

# WATER, SANITATION & HYGIENE

## OVERVIEW OF UNHCR WASH PROGRAMMES 2023

**29 COUNTRIES**  
delivering UNHCR WASH programmes

**136 SETTLEMENTS**  
hosting over 4,3 million refugees reporting to the WASH Monitoring System



**18**

Litres of water per person per day



**18**

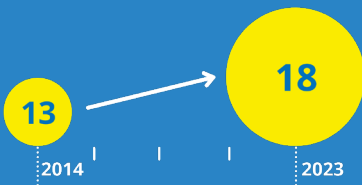
Persons per toilet



**11**

Operations with Smart Water Sensors

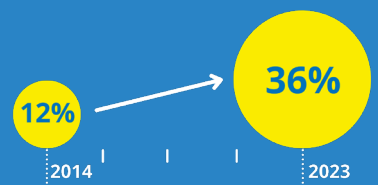
**Access to water**  
(litres per person per day)



**Access to soap**  
(% of households with soap)



**Access to sanitation**  
(% of households with HH toilets)



50% of UNHCR's boreholes solarized, with over 32,000 tons of CO<sub>2</sub> saved per year



Project Flow solarization feasibility studies conducted in 24 settlements

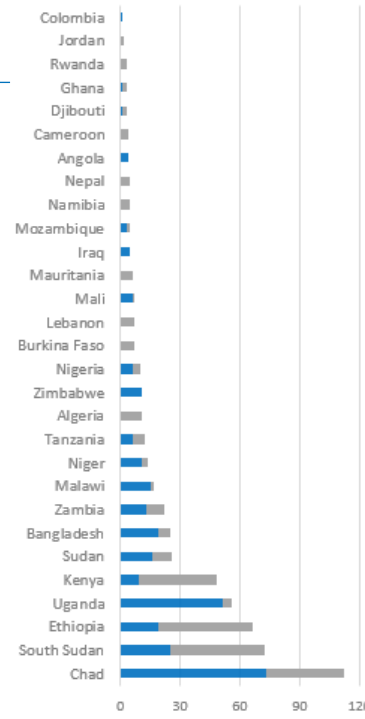
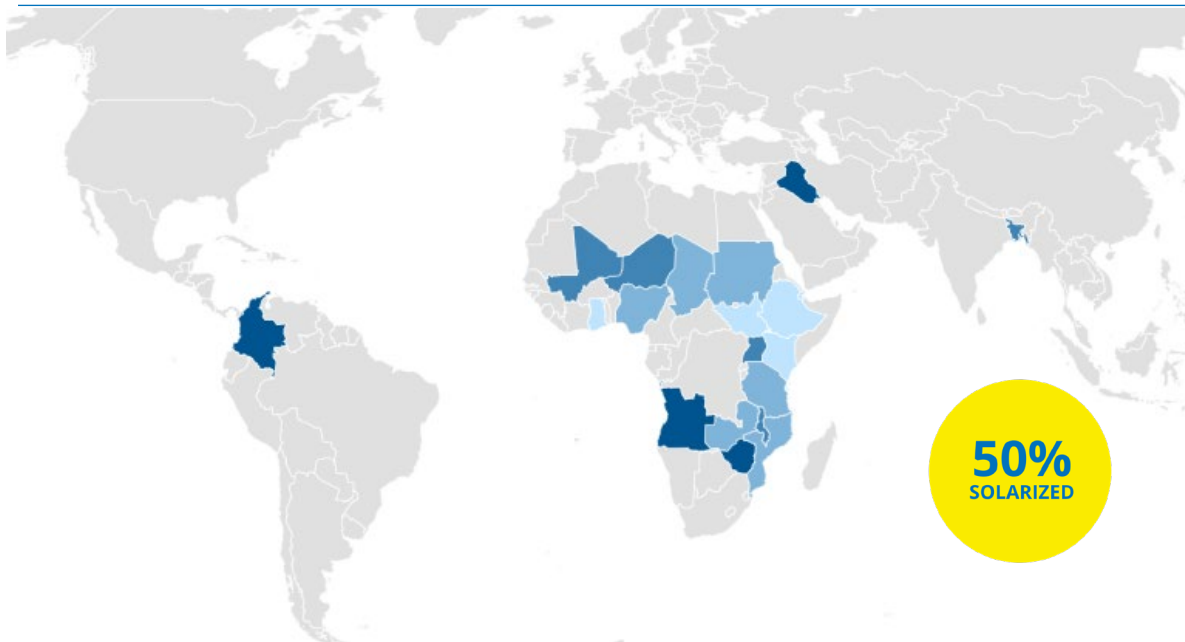


