2025 ANNUAL REPORT

WATER, SANITATION & HYGIENE

OVERVIEW OF UNHCR WASH PROGRAMMES 2025

25 COUNTRIES
delivering UNHCR WASH programmes to over 6.8 million refugees

6 COUNTRIES
with significant progress towards inclusion of WASH systems in refugee hosting areas into national system

91%
Refugees using at least basic drinking water services

57%
Refugees with access to a safe household toilet

9
Operations with Smart Water Sensors

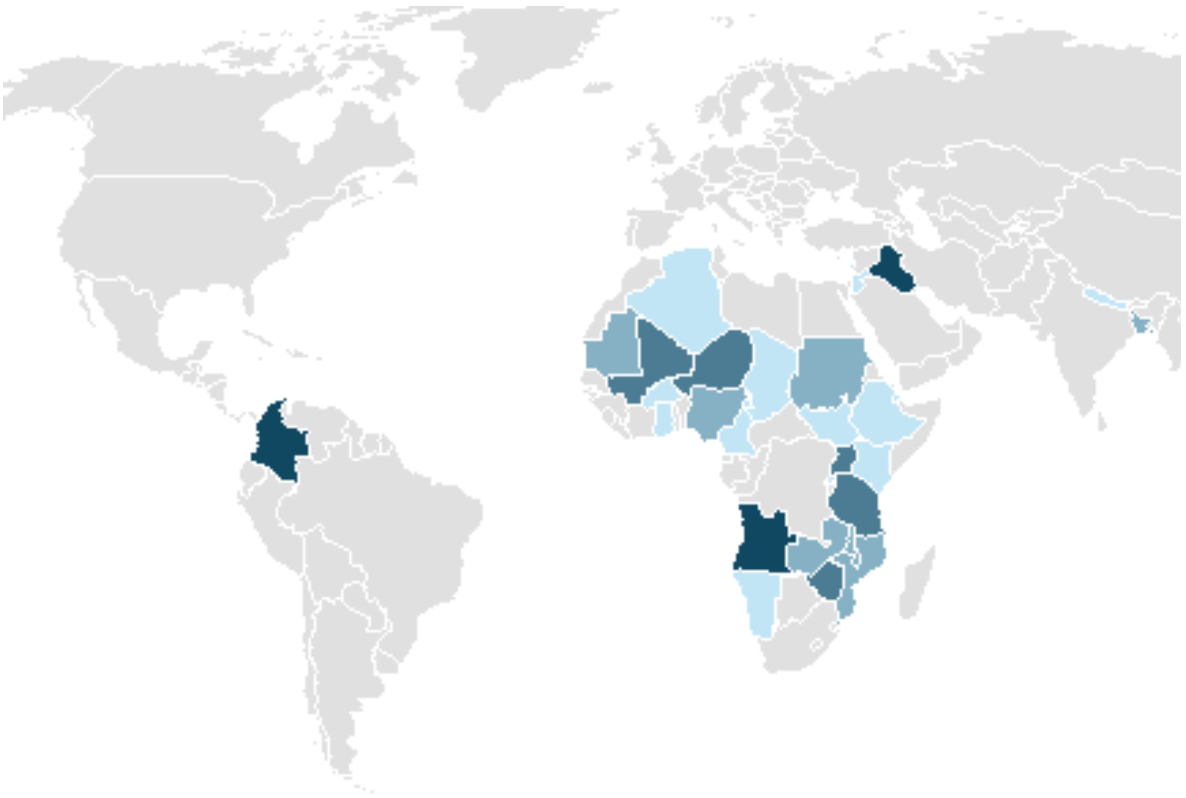
32 boreholes were newly solarized, mitigating an additional 1,600 tons of CO_2 mitigated per year

