



GHANA

Water Without Borders 2017



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Institute for Water,
Environment and Health

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Preface



The world is in the midst of a global water crisis – where lack of adequate freshwater supplies and poor management threaten the health of both humans and ecosystems. The United Nations Institute for Water, Environment and Health (UNU-INWEH) envisions a water-secure world, and works towards that vision with a range of academic, Government and development partners in Canada and throughout the world.

The Water Without Borders graduate programme is a collaboration between UNU-INWEH and McMaster University. It addresses issues of water without borders, either geopolitical or disciplinary. The program is designed to be undertaken alongside a graduate degree program at McMaster University and is open to graduate students in all faculties and departments.

In 2017, eight students travelled to Ghana to learn about water from Ghanaian professionals, government stakeholders, fellow students and community members. Water, sanitation and hygiene (WASH) challenges in a developing country context were highlighted through visits to water and sewerage infrastructure, through field research including water testing and key informant interviews, and through interaction with communities who are taking on their own WASH challenges.

This booklet aims to present student experiences in 2017. I hope that it inspires more students to take up the challenge of the Water Without Borders programme, and encourages existing students to pass on their new knowledge to friends, families and peers. Only by sharing knowledge of water challenges in developing countries will the story change; and only by understanding water challenges will they be solved, by future water professionals.

Dr Vladimir Smakhtin, Director
United Nations University
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Introduction

More than 40% of Ghana's 25 million people lack access to safe water, and it is estimated that only 13% of people have access to improved sanitation. Diarrheal disease is often caused by drinking contaminated water. It is the third most commonly reported illness at health centers across the country and 25% of all deaths in children under the age of five are attributed to diarrhea.





Several factors contribute to the water and sanitation problems in Ghana. First, local solutions are often not sustainable and do not provide water of adequate quality for health and wellbeing. Many people rely on untreated surface water sources, which frequently contain life-threatening parasites and high microbial content. In some regions of the country, even if water quality treatments are adequate, many households suffer from water scarcity in the dry season.

22% of the total population of Ghana lives on less than US\$1.25 per day, and typically, rural areas are the poorest. Rural and remote villages also suffer from the worst water supply, water quality and sanitation problems.



Although progress has been made, communities, particularly in rural areas, lack basic training and capacity to maintain rain water storage, groundwater hand pumps and other systems that well-intentioned organizations have provided. As a result, the majority of rural water systems fail prematurely: current estimates indicate that 29% of all rural and peri-urban hand pumps are broken, and an additional 49% are partially functioning. Education and training by Ghanaians, for Ghanaians is a key priority for organisations on the ground.



Student Reflections





“We didn't go to Ghana to experience the food, music, dance and culture, but we did anyways. For me, it was about getting outside of my comfort zone and experiencing all of Ghana. It was a privilege and an honor for me to be in the audience and become a part the community celebration, even if it was just for a day.”

“ This photo shows our encounter with the village’s Natural Leaders who championed change in that community. Through their hard work and dedication, the village understood the importance of safe water and sanitation practices, and were motivated to take on the initiatives that Plan International was promoting. The people pictured here are inspirational! ”





“This photo was when we first got a taste of the drinking-water situation in Ghana. The work that Safe Water Network is doing is absolutely amazing - and water testing showed that the resulting treated water was safe and free of microbial contamination, which is great! As well, the children photo-bombing our picture was a priceless moment. ”



“ Open defecation is not an easy subject of discussion, particularly in rural communities of developing countries like Ghana. Unfortunately, inadequate attention to this issue has killed thousands of people. Being a graduate student working on sanitation in Africa, many scholars have blamed colonial and post-colonial governments in African countries for their nonchalant attitude towards WASH. However, the people of Lakpa community in Ghana proved beyond reasonable doubt that good hygiene is possible with or without government intervention, even in poor areas where people cannot afford flush toilet. These rural dwellers, out of their ingenuity, built toilets with locally sourced materials under the Community-Led Total Sanitation (CLTS) initiative powered by an NGO, Plan International, in order to eliminate Open Defecation (OD) and encourage the construction and use of sanitation facilities. ”



“ During a youth focus group, Canadian and Ghanaian students discussed the way in which Ghanaian society should approach WASH. The debate focused on the dichotomy between education and enforcement. For some of the participants, the educational part of the process to change attitudes on WASH had hit a dead end. The next logical step was the use of a “strong hand” to enforce existing policies.

Another set of participants advocated for a stronger presence of education in the daily life of people. For this group, the key element to improve living conditions, was to continue to invest in WASH promotion. Students agreed that people needed the necessary knowledge to improve their own lives. ”





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