The largest UNHCR WASH responses are in Chad, Sudan, Ethiopia and Bangladesh



18 country operations report into the UNHCR WASH Monitoring System

## SOLARIZED BOREHOLES IN UNHCR OPERATIONS



Proportion of boreholes solarized: 100% 75 - 99% 50 - 74% <50%

# of boreholes Solar Non-solar

Information based on data submitted to UNHCR's WASH Monitoring Systems (WMS) and Borehole Database. Data changes on regular basis as more data is reported in the system.

*The report provides an overview of Water, Sanitation and Hygiene (WASH) service provision in the United Nations High Commissioner for Refugees (UNHCR's) operations. It highlights key achievements in UNHCR's global efforts to ensure universal and equitable access to water, sanitation and hygiene services that are environmentally sustainable to refugees and the surrounding communities.*

### **WASH in refugee emergencies**

In 2023, UNHCR and partners provided life-saving assistance to 16.7 million<sup>1</sup> people forced to flee their homes due to conflict and the surrounding host communities. UNHCR continued to provide access to WASH services to refugees, including through in-kind and cash-based interventions (CBI).

UNHCR delivered new emergency WASH responses such as the influx of Sudanese refugees in **Chad**, where nearly 70 boreholes and wells were successfully constructed, 10 water storage towers with a capacity of 680 m<sup>3</sup> were constructed and 16,550 meters of water supply network were installed. Nearly 11,000 toilets and showers were constructed in camps to cater for the sanitation needs of 484,950 refugees.

For the newly arrived Somali and Sudanese refugees in two new settlements and two transit sites in the Somali, Amhara and Benishangul Gumuz regions of **Ethiopia**, water trucking was used to meet the immediate needs while looking into more sustainable water supply sources. Communal emergency latrines were constructed in Metema and Kurmuk transit sites for almost 10,000 families.

In response to the ongoing displacements from **Democratic Republic of Congo (DRC)**, UNHCR in **Rwanda** supported over 12,600 new arrivals with household-level WASH supplies and new WASH facilities constructed in Nkamira reception and transit centers. In **Tanzania**, UNHCR undertook several WASH construction and rehabilitation interventions to support more than 14,000 asylum seekers at reception and transit centers, providing them with water as well as access to improved sanitation.

Based on the [UNHCR Emergency Preparedness and Response in 2023](#) report, UNHCR distributed 2.5 million **buckets** and 460,000 **jerry cans globally**, in emergencies such as the conflict in **DRC** and earthquakes in **Afghanistan**. Cash assistance was a crucial safety net for displaced and stateless people, allowing them to meet their immediate basic needs. As in 2022, food, health, rent, and clothes/shoes were the largest expenditure categories in most operations. 13% of the interviewed households also used cash assistance to access water, which was similar to 2022<sup>2</sup>.