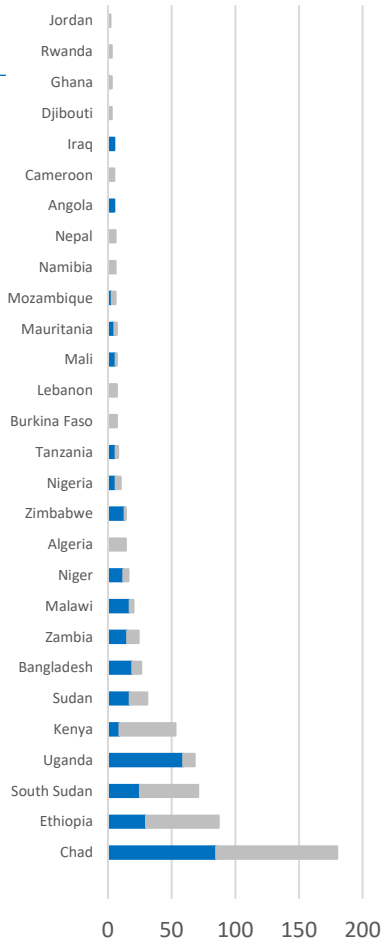
Project Flow solarized 5 water systems in Mauritania, delivering 35% more water, reducing operation costs by approximately 68% and mitigating approximately 190 tons of CO_{2eq} annually

The highest number of people served were in **Chad, Ethiopia, Kenya, Sudan and Uganda**

The largest UNHCR WASH programmes were in **Chad, Bangladesh, Ethiopia, Sudan and Uganda**

SOLARIZED BOREHOLES IN UNHCR OPERATIONS





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

Information based on data submitted to UNHCR COMPASS. Data changes on regular basis as more data is reported in the system. Note: As information for the 2024 Annual Report was based on data from UNHCR's Technical Information Management System (TIMS), there may be some impact on data coherence between the two years.

The report provides an overview of UNHCR's Water, Sanitation and Hygiene (WASH) programmes in 2025. It highlights key achievements in UNHCR's global efforts to ensure lifesaving access to water, sanitation and hygiene services to refugees and the surrounding communities.

Introduction

UNHCR, alongside partners and host governments, remained committed to providing essential WASH services to refugees and host communities amongst ongoing challenges such as new refugee crises, unresolved conflicts, disease outbreaks, and the impacts of extreme weather events.

Despite these pressures, 6.8 million refugees and more than 428,000 people in host communities received support from UNHCR to access safe water and/or sanitation in 2025. At the same time, UNHCR's overall expenditure on WASH assistance decreased by 22% compared to 2024. The countries most significantly affected were **Nigeria**, **Rwanda**, **South Sudan** and **Uganda**, all of which had their WASH activities reduced by more than one third of 2024.

In the context of reduced funding WASH responses increasingly prioritized maintaining safe drinking water supply as a non-negotiable lifesaving intervention, while sanitation and hygiene promotion activities were frequently scaled back or completely stopped. Where sanitation activities continued, they often remained limited to communal emergency facilities, slowing the transition to household-level, more durable sanitation solutions.

Critical processes were also affected: annual household WASH assessments, including knowledge, attitudes and practices (KAP) surveys, were often deprioritized, constraining the sector's capacity to identify and target the most at-risk areas or households. Routine operation and maintenance (O&M) activities and essential asset renewals were similarly reduced, increasing the risk of system breakdowns and service interruptions.

Against this backdrop, the report highlights key achievements in delivering lifesaving and environmentally sustainable WASH services to refugees and host communities, alongside the trade-offs that constrained progress towards more inclusive, climate resilient and nationally integrated WASH systems.

Access to water

In 2025, critical water services were sustained for displaced populations and their hosting communities, with more than 91% of the targeted population using at least basic drinking water services. This is an increase from 2024, reflecting the prioritization of reduced resources to this life-saving activity, at the expense of sanitation and hygiene activities and ongoing maintenance. It represents both the significant increase in actual number of people supported with water services in emergencies and protracted situations such as

Bangladesh, **South Sudan** and **Uganda**, and notable decreases in coverage in countries such as **Cameroon** and **DRC**, where funding cuts were more immediately felt.

