



YEMEN-07172017-staff-27

# WATER, SANITATION & HYGIENE

## Capacity Statement

OCTOBER, 2017



# Introduction

Around the world, 1 in 10 people (663,000 million) lack access to a safe drinking water source and 1 in 3 people (2.4 billion) lack access to basic sanitation.<sup>1,2</sup> Unsafe water, inadequate sanitation and poor hygiene directly contribute to the burden of child mortality; diarrheal disease is a leading cause of death in children under 5 with more than 1,400 children dying from this preventable disease each day.<sup>3</sup> Malnutrition, another leading cause of child mortality, places a child at higher risk for diarrheal diseases and other infections. Inadequate water, sanitation and hygiene is also responsible for the continued transmission of many neglected tropical diseases. The disparities in water access disproportionately affect women and girls who are often expected to ‘manage’ household water, which includes spending up to six hours each day fetching water from sources at least a mile away. As a result, some girls miss school while others are simply too tired to participate. Similarly, the absence of a household toilet has a profound impact on almost 500 million women and girls who have to find somewhere private and safe to relieve themselves. Many face abuse and some the risk of violence. All face the loss of dignity and respect.

A key Sustainable Development Goal is to ensure access to water and sanitation for all by 2030. As a

leading organization in humanitarian aid and international development, Mercy Corps works diligently across the globe to close the gap in improved water and sanitation access and promote positive health outcomes. Over the past decade, Mercy Corps has provided more than 470 water and sanitation interventions around the world. In times of crisis, we are amongst the first on the ground providing safe drinking water, appropriate sanitation facilities and promoting key hygiene practices to prevent water-borne disease. As a recognized leader in emergency and early recovery, we swiftly mobilize resources to re-establish regular access to disrupted water and sanitation services. Seeking lasting change, we aim to equip communities with long-term water and sanitation solutions that promote broad development goals.



PAKISTAN – 2009 -staff

<sup>1</sup> UNICEF; Water, Sanitation and Hygiene. Retrieved September 12, 2017 from: <https://www.unicef.org/wash/>

<sup>2</sup> Water.org; The Water Crisis. Retrieved September 12, 2017 from: <http://water.org/water-crisis/water-sanitation-facts/>

<sup>3</sup> UNICEF Data; Monitoring the Situation of Women and Children. Retrieved September 12, 2017 from: <https://data.unicef.org/topic/child-health/diarrhoeal-disease/>

# Our Approach

Mercy Corps recognizes the interdependent nature of water, sanitation and hygiene (WASH) for improvements in public health outcomes. We take an integrated approach to WASH by emphasizing the importance of simultaneously improving equitable access to sufficient and safe water and improved sanitation infrastructure and services, implementing context-specific social and behavior change interventions to ensure *uptake of key hygiene practices* and, collaborating closely with country stakeholder groups to *improve governance* for sustainable services in the long-term. Our strategic approach seeks to support locally appropriate solutions, which emphasize safety and dignity through gender-sensitive stakeholder engagement, evidenced-based learning, and consensus building. Mercy Corps' program interventions are need-based and context-specific to deliver WASH services in a wide range of emergency, recovery and long-term development scenarios in predominantly fragile and conflict-affected states in Africa, Asia, Latin America and the Middle East.

## WASH APPROACH

1. *Improve access to safe water and sanitation services*
  2. *Social and Behavior Change to ensure uptake of key hygiene practices*
  3. *Improve governance for sustainable services*
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# Relief and Early Recovery

*In times of crisis*, access to safe water and sanitation is one of the most critical needs. Mercy Corps is an acknowledged expert in disaster response strategies that deliver immediate humanitarian needs while also preparing communities to build back stronger. We consistently work with government and community stakeholders to ensure: *first line emergency response* through water trucking and other means, emergency latrines, hygiene promotion; *early recovery interventions* which focus on rehabilitation of vital water and sanitation infrastructure including wells, protected springs, tap stands, distribution networks, pumping stations, treatment systems, irrigation canals, and latrines and sewerage networks and; *participatory management* of these.

