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WASH and NTD Collaborations that Work

WASH on Wheels: A Groundbreaking Solution for Global Water Access

ccess to safe water in schools is a critical Aget often unattainable issue in the global health and development agenda. According to UNICEF, 546 million children worldwide attend schools where water access is inadequate or non-existent, with 246 million of these children suffering due to non-functional water infrastructure. This situation has dire consequences, particularly in the Global South, where inadequate water, sanitation, and hygiene (WASH) infrastructure exacerbates the spread of preventable diseases, hindering educational outcomes and perpetuating the cycle of poverty.

In Ethiopia, the stakes are especially high. Diarrheal diseases, closely linked to poor WASH conditions, remain the second leading cause of death among children under five. Similarly, neglected tropical diseases that cause a significant public health burden in Ethiopia and worldwide, are also linked to inadequate WASH conditions and services. This reality is compounded by the fact that millions of children attend schools where the infrastructure meant to provide them with safe water has fallen into disrepair. The challenge is not just the absence of infrastructure, but the lack of sustainable solutions to maintain and restore it.

Amidst this pressing need, the WASH on Wheels project has emerged as a transformative model, offering a scalable and cost-effective solution to water access challenges in Ethiopia and around the world.

A Novel Approach to a Persistent Problem

Conceived as a direct response to the widespread failure of WASH infrastructure in Ethiopian schools, where traditional methods of WASH infrastructure implementation were proving unsustainable, the non-governmental organisation <u>NALA</u> developed WASH on Wheels, a mobile unit operated by skilled technicians equipped with the necessary tools to repair and restore water systems onsite. Not just about fixing water infrastructure,



Above: Working in tandem, WASH technicians achieve success. Right: Many hands make light work by working together to lift and move a broken water tank. Credits: NALA/Sarit Baum.

WASH on Wheels is about revolutionizing how we think about water access globally.

The project was first deployed in May 2022 at Worke Elementary School in Debre Tabor Town, where a water pump that had been broken for eight years was fixed within three hours, restoring access to clean water for 1,000 students. Since then, WASH on Wheels has restored water access in over 252 schools across Ethiopia, directly benefiting over 200,000 students. Moreover, the positive effect of this intervention extends beyond the students themselves, impacting an estimated 800,000 individuals in the surrounding communities.

Expanding Impact: Responding to Crisis in Tigray

Building on its proof of concept, the WASH on Wheels project demonstrated its flexibility



"Impact in Action" is a series showcasing successful collaborations between WASH (Water, Sanitation, and Hygiene) initiatives and Neglected Tropical Disease (NTD) programmes. Curated by the NNN WASH Working Group in partnership with WHO, this series brings together insightful case studies from around the globe. Each story highlights innovative strategies and tangible outcomes resulting from integrating WASH practices with NTD control and elimination efforts. View more case studies and download WASH and health working together: a 'how-to' guide for neglected tropical disease programmes, second edition.



and scalability in response to the conflict in Tigray. The region's water infrastructure had been severely damaged, leaving communities without access to clean water—a critical need in the post-conflict recovery process.

Bypassing the high costs and logistical challenges of traditional reconstruction, in 2023 the project was scaled to Adwa, Tigray, where mobile units were deployed to refurbish damaged water systems in affected schools. Within short time frames, the project team restored water access in schools, providing much-needed relief to thousands of children. This ability to adapt to different situations underscores the versatility of the WASH on Wheels model, proving it can deliver sustainable water solutions even in the most challenging environments.

Community Engagement and Capacity Building: The Key to Sustainability

A crucial aspect of the WASH on Wheels project is its focus on community engagement and capacity building. The project goes beyond just repairing infrastructure—it actively involves local communities in the process, fostering a sense of ownership and sustainability. In each location, community members contribute to the project through labor and materials, which is estimated at more than half of the overall investment. This significant contribution not only reduces costs but also ensures that the communities are invested in maintaining the infrastructure long after the WASH on Wheels team has left.

Additionally, the project included a WASH fellows program, where selected government representatives are trained in maintaining water infrastructure within their districts. These WASH fellows are equipped with the skills needed to sustain and expand the project's reach, ensuring that local capacity is built and that the improvements are not just temporary.

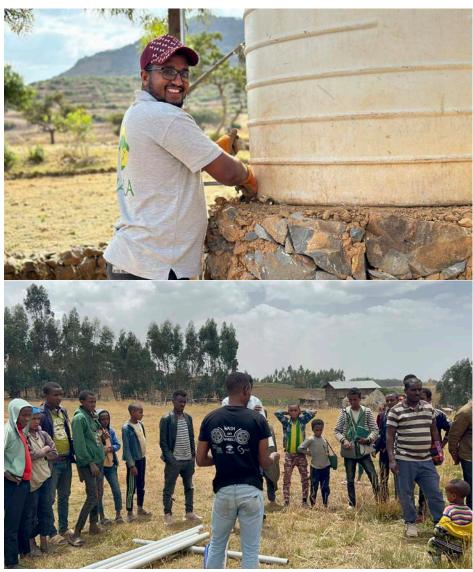
Cost-Effectiveness: A New Standard for WASH Interventions

One of the most compelling aspects of the WASH on Wheels project is its costeffectiveness. Traditional WASH infrastructure projects often require significant financial resources, making them difficult to implement and sustain, especially in low-resource settings. WASH on Wheels, however, delivers substantial impact at a fraction of the cost.

A cost-effectiveness analysis conducted by impact researchers, revealed that for every 1 USD invested in WASH on Wheels, one child gains access to clean water







Above: Smiles are all around when Abraraw replaces a non-functional tank tap. Below: Local support: includes engaging the community and school kids in supporting the WoW project Credits: NALA/Sarit Baum.

for an average of 400 school days. This remarkable return on investment has set a new standard for WASH interventions, proving that it is possible to achieve significant impact with limited resources.

A Vision for the Future: Scaling a Global Solution

The success of WASH on Wheels in Ethiopia, and its recognition by national forums including the ASTMH innovation lab, is a testament to the power of innovation in addressing some of the world's most pressing challenges. As the project continues to expand, it offers a blueprint for global action - a model that can be adapted to meet the unique needs of communities around the world.

As we look to the future, the vision is clear: a world where every child, regardless of where they live, has access to safe, clean water. The WASH on Wheels project is more than just a solution—it's a movement towards achieving the Sustainable Development Goals, by ensuring the availability and sustainable management of water and sanitation, and through that achieving health and wellbeing for all.

Click here to see Impact in Action videos on YouTube.



WASH on Wheels is not just about fixing water infrastructure—it's about revolutionizing how we think about water access globally, offering scalable and sustainable solutions even in the most challenging environments.