Cash assistance remained an important modality to help households meet WASH needs in a dignified manner while supporting local markets. According to Cash Assistance in 2025: Main Outcomes from Post Distribution Monitoring, amongst people who received cash assistance in 2025, 13% of people surveyed used it for water and 9% used it for utilities and bills (which may include household water connections).

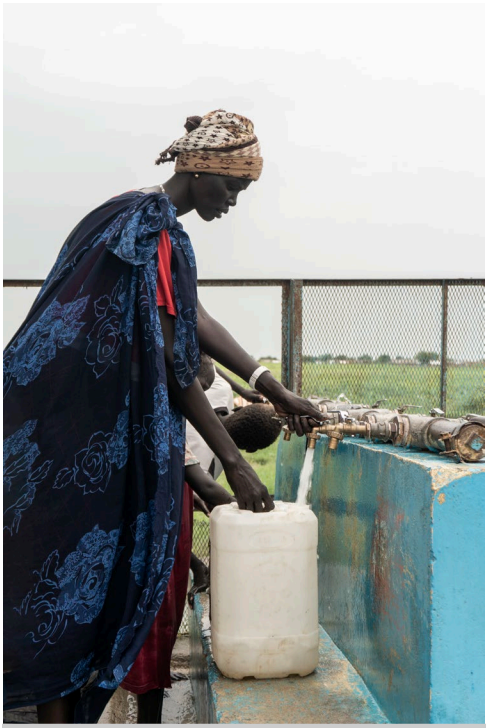
Access to sanitation and hygiene

Whilst sanitation activities were often deprioritized due to funding cuts, the impact of ongoing construction activities in previous years, particularly in emergencies, was realized in 2025: reported household toilet coverage reached 57% globally. As with water access, this figure masks substantial disparities between operations: significant gains in access compared to the previous years were noted in countries such as **Chad, Niger** and **South Sudan**, whilst countries such as **Ethiopia** and **Uganda** noted increased gaps in access to household toilets. In Ethiopia, for example, existing sanitation facilities were particularly impacted by floods, whilst in Uganda, the construction of household facilities for new arrivals was deprioritized. These disparities underscore the ongoing challenge of attaining equitable and adequate sanitation access for all refugees, and the need for predictable, multi-year financing to operate, maintain and expand these facilities.

Amongst people who received cash assistance in 2025, **20%** of people surveyed used it for **hygiene items**, which was the fourth highest use of cash

Durable, climate-adapted sanitation facilities in Jamjang, South Sudan, reduce protection risks, including GBV, while maintaining safe access to services during heavy rains and flooding. © UNHCR/Reason Moses Runyanga

assistance, as in the previous year, highlighting the importance of hygiene to people's priorities. Nevertheless, reduced or insufficient in-kind distributions of soap and menstrual hygiene materials or hygiene promotion activities were reported in several operations (**Algeria, South Sudan, Sudan** and **Uganda**), raising concerns about the health and gender risks of under-resourced hygiene responses, particularly in congested emergency settings.



Solar power brings clean water and hope to refugees and host communities in White Nile State, Sudan. © UNHCR/Antonia Vadala

WASH in refugee emergencies

In 2025, UNHCR responded to multiple refugee emergencies across eight countries, supporting over 4.8 million refugees with WASH interventions strategically tailored to the specific needs of each emergency context.

In **Chad**, UNHCR worked closely with WASH partners and local authorities to ensure the availability of safe water in the new and existing settlements. The transition from emergency water supply systems for the new Sudanese refugees continued with the construction of 45 new boreholes, 151 water points, five water storages and installation of 63,000 linear meters of water distribution pipes. Also for the Sudan situation, **South Sudan** collaborated with the African Development Bank (AfDB) to expand water access for the new arrivals, with the drilling and equipping of five new handpumps.

For South Sudanese refugees in **Sudan**, a new water treatment plant was established in Blue Nile State and water systems in White Nile State were solarized, improving sustainability and reducing costs. In **Ethiopia**, UNHCR transitioned away from water trucking for the new South Sudanese arrivals, with the development of surface water treatment facilities and pipeline, doubling daily water access to meet UNHCR's emergency target.

