene kits also include things like toothbrushes, toothpaste and combs. It is a collection of basic essentials that allows people living in difficult circumstances to provide daily care for themselves and their families.

Africa

WATER TRUCKING

Number of beneficiaries:	1,500
Average time to completion:	3 Days
Warranty of materials:	1 Week

To meet the immediate needs of people and families in drought-stricken countries, HHRD began distributing water via truck in five countries: Kenya, Somaliland, Tanzania, Ethiopia and Djibouti. While not a permanent solution, this activity allows residents access to clean drinking water in sufficient quantities to last a week or more. Each truck has the capacity to service a village. Some beneficiaries have not had a drop to drink for days before the water trucks arrive. It is a vital addition to the WASH catalog and worthy of donor support.



SHALLOW WELL WITH AFREDIV/SUBMERSIBLE PUMP

Number of beneficiaries:	1,000
Average time to completion:	2 Months
Warranty of materials:	5 Years

A shallow well is a hole which has been dug, bored, driven or drilled into the ground for the purpose of extracting water. The source of a shallow well is an aquifer-- a body of porous rock or sediment saturated with groundwater resulting from precipitation which seeps through the soil. Shallow wells tap the shallowest aquifer in the vicinity. A well is considered to be shallow if it is less than 50 feet deep. This allows the use of a suction pump, which is generally strong enough to extract water up to 22 feet (6.7 meters) in one pull. These wells are available in four countries: Kenya, Somalia, Tanzania and Uganda.



Africa

MEGA BOREHOLE

Number of beneficiaries:	30,000
Average time to completion:	6 Months
Warranty of materials:	10 Years

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. A borehole may be constructed for many different purposes, including the extraction of water. The life of the project is 10+ years, and with some periodic maintenance, the life of the project can be further enhanced. This project is available in Kenya and Uganda.



RAINWATER HARVESTING

Number of beneficiaries:	2,000
Average time to completion:	2 Months
Warranty of materials:	6 Years

Rainwater harvesting is the collection and storage of rain which would otherwise run off and become dirty and polluted. Rainwater is collected from a roof-like surface and redirected to a tank for future needs. This is one of the best methods developed to support the conservation of water. Pure rainwater can be used for irrigation, washing, cleaning, bathing, cooking, and also for livestock requirements. This project is available in Kenya and Uganda.

Africa

MEGA WATER FILTRATION PLANT

Number of beneficiaries:	15,000
Average time to completion:	6 Months
Warranty of materials:	15 Years

A water filtration plant is a facility that works to purify water by removing chemicals, hazardous and toxic materials from a water source. Filtration is a process which removes particles suspended in water. Removal takes place through a number of mechanisms which include straining, flocculation, sedimentation and surface capture. The Mega Water Filtration Plant is only available in Kenya.



MINOR PURIFICATION PLANT

Number of beneficiaries:	15,000
Average time to completion:	6 Months
Warranty of materials:	15 Years

The Minor Purification Plant removes viruses, bacteria and other organic and inorganic particles/contaminants found in the water supply. It uses reverse osmosis, sand filtration, and a cartridge filter for removing sediments and smell. It has membranes for removing soluble salts, coupled with a powerful pressure pump to push water through the membranes. It also features a UV sterilizer to kill pathogens, bacteria, protozoa, and virus.

Africa



HYGIENE KITS

- Number of beneficiaries:
10 families @ \$50/kit
- Average time to completion:
3 days
- Warranty of materials:
Consumable materials

Due to an outbreak of cholera caused by excessive flooding in the region, hygiene kits are desperately needed in Africa. In addition to soap, shampoo and detergent to fight viruses and bacteria, hygiene kits also include things like toothbrushes, toothpaste and combs. It is a collection of basic essentials that allows people living in difficult circumstances to provide daily care for themselves and their families.

WASHROOMS FOR SCHOOLS

- | | |
|-----------------------------|-----------------|
| Number of beneficiaries: | 15,000 |
| Average time to completion: | 6 Months |
| Warranty of materials: | 10 Years |

HHRD Africa bathrooms consist of 5-unit pit latrines and one hand-washing area. It is used as a sanitation facility in public schools and enables children to get an education they would otherwise be deprived of if the school lacked this vital resource. The toilets are supplied with water for cleaning and flushing purposes. A septic tank is located at least 3 to 6 meters away from the building. Washrooms for Schools are available in Kenya, Somalia, Tanzania, Uganda and Ethiopia.