## WASH IN EMERGENCIES

*Mercy Corps has helped communities recover from dozens of emergencies around the globe. We are a recognized leader in providing safe drinking water and adequate sanitation facilities and preventing water-borne diseases under some of the world's most difficult conditions. As thought leaders, our emergency water experts support improvements in the speed, quality, and effectiveness of emergency water and sanitation responses and the capacity of the humanitarian community in saving lives by contributing to global platforms such as the UN Global WASH Cluster, the Emergency Capacity Building project, Interagency Working Group, InterAction, and the Sphere Project.*

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## Relief and Recovery Approach in Action

Yemen – Ongoing: with a presence in the country since 2010, Mercy Corps has been a lead organization responding to the critical and deteriorating humanitarian situation. In Sana'a and Taiz Governates, we are working to improve access to safe water and sanitation infrastructure and improve hygiene practices for conflict-affected households and internally displaced persons (IDPs). Mercy Corps has provided emergency water trucking, constructed and rehabilitated water systems in communities, public health facilities and schools, constructed and rehabilitated water and sanitation facilities, implemented environmental health interventions to reduce the spread of vector and water-borne diseases and promoted proper hygiene practices in schools and communities.

Since early 2016 Mercy Corps has been responding to the emergency needs of IDPs and returnees in Sana'a, Taiz, Aden, Lahj, Abyan and Al Dhale Governorates. In Aden, Mercy Corps repaired the Al Barzakh storage tank and water supply pipeline, damaged during fighting, which now serves the entire population of four districts (approximately 294,372 people). We are also implementing three large-scale infrastructure projects in the Governorate to restore public water supply in areas that have been without a functioning system and supporting partners' similar work in Abyan, and Lahj Governorates. Mercy Corps has been supporting efforts responding to the cholera outbreak, declared in 2016, and has recently launched a new program in Abyan, Aden, Al Dhale'e, Al-Mahwit, Hadramaut, Lahj, Sana'a, and Taiz Governorates which includes a significant focus on cholera prevention and treatment and aims to reach nearly 700,000 beneficiaries.

Syria response – Ongoing: When protests degenerated into brutal civil war in 2011, a complex emergency was born with more than 4 million displaced internally and in Jordan, Lebanon, Iraq and Turkey. To date, Mercy Corps has supported the water, sanitation, and hygiene needs of more than 2 million people affected by the crisis. In Jordan, we have rehabilitated and upgraded sections of two major water systems and reduced water losses in collaboration with the Ramtha City and Mafraq Water Utilities, resulting in increased water availability for nearly half a million people in host and refugee communities. In Lebanon, Mercy Corps has been providing access to drinking water and sanitation facilities at refugee informal settlements for the last several years. Similarly, we have rehabilitated/rebuilt water pumping systems and networks at several municipalities in South Lebanon and Bekaa Valley governorates to facilitate refugees as well as the host populations. Nearly 200,000 people have benefited from Mercy Corps' water sanitation and hygiene interventions in Lebanon during 2016. Mercy Corps has made similar interventions inside Syria during 2016/17 to increase access to drinking water and sanitation facilities for local and displaced populations benefiting over 200,000 affected people.



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Iraq: Mercy Corps has been responding to the critical and deteriorating humanitarian crisis in Iraq driven by the Mosul offensive and the rapidly intensified fighting in the surrounding regions between ISIL and Coalition Forces in IDP settlements in Ninewa, Salah al-Oin, Kirkuk and Erbil. With the aim of reaching nearly 50,000 Individuals, first line emergency WASH intervention have enabled access to safe water for IDPs through water trucking, water treatment, and installation of water, including water disinfection and testing at water source and distribution points. Sanitation is being addressed through the provision of emergency latrines, garbage bins, and waste disposal services. Interventions are coupled with the delivery of key hygiene messages and provision of emergency Showers and key hygiene commodities. In geographic areas where stability has returned, Mercy Corps is additionally providing WASH support to local municipalities and local governments through rehabilitation of their water supply and treatment systems. Furthermore, WASH facilities have been repaired and upgraded in more than 50 schools in the target program areas, combined with provision of hygiene promotion training for students to support these initiatives. More than 100,000 people have benefited through the aforementioned interventions.