For the DRC situation, lifesaving activities continued to be implemented in **Burundi** and **Uganda**, deprioritizing more sustainable, longer-term activities. This had notable impact on access to household sanitation facilities in both countries, with both countries constructing emergency, temporary latrines only.

WASH response to disease outbreaks

UNHCR WASH teams and partners collaborated with local and national health actors to respond to several

cholera outbreaks in 2025, including in **Chad, DRC, Ethiopia and South Sudan**. Water, sanitation and hygiene promotion systems and activities were strengthened to limit these outbreaks in refugee settlements and neighbouring host community areas.

Cross sectoral interventions, including upgraded water, waste management and energy systems for health facilities, in several countries including **Kenya, Nigeria and Zimbabwe**, strengthened critical response mechanisms to water-related diseases.

The lack of funding for WASH interventions lead to reduced operations and maintenance (O&M) specifically of waste management facilities in **Algeria, Chad, Malawi** and **Rwanda**.

Enhancing resilience of WASH systems

UNHCR continued to strengthen the resilience of WASH systems against extreme weather events, aligning with the Operational Strategy for Climate Resilience and Environmental Sustainability 2022 - 2025 and the Focus Area Strategic Plan for Climate Action 2024-2030. Efforts focused on both mitigating the environmental impacts of WASH systems (largely by reducing the carbon footprint or protecting scarce or vulnerable water resources) and protecting WASH systems (including water resources and infrastructure) against extreme weather events.

A key achievement in 2025 was the solarization of 32 boreholes in six operations (**Chad, Ethiopia, Mauritania, Niger, Pakistan** and **Uganda**). The solarization of these additional boreholes mitigates up to an estimated 1,600 tonnes of carbon dioxide (CO_{2eq}) emissions annually, while simultaneously lowering operational costs and reducing reliance on fuel deliveries in remote field locations. The reduced financial burden of these systems strengthens the business case for the transition of these water systems to local water utilities. Additional solarization initiatives were

Project Flow

Using an innovative financing mechanism, Project Flow, which supports the transition of refugee-serving water systems to sustainable solar energy, achieved several key milestones during 2025. The first solar-powered installations were completed in the M'bera settlement in **Mauritania**, while solar implementation works were launched in **Ethiopia** and **Rwanda**, and procurement process finalized in **Sudan**. The participating country operations began repaying the solar investments through the achieved cost savings, allowing replenishment of the Project Flow funding mechanism and enabling future investments in additional solar systems in new locations. The five solarized boreholes in Mauritania now deliver 35% more water while the operational costs are reduced by up to approximately 68% and mitigate approximately 190 tons of CO_{2eq} emissions each year.

A further 20 water systems and health facilities are expected to become operational during 2026, which in total are estimated to mitigate approximately 1,400 tons of CO_{2eq} emissions by annually.

implemented in **Chad, Ethiopia, Niger, Pakistan** and **Uganda**, to expand climate resilient water access.

Chad and **Malawi** continued with managed aquifer recharge pilots, aimed at diversifying water sources to adapt to the impacts of climate change.

A number of countries continued to implement solid and faecal waste management activities, targeting reduced impacts on the environment, including minimising sources of contamination within water catchments. Waste to energy projects further helped to mitigate climate change by reducing emissions from poorly managed waste and providing alternative sources of energy. **Bangladesh**, for example, more than 10,000 cubic meters (m^3) of solid waste were processed in ten material recovery facilities, producing compost and recycled plastic products benefiting refugees and host communities. In **Cameroon**, composting of faecal sludge produced biofertilizer that contributed to improved agricultural yields and strengthened household resilience. Similarly, in **Mauritania**, as a result of a project funded by the World Bank and the Government of Mauritania, a faecal sludge treatment and valorization site for human waste was established, aimed at converting sludge into fertilizer to support reforestation activities. In **Kenya**, bio-digester latrines were constructed in schools, generating biogas while safely managing excreta.