Bangladesh



DEEP TUBE WELL

Number of beneficiaries:	700
Average time to completion:	6 Months
Warranty of materials:	10 Years

There is ample groundwater in Bangladesh, but it is contaminated. A Deep Tube Well draws water from far enough underneath the surface to eliminate cross-contamination from sewage. A 6 to 10 inch pipe is bored into an underground aquifer. The lower end is fitted with a strainer, and a pump lifts water for irrigation. A small reservoir of water is made at the outlet of the tube well to be used by the local population for things other than drinking.



MEGA WATER WELL

Number of beneficiaries:	10,000
Average time to completion:	6 Months
Warranty of materials:	15 Years

Mega Wells are installed with a hand percussion drilling method that drives a polyvinyl chloride pipe to the aquifer, tapping into deeper water sources and eliminating the risks of drinking contaminated ground water. After construction of a Mega Water Well, refugees living in Cox's Bazaar camps have received sufficient water near their homes for drinking & other domestic uses. A single Mega Water Well can provide bacteria-free drinking water for thousands of refugees.



WASHROOM BANGLADESH

Number of beneficiaries:	700
Average time to completion:	11 Months
Warranty of materials:	8 Years

In Cox's Bazaar Refugee Camp, 37% of households use shared public facilities for bathing, of which only 68% are functional. High numbers of Rohingya refugees, especially women and girls, are using makeshift bathing spaces inside their shelters. Surah Al Baqarah says, "Truly Allah loves those who turn to Him constantly, and He loves those who keep themselves pure and clean." Washrooms are necessary to assert dignity and cleanliness for vulnerable residents.

Cambodia

WATER TANK

Number of beneficiaries: **300**
 Average time to completion: **3 Months**
 Warranty of materials: **5 Years**

In many rural areas in Cambodia, schools, masjids, and health centers have only one small water well pump capable of providing for the entire community. Upgrades include a hand wash basin in addition to the motor for pumping water from the system.

Water Project Model: We selected the water tank project model to make it easier for people to do wudu/ablution, get drinking water and more.

Capacity: We have one tank that can hold 2,000 liters of water. This supplies four water systems with cement in good condition, so one water tank can be used for a minimum of 5 years.

Machine: We use a motor to pump the water from a small well or river and store it in the water tank.



WASHROOM FOR CAMBODIA

Number of beneficiaries: **10**
 Average time to completion: **6 Months**
 Warranty of materials: **5 Years**

Cambodia is a developing country; in some areas there is still not enough infrastructure, especially bathrooms and public toilets. In some cases, people practice open defecation which invites illness and goes against the Islamic Law. HHRD is partnering with the Charitable Association of Cambodian Islamic Graduates (CACIG) to build ten toilets in six villages. These toilets will protect the environment, restore dignity and protect the health of the surrounding population.

Indonesia

BORE WELL WITH WATER TANK



Number of beneficiaries: **10 Households**
Average time to completion: **3 Months**
Warranty of materials: **5 Years**

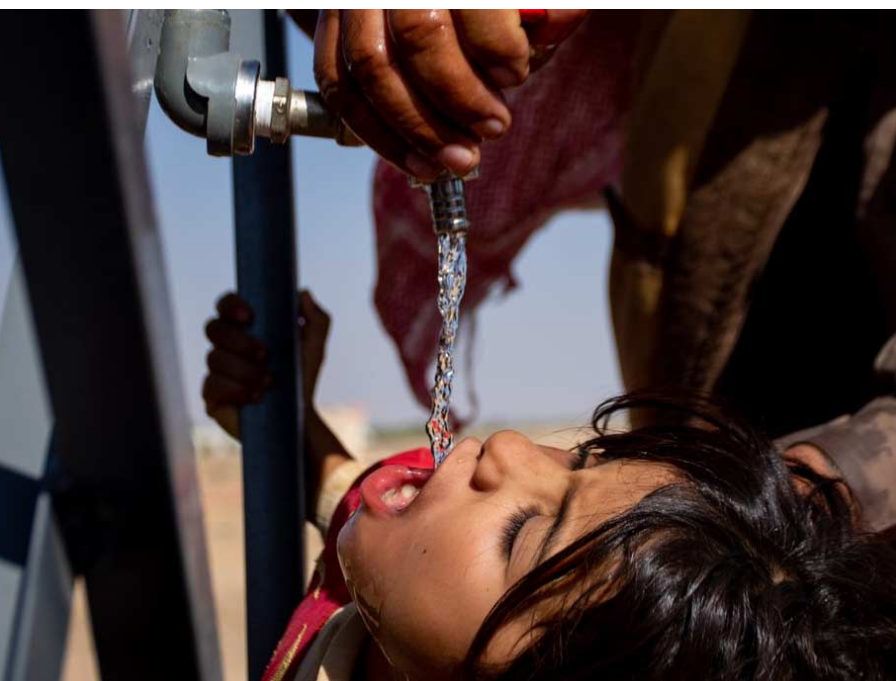
To increase the health rate of Indonesians, HHRD's vetted partner, Human Initiative, builds water well projects. This mission is supported by several activities, one of which is the construction of a well 20 meters deep to increase community access to clean water resources. The water well is built in residential areas that urgently need clean water. Most people in those areas work as farmers and laborers with middle to lower economic levels. This program has been implemented across Indonesia: Bogor (West Java), Lombok, East Nusa Tenggara, and Central Sulawesi.