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**Nigeria – Ongoing:** In North East Nigeria, 14.8 million people have been affected by an unprecedented humanitarian emergency triggered by the ongoing Boko Haram insurgency and the military response by the Government of Nigeria. Approximately seven million people require immediate humanitarian assistance across Borno, Yobe, Adamawa, and Gombe states, while three million remain in insecure and inaccessible areas. Mercy Corps has been responding to the WASH needs of IDPs and host communities in Borno State since early 2016, reaching nearly 69,000 through renovation of communal water points, water quality testing, drilling of new boreholes, creation and training of management committees run by local volunteers (WASHCOMs) consisting of both men and women, hygiene promotion and rehabilitation of communal toilets in schools and clinics.

**South Sudan – Ongoing:** In response to the protracted crisis, Mercy Corps has been responding to the WASH needs of vulnerable populations in Unity State since 2015 in Bentiu (Rubkona County) and Panyinjar County reaching over 300,000 beneficiaries, the majority being IDPs. Interventions include ensuring access to potable water, borehole rehabilitation, construction of semi-permanent household and communal latrine stances, ensuring a stronger integration of health, nutrition and WASH to mitigate WASH-related illness through referral tracking systems and integrated outbreak response planning, prioritizing protection principles and women and girls' empowerment in program design, implementation and monitoring/evaluation and conducting intensive community engagement to ensure ownership of WASH facilities by communities.

**Horn of Africa – 2011:** During the worst drought in 60 years in Ethiopia, Kenya and Somalia, Mercy Corps provided emergency water to pastoralists as well as people living in displacement camps. In Kenya, Mercy Corps delivered water to 290,664 people and their animals for three months during the worst of the drought. In Ethiopia, we distributed water to help 284,140 people survive. In Somalia, we supplied clean drinking water to displacement camps serving 61,000 people. We also helped pastoralists in all three countries better capture, store and manage water to become more resistant to future cycles of drought and famine.

Haiti – 2010: An estimated 3 million people were impacted by the 7.0 magnitude earthquake that leveled much of Port au Prince, Haiti in January 2010. Mercy Corps quickly established a WASH program that provided 429,000 people with access safe drinking water and delivered lifesaving information and water treatment products to 1 million people in high-risk areas to reduce the incidence of cholera.

## Development

*In development settings*, we implement programs to increase access to improved water sources for previously unserved populations as well populations relying on inadequate water sources and services. The majority of unserved populations currently live in rural areas where standalone systems, such as bore wells fitted with electric or hand-pumps or gravity scheme, are the appropriate solution to increase water access. The other major population segment that lacks sustainable access to quality water and sanitation sources and services live in sub-urban fringes of large cities or in small towns, which are generally neglected by policy makers and donors. In urban areas, such as in the Democratic Republic of Congo (DRC), we partner with the government to rehabilitate and extend networks to provide clean water and improved sanitation facilities to previously unserved people living in urban and peri-urban areas. Under the rapidly urbanizing world, these populations are expected to explode over the coming 15 to 30 years. While we rehabilitate and/or expand water and sanitation services and systems for these populations, we focus on building capacity of service providers and advocating for market-based solutions to ensure sustainable services and work with communities and governments to improve governance structures that manage water access in the longer term. We believe that, in order to obtain an efficient improvement to sanitation coverage, generating sanitation demand and strengthening the supply of sanitation products and services is required. We aim to achieve this through applying innovative approaches such as Community Led Total Sanitation (CLTS) and sanitation marketing.

### Development Approach in Action

Democratic Republic of Congo (DRC) –

Ongoing: The DRC has one of the fastest urban growth rates in the world caused by rapid population growth and conflict. Municipal service providers are caught between trying to manage deliveries to existing residents using inadequate, aging and overloaded delivery networks while under increasing pressure to expand services to new parts of town. Mercy Corps has been working in the DRC since 2008 to increase urban access to water, sanitation, and hygiene. Mercy Corps rehabilitated and extended the Goma Water Network (GWN) to provide clean water to previously unserved people in Goma and its neighborhoods, reaching approximately 150,000 additional residents. In addition, the program constructed 2,000 household latrines, 50 community latrine doors, and delivered hygiene promotion activities through trainings, mass campaigns, educational theatre and radio messaging. We are now expanding the reach of this work to 1.55 million urban residents in the cities of Goma, Bukavu and Bunia through a four-year, £38 million DFID-funded program. Building on eight years of direct experience, we are taking a comprehensive approach by rehabilitating and extending the urban networks to cover the water



needs of the entire population, sustaining infrastructure improvements by increasing the capacities of water system managers and empowering communities to participate in water system management, and increasing sanitation access and effective hygiene practices.