Algeria continued to process plastic waste and generated revenues that covered staff incentives and some operational costs, contributing to the

Five boreholes solarized in Mauritania through Project Flow, reduce fuel consumption by 50% in the first month of operation alone. © UNHCR/Jupsergi Prodige Dimi Ngolo

sustainability of the plastic recycling initiative.

These waste projects were noted to also reduce public health risks and help ease tensions with host communities by addressing shared environmental concerns.

Fewer climate adaptation projects were reported in 2025, with just **Rwanda** and **Zimbabwe** highlighting their efforts in protecting WASH infrastructure. In **Rwanda**, the construction of retaining walls, drainage channels and planting trees to reduce landslides and erosions was undertaken to protect existing WASH infrastructure, whilst **Zimbabwe** developed the BioFence Innovation for the same purpose.

The **smart water sensors** (SWS) project, which provides real time data from both water resources and water infrastructure to improve groundwater management, operational efficiency and minimize losses, continued in nine countries in 2025, despite severe budget restrictions. The importance of this multi-year project in strengthening the resilience of WASH systems was highlighted in several operations: enhanced groundwater monitoring for short-term operational effectiveness and longer-term safe extractions of water contributing to environmental sustainability was a key benefit noted by **Bangladesh, Cameroon, Malawi** and **Nigeria.** The successful handover of the SWS to the Government of **Iraq** who manage the water supply systems for the refugee settlements, underscored the importance of groundwater monitoring for both the refugees and the surrounding host community in a highly water scarce environment.

Building on the value of this project, **Zimbabwe** explored automation of the water supply system to enable remote programme and control optimized water production schedules, safeguard pumps, and support energy efficient, solar powered schemes.

Cameroon and **Nigeria** particularly valued the ability to track service provision remotely, with particular emphasis on critical parameters such as chlorine and water flow. This system reduced the need for frequent travel to refugee settlements and thereby lowered the carbon footprint of the WASH programme.

The vulnerability of WASH systems to the impacts of increasingly extreme climate was highlighted in 2025, as limited funds were prioritized on lifesaving WASH services over strengthening the resilience of WASH services. Direct impacts of sudden onset weather events such as floods were experienced in **Kenya** and **Uganda**, where flooding damaged WASH infrastructure and affected water quality, and in **Bangladesh**, where heavy rainfall spread poorly managed greywater within and beyond the settlements. Indirectly, increasing rainfall intensity and frequency in **Cameroon, Nigeria, Sudan** and **Uganda** reduced road access to settlements which affected WASH construction and maintenance activities.

Slow onset events, such as prolonged dry seasons and drought further demonstrated the need for diversified

water sources and more resilient water systems. In **Bangladesh**, average water supply dropped from 33 to 23 litres per person per day (l/p/d) from 2024 to 2025, reflecting the dependence of Teknaf settlements on vulnerable surface water sources. Prolonged drought in the Teknaf settlements resulted in rationing of water to 10 l/p/d and the need for significant periods of water trucking. In **Uganda** and **Zimbabwe**, climate variability further strained access to water for refugees - droughts and unpredictable rainfall reduced groundwater recharge and added pressure to extractions from existing boreholes, highlighting the need for more climate resilient and diversified water sources.

WASH response to the impacts of extreme weather events

In 2025, Luakdong settlement in **Ethiopia** experienced one of the heaviest rainfall seasons in recent years, resulting in severe flooding that significantly impacted core humanitarian infrastructure. The settlement, located in a low-lying flood-prone area, became increasingly vulnerable as continuous heavy rains caused the nearby river to overtop its banks. With no natural drainage outlet for excess water, the entire land plot remained inundated for extended periods. The flooding caused widespread damage to critical WASH and shelter facilities: essential water points were rendered non-functional and latrines collapsed due to soil instability and prolonged waterlogging. As a result, thousands of refugees faced a cholera outbreak and heightened protection, health and dignity risks. In response, a protective dyke structure surrounding the settlement was constructed, which now prevents uncontrolled overflow into residential and service areas.