Middle East and North Africa - MENA

WATER SUPPLY BY TRUCK

Number of beneficiaries: 600-1,500
Average time to completion: 3 Days
Warranty of materials: NA

This project was established in 2019 and has helped 600 beneficiaries every year since by providing 4,000 liters of water every month. It is difficult and expensive for Syrian refugees who live in camps to find a clean drinking water source in the desert. HHRD delivers water directly to beneficiaries via truck.



WATER TANKS IN JORDAN

Number of beneficiaries: 600
Average time to completion: 3 Days
Warranty of materials: 5 Years

Thousands of Syrian refugee families live in tents in Jordan, especially in Al Mafraq. Some of the families have access to clean drinking water, but they are lacking storage tanks for the water. HHRD water storage tanks are not simply barrels, but specially designed units that take contamination, sunlight and accessibility into account. These tanks provide a readily available source of drinking water that eases the lives of children and families.

Middle East and North Africa - MENA



WASHROOMS IN MENA

Number of beneficiaries: **600**
 Average time to completion: **11 Months**
 Warranty of materials: **5 Years**

Thousands of Syrian refugee families live in tents in Jordan, notably in Al Mafrqa and Madaba. They are lacking proper facilities for sanitation and have to go outside to relieve themselves. This practice not only affects the environment, but it is also unhealthy for people living in the area. Moreover, in harsh weather it becomes difficult to go outside. Life-threatening animals like snakes, scorpions, and such are also another issue in this regard. If proper bathrooms can be provided for these deprived families living in tents, it can improve their way of living.



HOME WATER FILTRATION

Number of beneficiaries: **200**
 Average time to completion: **21 Days**
 Warranty of materials: **3 Years**

There is lack of clean drinking water in the MENA (Middle East North Africa) region, especially in Jordan and Lebanon, so HHRD provides water filters to Palestinian refugees in these two locations. This project has the capacity to ease lives and increase the health of the population.

HYGIENE KITS

- Number of beneficiaries: **10 families @ \$50/kit**
- Average time to completion: **3 days**
- Warranty of materials: **Consumable materials**

After the outbreak of COVID-19, the world woke up to the need for basic hygiene necessities. In addition to soap, shampoo and detergent to fight viruses and bacteria, hygiene kits also include things like toothbrushes, toothpaste and combs. It is a collection of basic essentials that allows people living in difficult circumstances to provide daily care for themselves and their families.



Nepal



BIO-SAND FILTRATION COMMUNITY WATER PUMP

Number of beneficiaries: **500/Day**
Average time to completion: **4 Months**
Warranty of materials: **5 Years**

To build upon the simple hand pump, HHRD added a Bio-Sand Filtration, an Open Aeration and Electrical Dozen Pump, turning this small project into a workable solution for our beneficiaries. It is an eco-friendly way of filtering the water so that it is safe for human consumption, combined with an easy method of water extraction. It provides water for washing as well as for drinking.



Drinking Water Treatment Plant

Number of beneficiaries: **1,500/Day**
Average time to completion: **6 Months**
Warranty of materials: **10 Years**

The RO/UT (Reverse Osmosis/Ultra Filtration) Drinking Water Treatment Plant kills infectious microorganisms in the water using ultraviolet rays. It filters water for taste and smell. Since it does not use chemicals, it is one of the safest water treatment systems.