<sup>1</sup> UNHCR Emergency Preparedness and Response in 2023, UNHCR

<sup>2</sup> Cash assistance in 2023: Main outcomes from post distribution monitoring, UNHCR



UNHCR providing clean water for the people of Janat Bagh village, Afghanistan. ©UNHCR/Oxygen Empire Media Production

### ***WASH response to disease outbreaks***

Whilst UNHCR continued activities to strengthen WASH barriers to disease outbreaks, operations such as **DRC**, **Malawi**, **Cameroon**, and **Sudan** effectively responded to new outbreaks, in close collaboration with health colleagues. In **DRC**, at the Sange assembly point and Kamvivira transit center in South Kivu where cholera remains endemic, more than 3,000 asylum seekers were supported through the cholera response with the supply of drinking water, distribution of soap, disinfection of latrines and dormitories, emptying of latrines, reinforcement of hand-washing facilities and hygiene promotion sessions. **Malawi** had its deadliest recorded outbreak of cholera in 2023. In collaboration with partners, UNHCR responded by constructing and distributing more than 150 dome slabs on toilets, distributing household water treatment, soap and handwashing buckets, training local health promoters

on cholera, and conducting cholera road show campaigns.

Vector control interventions in **Sudan's White Nile State** were undertaken in collaboration with Ministry of Health (MOH) and World Health Organization to reduce the risk of malaria, dengue fever and cholera, which were already prevalent in the country. To eliminate the risk of WASH related diseases and interrupt their transmission cycles, interagency partners conducted 95 communal vector control campaigns including collection and safe disposal of garbage across various refugee hosting states. Additional hygiene workers were recruited, trained, and engaged alongside MOH to conduct hygiene promotion sessions on risk communication, cholera prevention and awareness raising on general hygiene practices reaching a total of more than 505,000 individuals (representing 68% of refugees and asylum seekers in settlements).

### *Climate resilient WASH responses*

Working towards the targets of the [Operational strategy for climate resilience and environmental sustainability 2022-2025](#), UNHCR WASH collaborated closely with other technical sectors, including energy, to continue to solarize water supply systems. By the end of 2023, UNHCR had solarized 295 boreholes, representing 50% of boreholes in UNHCR's operations. This conversion to solar energy saves over 32,000 tonnes of carbon dioxide (CO<sub>2</sub>) annually. To further enhance the climate resilience of UNHCR's operations and to reduce the dependency on fossil fuels, UNHCR accelerated the solarization of water systems through the innovative financing mechanisms of [Project Flow](#). Project Flow funds the up-front capital cost of solar systems, which UNHCR operations pay back over multiple years using the savings achieved compared to diesel-powered systems. In 2023, feasibility studies were completed, and detailed solar designs were developed for 38 water systems and 10 healthcare facilities in **Ethiopia, Mauritania, Rwanda, South Sudan, Sudan, and Zambia**. Solarization of these systems has a potential to reach 1.36 million beneficiaries and reduce CO<sub>2</sub> emissions by approximately 2,000 tons/year. The solarization of the selected systems will occur throughout 2024 and a second round of feasibility studies will start in parallel.

To contribute to improved water services through effective monitoring, the implementation of **Smart Water**

**Sensors** (SWS) for real time monitoring of water services has continued: over 1,200 SWS were procured and delivered to 11 country operations. This brings the number of SWS deployed to UNHCR operations close to 2,000. Capacity building of the relevant country teams was conducted through hands on in-country training sessions in 10 country operations<sup>3</sup>. SWS used for groundwater monitoring provide data to support optimal abstraction of groundwater which prevents depletion of the aquifers. SWSs also support timely identification of technical issues such as leakages thereby minimizing water wastage.

### *WASH response to the impacts of climate change*

To mitigate the impact of extreme weather events on WASH service delivery, UNHCR and partners engaged in activities toward climate resilient infrastructure and services. In **Chad**, UNHCR piloted activities to protect boreholes in wadis, which are at risk of damage through increasingly intense seasonal rains. Works were undertaken at two boreholes for Mile camps, Guereda, serving more than 45,000 refugees.