Sustainable responses in the WASH sector: inclusion of refugees into national water and sanitation services

In line with the objective of the Global Compact on Refugees, inclusion of the

Improved waste management in Cox's Bazar contributes to more resilient WASH systems. © UNHCR/Shari Nijman

refugee population in the national agenda and strategies of host countries and collaboration with development partners remain key priorities for UNHCR, aiming for long-term sustainability and enhanced community resilience. By 2025, a total of 54 pledges were made under the Multistakeholder Pledge on Sustainable Human Settlements, 32 of which support the access to basic services for forcibly displaced people. Notable WASH-focused commitments include the Grundfos Foundation's Project Flow, pledges from the German government, Veolia Foundation and the Geneva Water Hub, and the Government of Yemen's pledge on "Equitable Access to Clean Water and Sanitation for Refugees, IDPs, and Host Communities." Several additional pledges focus on the transition from camps to sustainable human settlements, including the integration of WASH services into national systems, like in **Ethiopia**, **Kenya**, and **Mauritania**.

In **Uganda**, a key milestone was the signing of a formal Memorandum of Understanding between the Government and the Northern Umbrella for Water and Sanitation, establishing a structured framework for transitioning water systems in refugee hosting areas. By the end of the year, over 10% of all motorized water supply systems were under the direct management of national utilities. The sector also launched the second Water and Environment Sector Refugee Response Plan (WESRRP II), aligned with the fourth National Development Plan (NDP IV) and SDG 6, to further embed refugee-host WASH integration into national systems.

In **Ethiopia**, the Somali Regional State Water Bureau (SRSWB) assumed the responsibility for operating and maintaining the water infrastructures and supporting capacity building for local utilities: water utilities in Kebribeya and Awubarre were successfully established and were technically and institutionally equipped to take over full responsibility for providing water supply services to both host and refugee populations. Additionally, the Bohk Woreda Water Development Office managed the O&M of four solarized boreholes in Mirqaan Refugee Settlement.

Some countries focused on community-based models to manage water systems locally: in **Kenya**, Market Water Committees were formalized and registered as Water and Sanitation Societies strengthened community-based management of water systems and generated more than USD 265,000 in revenue to support system operations.

A pilot in **Malawi** established refugee-led water users associations (WUA), regulated by the Regional Water Board, to operate small water supply networks on a cost recovery basis. This pilot aimed to test the willing and ability of refugees to pay for water and using the fees to cover O&M. The legal process for regulation of these WUAs included establishing a board, developing a constitution and registering with the Ministry of Justice.

As operations continue to collaborate with local and national partners for inclusion of refugee hosting areas in local/national WASH systems, the

principle of pay for use is a critical element for the sustainability of these systems. A global survey in 2025 showed that refugees contributed to some proportion of these payments in some locations in only four countries (**Angola, Niger, Rwanda** and **Republic of Congo**) – these being mostly out-of-camp settings. In settlement settings, UNHCR covered the fees for bulk supply of water through utilities in locations in four countries (**Ethiopia, Ghana, Rwanda** and **Uganda**). In Burundi, development partners and the government covered the cost of provision of water through existing community systems. In Iraq, the government covered the salaries of water operators only – households did not pay additional for use.

Collaboration and partnerships

Strategic partnerships and collaborations were instrumental in advancing WASH outcomes across UNHCR operations in 2025. Notably, in the final stages of the first phase of Geneva Technical Hub (GTH, funded by Swiss Agency for Development and Cooperation) experts in hydrogeology and water systems reflected on learnings from the previous years of GTH to develop three tools to support improved sustainable water management: Borehole diagnostic matrix, Piped water supply design for refugee settings – step-by-step manual and Rapid pumping main sizing and assessment chart. Similarly, the environment and energy expert compiled Frequently Asked Questions (FAQ) documents on the waste-to-energy topics of briquette and biogas production and use. These documents integrate - in a simple and easy-to-access manner - technical guidance, best practices and strategic approaches to apply in refugee settings.