SOLAR-POWERED RO FILTRATION PLANT

Number of beneficiaries: **1,500/Day**
Average time to completion: **6 Months**
Warranty of materials: **10 Years**

New in 2022, the Solar-Powered RO Filtration Plant has all the amenities of the RO/UT Filtration Plant but uses solar energy. This decreases the project's carbon footprint and makes it more sustainable. It also makes it cheaper for the community and more accessible to all.

Pakistan



AFREDIV PUMP

Number of beneficiaries:	150
Average time to completion:	6 Months
Warranty of materials:	5 Years

Afrediv hand pumps are ideal for villages and households in which surface ground water sources are common. Only a basic pump is needed for poor families to meet their water requirements. This type of suction hand pump is economical and easy to install and maintain. Maintenance is done at the village level without the need for specialist parts. The pumps are made with galvanized iron.



DUG WELL

Number of beneficiaries:	200
Average time to completion:	6 Months
Warranty of materials:	10 Years

Wells are a traditional source of water in rural areas of Pakistan. The ground is excavated deep to hit water. Digging is done through various techniques, including drilling, blasting, etc. Cemented rings are put in open wells for long life and sustainability. Water motors and hand pulleys are used for pulling the water up and down from the wells.



GRAVITY FLOW SCHEME

Number of beneficiaries:	250
Average time to completion:	6 Months
Warranty of materials:	25 Years

The distribution of water is always troublesome in hilly and remote areas. To remedy the situation, a reservoir of water is created mechanically and stored where it can be easily disseminated to the required population. The scheme also involves the development of new water resources so that demand can be met seamlessly.

Pakistan



REVERSE OSMOSIS FILTRATION PLANT

Number of beneficiaries: **2,000**
Average time to completion: **6 Months**
Warranty of materials: **10 Years**

The Reverse Osmosis process used by HHRD is special. As they remove salt from the water, traditional plants also kill the minerals necessary for the body, rendering the water unsuitable for drinking. The reverse osmosis plants deployed in Pakistan have a special attachment to boost the minerals. They are separated from the water but retained, the salt is removed and the minerals are added back before the beneficiary drinks. This keeps the PH level of the water accurate.

SUBMERSIBLE WITH BRICK MASONRY

Number of beneficiaries: **250**
Average time to completion: **6 Months**
Warranty of materials: **5 Years**

A submersible water pump operates beneath the earth, pushing water to the surface. Most submersible pumps are long cylinders that are about 3 to 5 inches in diameter and 2 to 4 feet long. Submersible water pumps have a hermetically sealed motor that is close-coupled to the body of the water pump. Having a hermetically sealed motor prevents the water from getting inside the pump's motor and causing a short circuit. Other components of a submersible water pump are the cable, which is connected to the motor, and a pipe that transports the water to the surface. Water is then stored in a water storage tank constructed near the tube well. Submersible water pumps are best suited for remote areas or places where electricity has frequent outages.



SOLAR-POWERED WATER PROJECT

Number of beneficiaries: **200**
Average time to completion: **6 Months**
Warranty of materials: **5 Years**

After brainstorming with the team, relevant stakeholders, local NGOs, and other locally available resources, WFL decided to install solar-powered water uplifting solutions in a 500-liter water storage tank. The project was designed to replace the Afrediv hand pump in educational institutes where it is difficult to use and not easily accessible for disabled children.



Pakistan



TUBE WELL

Number of beneficiaries:	1,500
Average time to completion:	6 Months
Warranty of materials:	10 Years

A tube well is a type of water well in which a long (6 to 10 inch) pipe is bored into an underground aquifer. The lower end is fitted with a strainer, and a pump lifts water for irrigation. The required depth of the well depends on the depth of the water table. A small reservoir of water is made at the outlet of the tube well to be used by the local population for things other than drinking.

ULTRA FILTRATION PLANT

Number of beneficiaries:	2,000
Average time to completion:	6 Months
Warranty of materials:	10 Years

Similar to the Reverse Osmosis Filter Plant, the Ultra Filtration Plant cleans groundwater, making it safe to drink. Water purification is the process of removing undesirable chemicals, biological contaminants, suspended solids, and gases from contaminated water. The goal is to produce water fit for drinking. Water purification plants are a source of pure, safe, and healthy drinking water.



Pakistan



WASHROOMS FOR PAKISTAN

Number of beneficiaries:	250
Average time to completion:	6 Months
Warranty of materials:	5 Years

Your gift of a Washroom will help more than two hundred students keep an eye on their studies in addition to their sanitation and hygiene. Without your assistance, some students, especially girls, might have to miss classes due to sanitation issues, interrupting their schooling and diminishing their future prospects.

