Climate Change: Capability Statement

Consistent and reliable access to water, sanitation and hygiene (WASH) are required to build resilience to climate change events and mitigate the impacts, especially for those in low and middle income countries[1].

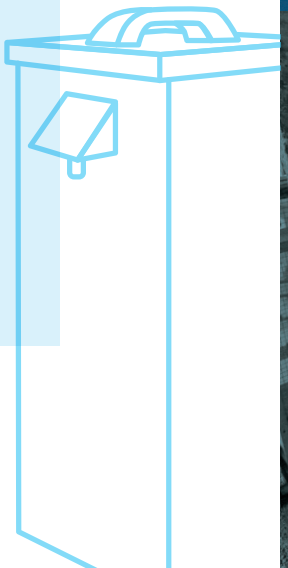
As severe weather events become more frequent and severe, the risk of negative impacts on water availability and contamination increases alongside the spread of dangerous pathogens such as cholera[2,3]. When climate related events strike, communities with resilient WASH technologies and systems will stay healthier, be more likely to maintain economic and gender progress, and preserve and improve community functioning and wellbeing over time.

The role of non-networked technologies

CAWST specializes in non-networked (non-piped) water and sanitation technologies and systems. These technologies provide immediate relief in contexts where pipes can't go such as unplanned urban areas, dispersed populations or where weather related events have compromised infrastructure. Alongside being a solution that enables resilience, some non-networked technologies even provide greenhouse gas emissions reduction, mitigating climate change.

Household Water Treatment

Water safety is assured with point-of-use water treatment technologies, no matter the water source. Affordability, availability and ease of use are just some of the factors to consider when choosing the right technology. Giving control to households to treat their own water before drinking it builds personal agency and confidence.



BUILD RESILIENCE, REDUCE EMISSIONS AND PROMOTE GENDER EQUALITY

The biosand filter (a robust household water treatment option) is a proven and certified emission reduction technology. The biosand filter, used daily by a family, can produce 12-18 litres of filtered drinking water in 1 hour and stop ~4 tonnes of CO2 being released into the atmosphere each year in comparison to burning fuel (wood or coal) to boil water. It has the added benefit of reducing the burden of collecting fuel which primarily falls on females.

FECAL SLUDGE MANAGEMENT

Services such as latrine pit emptying, fecal sludge treatment, and proper disposal or reuse of sludge are essential for those who rely on non-networked systems. These solutions are often under-resourced but required to reduce the burden of disease caused by fecal contamination to water sources, which can be exacerbated during climate events like floods and cyclones.

1. WaterAid WATER, SANITATION AND HYGIENE: The foundation for building resilience in climate-vulnerable communities.
2. Jones, N., et al., Water, sanitation and hygiene risk factors for the transmission of cholera in a changing climate: using a systematic review to develop a causal process diagram. J Water Health, 2020. 18(2): p. 145-158.
3. UNESCO and UN-Water, United Nations World Water Development Report 2020: Water and Climate Change. 2020, UNESCO: Paris.

Building local capacity

No two communities will experience climate change the same way. They have unique geographic features, water access, social demographics, traditional practices and more. This means that communities need unique solutions to be resilient. Instilling knowledge and skills about water and sanitation locally is essential to selecting the technologies and practices that are best for a particular local context. Building the capacity of both men and women empowers all members of the community to contribute to their shared development.

CAWST Supporting organizations globally

CAWST is a charity and non-profit licensed engineering firm. Providing training and consulting support to practitioners on practical WASH solutions, we help them to start, strengthen and scale up their programs. CAWST fills a unique niche in the WASH sector, supporting organizations to adapt and even thrive despite a changing climate with the following services:

Free learning resources

Anyone, anywhere can access CAWST's extensive library of learning resources for free. Resources are available in multiple languages and are housed under a creative commons license, encouraging sharing and further use and adaptation by organizations exactly how they see fit.

Training workshops

Combining theory, hands-on practice and program planning, CAWST's training workshops are valuable opportunities to learn about non-networked WASH topics. CAWST's training workshops can be taken in-person, online or through a trusted training partner in various locations globally.

Consulting support

Ongoing technical advice and coaching on various aspects of projects is a crucial part of supporting organizations turn their ideas and learning into action. CAWST's specialists are available through live-chat, email, phone/video calls or in-person visits to answer questions, provide guidance and connect organizations to the answers they are seeking.

Sector collaboration

No one organization can tackle the need for WASH alone. CAWST actively builds, supports and is involved in WASH networks. Built on a model of knowledge dissemination, CAWST actively connects organizations and supports sector collaboration and sharing.

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

The United Nations explicitly recognizes safe water and sanitation as a basic human right, foundational to the realization of all other human rights.