Building on a previous mission to **Kenya**, the GTH hydrogeology and water systems experts facilitated a tailored capacity building/workshop focussed on optimisation of the Kakuma water supply system, from sustainable boreholes use to household use. Whilst this training had a technical focus, the participatory process of initiating the development of a masterplan with WASH actors from local government, local partners and UN agencies was an important step in facilitating the inclusion of the WASH services/infrastructure into the national system.

The success of this first phase of GTH was highly valued by the broader humanitarian community, resulting in the scale up of GTH 2.0 in late 2025. Funded by ECHO and SDC, and with contributions from the Consultative Group on International Agricultural Research (CGIAR), the Swedish Civil Defence and Resilience Agency (MCF) and Veolia Foundation, GTH 2.0 brings together technical experts, field practitioners, local entities and affected communities, to support the broader humanitarian community including actors involved in WASH programs: Global WASH Cluster, ICRC, IFRC, IOM and UNICEF.

Collaboration with national/local authorities, UNICEF and other humanitarian and development WASH partners was strengthened in several countries: in **Bangladesh**, collaborations

continued to rationalize WASH activities, with increased coverage by UNICEF in Ukhiya, and increased coverage by IOM in Teknaf. In **Cameroon**, joint planning and implementation with the Ministry of Water and Energy, UNICEF, decentralized authorities, and community structures strengthened system sustainability and promoted better integration with national WASH mechanisms. In **Ethiopia**, UNICEF and development partners have also been co-financing infrastructures in four regions while INGOs are undertaking technical implementation and resource mobilization to complement the gaps. In refugee hosting regions in **DRC**, partnerships with UNICEF, the Ministry of Environment, Conservation of Nature, Water and Forests, local water authorities, and NGOs improved technical expertise, service delivery, and coordination. Donors, including the US Government and the Government of Japan, funded water infrastructure, latrine construction, and hygiene initiatives.

In **Chad**, UNHCR worked closely with the government counterpart, UNICEF and other actors to define a four-year country WASH strategy from 2025 to 2028 with clear strategic and operational guidelines related to the emergency response in eastern Chad. UNHCR has also led a settlement-based coordination mechanism while supporting UNICEF and the Government counterpart leading the regional WASH working groups. Collaboration with development actors, including INTPA, ARADA, and BMZ, was further strengthened.

Rwanda continued collaborations with the Government of Rwanda, local authorities and development partners including JICA and WB, and signed a three-year Joint Action Plan with AfDB to work collaboratively for the protection and well-being of refugees, while promoting their inclusion in national services, including those for water and sanitation.

Collaboration with the private sector provided valuable expertise in **Malawi** where Veolia Foundation continued its long-term support to UNHCR. Remote and onsite investigations in Dzaleka identified opportunities to overcome issues associated with solar power and water quality. The Veolia Foundation team further developed a hydraulic model and GIS mapping to provide a comprehensive understanding of the water distribution system and priority, costed action plans. The team in Malawi has already implemented some of the low-cost actions with positive feedback on the water supply system.

R-WASH

The Regional WASH Programme for Refugees, IDPs, and host communities in East Africa (R-WASH), is jointly implemented by UNHCR, UNICEF and government partners, and financed by the German Government and the private sector partner Xylem. It is a multi-year programme (2021 to 2027) supporting more than 660,000 people in **Sudan**, **Ethiopia** and **Somalia**.

R-WASH made significant progress in 2025, despite funding reductions. In Ethiopia, support to Awubare, Shedder and Kebribeyah focussed on water system optimization, including solarization of boreholes, capacity building for the Awubare and Kebribeyah Water Utilities, and support to the Somali Regional State Water Board. The water supply systems are expected to be handed over to the water utilities in 2026, advancing the transition from humanitarian to nationally managed services.

Infrastructure conditions in Sudan remain severely affected by ongoing conflict and related disruptions, contributing to deterioration of water supply and sanitation services in Girba and Wad Sharifey. With annual funding reductions and rising costs, R-WASH implementation faced constraints in meeting increasing demand for services; nevertheless, the project prioritised essential service continuity, preventive maintenance and community-based approaches to safeguard minimum service levels supporting nearly 30,000 refugees and host community members.

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WASH
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