In collaboration with the WASH partner and the local community, the water distribution network in Girba and Wad Sharifey in Kassala State, **Sudan** was upgraded and expanded, reducing leakages and thus conserving scarce water resources.

<sup>3</sup> Angola, Bangladesh, Cameroon, Chad, Kenya, Malawi, Nigeria, Uganda, United Republic of Tanzania, Zimbabwe

In **Zimbabwe**, a project under the [Environment and Climate Action Innovation Fund](#) was implemented to construct a large biogas reactor at a piggery within Tongogara refugee settlement to reduce public health and environmental risks associated with uncontrolled solid waste. The project also targeted the production of more sustainable energy to power further livelihood activities. It includes a behaviour change activity to improve household organic waste management as additional feed stock for the piggery.

#### *[Inclusion of refugees into national water and sanitation services](#)*

In line with the [Global Compact on Refugees](#), inclusion of the refugee population in the national agenda and strategies of host countries and collaboration with development partners remain key priorities for UNHCR.

In line with the local integration plan for water supply in **Mozambique**, and in collaboration with the National Institute for Refugee Assistance, geophysics studies for medium and large-scale water supply schemes in Maratane settlement were undertaken. Projects such as the ITANG water utility in **Gambella, Ethiopia**, and R-WASH in six locations in **Ethiopia, Sudan and Somalia** offered opportunities for refugee inclusion and the promotion of peaceful co-existence with host communities. Through the R-WASH program jointly implemented by UNHCR, UNICEF and government partners, and financed by the German Government and a private sector partner, critical water infrastructure has been upgraded and

rehabilitated, and capacity building activities of water utilities are undertaken. As a result, water utilities were supported to provide water to more than 660,000 people in refugee settlements and host communities across the three countries.

In addition to supplying adequate and secure water to refugees in **DRC**, UNHCR also invested in ensuring their inclusion in national WASH systems, through active collaboration with stakeholders on key modalities. An inclusion roadmap will be finalised in 2024. In Aru, the water committees are incorporated into the Cellules d'Animation Communautaires, which serve as basic national community structures.

#### *[Collaboration and partnerships](#)*

In the call to action for the [UNHCR Strategic Directions 2022-2026](#), UNHCR committed to working with states, partners, private sector as well as directly with forcibly displaced people. UNHCR WASH continued to do this through multiple collaborations in 2023. Experts from the Swiss funded [Geneva Technical Hub](#) (GTH), in collaboration with Eawag (Swiss Federal Institute of Aquatic Science and Technology), continued work on the production of four technical guidelines for solid waste management, biogas, soak-pit design, and lime treatment in emergencies. Technical support (remote and field-based missions) was provided to **Algeria, Bangladesh, Cameroon, Ethiopia, Malawi, Mauritania, Mozambique, Nigeria, Rwanda, South Africa, South Sudan, Sudan and Zambia**, and included capacity building, expertise on hydrogeology and solid waste



management, recommendations for improved toilet construction and water network optimization. The experts supported a regional technical WASH training in **Malawi** organized by the Regional Bureau for Southern Africa to further strengthen the capacity of WASH staff towards improved technical oversight, and a global training in **Switzerland** for WASH (and shelter) staff to improve technical programs against environmental and climate risks.

Also at the **global level**, in partnership with [Engineering for Change](#) (E4C) and [Autodesk Foundation](#), technical specifications and sample drawings on

climate considerations for WASH infrastructure were produced.

UNHCR also partnered with Swedish Civil Contingencies Agency (**MSB**), Dutch Disaster Risk Reduction and Surge Support (**DRRS**, formerly Dutch Surge Support Water) and Danish Refugee Council (**DRC**) to deploy six standby partners in **Chad, Ethiopia and Senegal**. To promote peaceful co-existence between the refugees and neighboring host communities in **Zambia**, UNHCR and government counterparts collectively maintained, repaired and operated all the water points in the refugee settlement.



## WASH ANNUAL REPORT 2023

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