Surah Al Baqarah says, "Truly Allah loves those who turn to Him constantly, and He loves those who keep themselves pure and clean." Washrooms are necessary in schools to teach children clean habits and to ensure that they can remain in the classroom for the duration of the school day.

GENERAL SUPPORT

WATER PROJECT MAINTENANCE

To maximize the longevity of our water projects, we need to revisit them periodically to ensure all components are working at optimal levels. A small donation will help ensure that thousands of people are able to continue drawing water from wells, pumps and filters they rely on.

WASH PROJECT MAINTENANCE

To ensure that washroom facilities are functioning for schools, families and communities, we need to revisit them periodically. A small donation will help ensure that thousands of people are able to continue to access sanitary solutions to keep them healthy, clean and disease-free.

SUGGESTED DONATIONS

WATER PROJECTS

AFGHANISTAN		
	Afrediv Pump	\$3,335
AFRICA		
Africa: Kenya	Mega Borehole	\$115,000
Africa: Kenya	Mega Water Filtration Plant	\$160,000
Africa: Kenya	Rainwater Harvesting	\$3,450
Africa: Kenya	Shallow Well with Afrediv/Submersible Pump	\$4,500
Africa: Kenya	Water Trucking	\$400
Africa: Kenya	Minor Purification Plant	\$46,000
Africa: Mali	Shallow Well with Afrediv/Submersible Pump	\$5,750
Africa: Somalia	Shallow Well with Afrediv/Submersible Pump	\$4,500
Africa: Somaliland	Water Trucking	\$400
Africa: Tanzania	Shallow Well with Afrediv/Submersible Pump	\$4,500
Africa: Tanzania	Water Trucking	\$400
Africa: Uganda	Mega Borehole	\$115,000
Africa: Uganda	Rainwater Harvesting	\$3,450
Africa: Uganda	Shallow Well with Afrediv/Submersible Pump	\$4,500
Africa: Ethiopia	Water Trucking	\$400
Africa: Djibouti	Water Trucking	\$400
Africa: Multiple Countries	Hygiene Kits	\$500
BANGLADESH		
Bangladesh	Tube Well	\$1,600
Bangladesh: Rohingya Refugees	Mega Water Project	\$11,000
ASEAN		
Cambodia	Water Tank	\$1,600
Indonesia	Water Tank	\$2,500

SUGGESTED DONATIONS

WATER PROJECTS

MENA		
Jordan	Water Tanks	\$1,150
Jordan: Syrian Refugees	Water Supply by Truck	\$1,000
Lebanon: Palestinian Refugees	Home Water Filtration	\$1,000
Lebanon: Syrian Refugees	Water Supply by Truck	\$1,000
NEPAL		
Nepal	Bio-Sand Filtration Community Water Pump	\$1,460
Nepal	Solar-Powered RO Filtration Plant	\$20,000
Nepal	Drinking Water Treatment Plant	\$6,000
PAKISTAN		
Pakistan	Afrediv Pump or 2 Abayaar Pumps	\$1,000
Pakistan	Dug Well	\$2,650
Pakistan	Gravity Flow Schemes	\$3,450
Pakistan	RO Plant	\$20,000
Pakistan	Solar-Based Drinking Water Solution	\$1,300
Pakistan	Submersible with Brick Masonry	\$3,450
Pakistan	Tube Well	\$11,300
Pakistan	Ultra-Filter Plant	\$13,300
GENERAL SUPPORT		
General support	Water project maintenance	\$100

SUGGESTED DONATIONS

SANITATION AND HYGIENE

AFGHANISTAN		
Afghanistan	Hygiene Kits	\$100
Afghanistan	(WASH) 1 Unit Restroom in School	\$2,000
AFRICA		
Africa	Hygiene Kits	\$500
Africa	(WASH) 5 Unit Restroom	\$6,670
BANGLADESH		
Bangladesh: Rohingya Refugees	(WASH) 2 Unit Restroom	\$2,450
ASEAN		
Cambodia	(WASH) 1 Unit Restroom	\$700
MENA		
Jordan: Syrian Refugees	(WASH) One Unit Restroom	\$2,000
Jordan: Syrian Refugees	Hygiene Kits	\$500
PAKISTAN		
Pakistan	(WASH) 2 Unit Restroom	\$5,400
GENERAL SUPPORT		
General Support	WASH project maintenance	\$200