Wateroam's plant in Sarawak (East Malaysia) Photo: Wateroam

Taking on water wees

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Water access is turning out to be one of the biggest issues of our time. **Lim Chong Tee** highlights the work being done by Wateroam...



68

ccess to clean water remains a pressing global challenge, affecting the lives of approximately two billion people who lack access to safe drinking water. In response to this critical issue, Wateroam has developed portable and user-friendly solutions aimed at helping rural and disasterstricken areas. With a presence in 44 countries, Wateroam has already had a significant effect on the lives of over 250,000 individuals globally.

Wateroam was established in 2014 as a professionally run social enterprise dedicated to reaching and empowering communities in dire need of clean water. The organisation's three founders first crossed paths as undergraduates participating in a water initiative programme at the National University of Singapore. It was there that they began working together to develop the first iteration of a water filtration system capable of serving remote communities deprived of clean water. Their original solution was a lightweight plastic bag with a membrane filter at its base called *Fieldtrate Lite*.

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At present, the organisation actively engages with local communities and conducts comprehensive training programmes to implement sustainable initiatives that empower individuals and enhance public health. By fostering a collaborative approach, it ensures that communities not only have access to clean water but also gain the knowledge and skills to sustainably manage this precious resource.

Wateroam helps communities with solutions that have been created keeping in mind the limitations of the end users. For instance, the ROAMFilter Plus has an intuitive design. In addition to being portable, it does not require electricity to run and can be easily deployed in rural or disaster-prone settings. The cutting-edge filtration systems are designed to deliver optimal filtration speed and uncompromised water quality, effectively meeting the needs and challenges faced by the target communities. The World Health Organization (WHO) has successfully evaluated this filter to provide two-star comprehensive protection, further validating its efficacy and quality.

Access to clean water not only transforms individual lives but also uplifts entire communities, leading to improved health outcomes and a more sustainable future with healthier populations worldwide. The underlying idea behind Wateroam's mission is that everyone should have access to clean water, which is not a luxury, but a fundamental human right. Nearly one million people die each year because of water, sanitation, and hygienerelated (WASH) complications. The numbers are worse for women and children, who are responsible for securing water for their families.

By providing communities with a sustainable source of clean water, it is possible to empower women to engage in other productive activities, fostering greater economic productivity and enabling them to lift themselves and their families up. Moreover, children are no longer required to undertake the risky and time-consuming journey to collect water, allowing them to allocate their time towards education and other enriching activities. This shift ensures their safety, as they are no longer exposed to the hazards of travelling long distances unsupervised. Natural hazards such as earthquakes and floods, as well as political conflicts, disrupt local water supplies, leading to severe health risks for communities. Contaminated water sources during these crises pose significant dangers in the form of waterborne diseases.

In response to these challenges, Wateroam's water filtration systems act as life saving interventions, providing immediate access to clean water.

During the catastrophic flood in Pakistan from June to October 2022, the organisation successfully provided clean water access to 1,000 individuals. By deploying portable filtration systems, we played a crucial role in mitigating health risks and ensuring the well-being of the affected populations.

In addition, Wateroam collaborated with Relief Singapore to send filters to the disaster-stricken areas of Türkiye and Syria following a devastating earthquake in February 2023. This timely intervention alleviated health crises caused by a lack of clean drinking water and reduced the spread of waterborne diseases, safeguarding the health of affected communities.

Wateroam's commitment to addressing water challenges extends to conflict-affected regions as well. Collaborating with organisations such as the Singapore Red Cross, Polish non-governmental organisation (NGO) Fundacja Pok, and grassroots communities, Wateroam has provided access to clean water in Ukraine's Donetsk, and Kherson regions, which have been severely affected by the Ukraine-Russia war.

In April 2020, Wateroam partnered with Sea Mercy to provide relief efforts in Vanuatu following the devastating Category 5 Tropical Cyclone Harold. Sea Mercy deployed a total of 260 filtration systems in the provinces that suffered the worst effects: Penama, Malampa, and Sanma. The water filters were distributed to healthcare centres, community halls, and other centralised locations where people could fill their buckets with drinking water. This helped locals gain easier access to safe and clean water without having to pour hours into travelling long distances to collect it.

Similar interventions have been implemented in various regions, including Cambodia, Malaysia, and Myanmar. In Cambodia, it worked with the New Life Foundation for the Sustainable Water Project, where locals

Flood relief activity in Pakistan Photo: Wateroam were empowered to become microentrepreneurs in water distribution. The introduction of a single filter resulted in the emergence of microentrepreneurs who earned higher incomes, thereby improving their livelihoods and





supporting their families. Additionally, the sale of affordable drinking water not only ensured the safety of other families from waterborne diseases but also expanded its clientele to include NGOs in need of clean drinking water at reasonable prices. This case study highlights how the introduction of clean water mechanisms leads to the sustainable development of underserved communities. Wateroam's team with Red Cross and SCDF, while fundraising for Türkiye, Syria Photo: Wateroam

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Wateroam has also partnered with Safe Water for Every Child Myanmar since 2018 to bring potable and accessible drinking water to underserved communities in Karen State. Filtration systems were installed in key locations, such as medical centres and schools, in four Karen villages. In addition to providing clean water, community hygiene education and essential resources were distributed to combat diseases. The project has already benefited 10,000 individuals, empowering communities and fulfilling Wateroam's mission of global water accessibility.

By scaling its efforts, Wateroam aims to address the global water crisis and bring sustainable development to vulnerable communities worldwide while championing gender equality and improving access to education and economic empowerment.

Author

LIM CHONG TEE is the co-founder and Chief Marketing Officer of WateROAM