Somalia – 2008-2012: As part of a \$15,549,395 USAID-funded School Environment and Education Development program which aimed to improve the educational environment in school communities through improvements to infrastructure, water and hygiene, 100 ground surface masonry water tanks were constructed and repaired in target schools alongside 4 community water projects including boreholes and water piping - reaching 185,287 people with access to safe water.

## Innovative Approaches

For cost effective and sustainable WASH services, Mercy Corps focuses on identifying, testing and taking to scale smart technology solutions and evidence based approaches. Innovations in digital technology such as mobile phones or embedded sensors can dramatically improve monitoring and functioning of water and sanitation systems and thus improve the overall management of water resources at regional, national, and local scales. Mercy Corps aims to contribute to the growing evidence base for cost effective approaches in WASH through testing appropriate technology options for onsite sanitation, water and wastewater treatment and monitoring approaches.

### Innovative Approaches in Action

Lebanon – 2013 to present: Unsafe wastewater disposal is the main source of contamination of surface and groundwater in Lebanon. The Bekaa governorate in particular suffers from the added load of an

estimated 161,699 registered refugees living in over 2,691 informal settlements, nearly all of which have inadequate sanitation systems. Mercy Corps conducted a study in 2013-2014 to identify critical sanitation needs faced by the Syrian refugees and their host communities in Jordan and Lebanon, and a technical assessment to identify innovative sanitation alternatives that meet the identified sanitation needs. A major recommendation of the study was to pilot test appropriate sanitation alternatives that can be applied within the Syrian refugee context. From 2015-2016, Mercy Corps, with support from the Bill and Melinda Gates Foundation (BMGF), launched a



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pilot project that involved building 25 micro-flush-based latrines, where the main feature was its reliance on vermicomposting to reduce the sludge mass and repurpose the waste into a usable product in the surrounding land. Possibly due to use of excessive amounts of water, and use of detergents in some cases, the worms did not thrive and hence the desired results of sludge reduction were not achieved. Mercy Corps and BMGF have launched a new phase of applied research in this sector. Under this new pilot, Mercy Corps aims to test and develop additional on-site toilet options and modular small-scale communal wastewater treatment solutions that offer a complete treatment solution and are simple to build and use under the local conditions.

## Tajikistan – Ongoing: Sanitation Marketing

As part of its Maternal Child Health (MCH) program in Khatlon region of Tajikistan, Mercy Corps is implementing a sanitation marketing component that intends to improve the design of latrines for schools and health centre as well as developing sanitation marketing in the area. An MCH baseline for the Khatlon districts in 2013 showed that nearly all families in the target areas rely on unimproved pit latrines, which the observations during the formative research carried out by Mercy Corps in 2015 found to be in poor condition. Latrines were reported as missing or dysfunctional at schools and health facilities. As part of the hygiene and sanitation component of the MCH Program, Mercy Corps is using Sanitation Marketing as a sustainable approach to combine household demand for affordable sanitation with providing the private sector with income opportunities. Mercy Corps aims to promote the production of sanitation products in Khatlon Region and replicate the experience in other targeted districts of the MCH Program.



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Indonesia – 2011-2013: To make sanitation services accessible and affordable to the urban and peri-urban poor in Jakarta, Mercy Corps used a market-based approach to pilot low-cost, environmentally sustainable sanitation infrastructure models replicable by residents, local government and/or the private sector. As a result of this pilot, 264 Households have access to improved sanitation through one communal latrine with septic tank and bio-filter and one communal latrine with treatment garden for the effluent. A simplified version of Participatory Hygiene & Sanitation Transformation (PHAST), a method to trigger community awareness on sanitation and to develop sanitation action plans, was implemented and 60 local people were trained as facilitators of behavior change promotion. Positive sanitation behavior messages were disseminated to approximately 12,020 people through various means of media communication such as radio jingles, posters, school bags, comic books, key chains, t-shirts and others. By the end of the project, three new sanitation related small businesses were established (sanitation loan, sludge removal service and construction of septic tank).

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### About Mercy Corps

Mercy Corps is a leading global organization powered by the belief that a better world is possible. In disaster, in hardship, in more than 40 countries around the world, we partner to put bold solutions into action — helping people triumph over adversity and build stronger communities from within. Now, and for the future.



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