

Non-Technical Summary

Background

Unsafe drinking water is a leading cause of diarrhea resulting in nearly two billion cases each year. An estimated 525,000 children under the age of five die from diarrhea each year¹. Chlorine has been shown to be microbiologically effective and has a residual effect that means water can stay safe for drinking for up to seventy-two hours. Chlorinating water therefore means that people do not need to boil their water.

Project General Description

The project seeks to improve access of households and communities to safe and clean drinking water, using a low greenhouse gas emitting water purification technology, chlorine dispensers. The project reduces the use and demand of non-renewable biomass that would have been used to boil the water as a mean of water purification in the absence of the project. This directly leads to reduced greenhouse gas emissions. This project is thus primarily designed for the long-term improvement of the living conditions of the local communities in this part of rural Uganda.

The chlorine dispensers of the project have been installed in Eastern Uganda (Manafwa and Mbale districts) in 2014. Until now, there have been around 1,000 dispensers normally operating and being used by the local communities.

The project is a small-scale greenhouse gas emission reduction project developed under the Clean Development Mechanism (CDM) of the UNFCCC as well as under the Gold Standard (GS). It is estimated that the project could generate around 45,000 tCO₂ emission reductions annually. The project is part of a Program of Activities called “International Water Purification Programme” (UNFCCC-ID: PoA 5962, GS2404) which is coordinated by Pure Water Ltd. (a subsidiary of South Pole Holding Ltd.) as the coordinating/managing entity and is implemented by Evidence Action as the project implementer.

As a greenhouse gas emission reduction project, as per regulations from CDM and GS, it can claim the emission reductions for 21 years in total (7 years for each crediting period and totally 3 crediting periods). The first crediting period of the project will end in April 2022, and now the project is seeking for crediting period renewal under CDM and GS.

Chlorine Dispenser System

The Chlorine Dispenser System consists of the dispenser hardware, community education, and a regular supply of chlorine. The plastic dispenser is fitted with a valve which consistently delivers a precise 3 ml dose of chlorine (sodium hypochlorite solution). To use the dispenser, community members go to their water source, place their bucket or jerrican under the dispenser, turn the valve to dispense the correct amount of chlorine, and then fill the bucket as they normally would with water from the source. Evidence Action educates the community about the dangers of contaminated water and how to use the dispenser to treat their water. A community member is elected to be the dispenser ‘promoter’, who encourages use of the dispenser, reports any

¹ <https://www.who.int/news-room/fact-sheets/detail/diarrhoeal-disease>

problems, and refills the dispenser with chlorine. Usage and functionality of all dispensers will be closely monitored by Evidence Action.

Economic, social, and environmental impacts

Health Impacts:

- Reduction of the burden of disease from diarrhea in target populations, particularly in children under five.

Environmental Impacts:

- The project will help reduce the use of non-renewable biomass from Uganda’s forests, assisting the maintenance of existing forest stock, protecting natural forest eco-systems and wildlife habitats.
- The protection of standing forests will ensure the maintenance of watersheds that regulate water table levels and prevent flash flooding.
- Reduced burning of non-renewable biomass will lead to reduced greenhouse gas emissions that contribute to climate change.

Social and Economic Impacts:

- Households that use the Chlorine Dispenser System would spend less time and money collecting firewood.
- Purchasing or collecting firewood or fossil fuels to boil drinking water constitutes a significant expense for the very poorest households and communities. The project will provide access to safe drinking water at no cost to communities, which will reduce expenditures for families.
- Improved access to safe drinking water will reduce child and adult morbidity and mortality, can improve attendance at school, and increase productivity.
- Indoor air pollution due to open and uncontrolled combustion for boiling water is a significant health concern in Uganda. Low greenhouse gas emitting water disinfection technologies such as dispensers tackle this problem by reducing the combustion of wood/fossil fuels.
- The project will alleviate the burden on women and children as they spend less time collecting firewood for boiling water. This will provide more opportunities for productive work and to attend school.
- The project will generate short-term employment for local artisans to install dispensers, and for local people to work as survey enumerators and to deliver chlorine refills to communities.

Method to contact and provide feedback

you can use the following methods and contacts details to reach us and get more information of the project or provide feedback on the project.

	Method Chosen	Justification
Continuous Input / Grievance Expression Process Book	Evidence Action Country office: Flat 2, Plot 11 Acacia Avenue, Kampala Evidence Action Mbale office: Plot 47, Namatala Drive, Mbale	Inputs or grievances can be given at any time directly to Evidence Action staff who are regularly visiting water points for evaluations, hardware check and chlorine delivery. During these visits, the staff can interact with the users and can receive input and relay it to the country office.

		Boxes for written comments can be found in the Evidence Action country and field offices.
Telephone access	<p><u>Evidence Action (project implementer):</u></p> <p>Evidence Action Country office: Contact person: Andrew Ocama +256 (0) 772532326</p> <p>Evidence Action Mbale office: Contact person: Irene Neumbe +256 (0) 752265181</p> <p><u>Pure Water Ltd. (CME):</u></p> <p>Contact person: Jane Duan +86 10 59070872</p>	<p>Each promoter gets a laminated promoter card with the number as well as some airtime to help them call the number.</p> <p>Evidence Action engages office-based staff to complete phone calls to promoters on a regular basis because some promoters may be reluctant to call to report problems.</p>
Internet/email access	<p><u>Via post:</u></p> <p>Evidence Action, Uganda P.O Box 33010 Kampala, Uganda</p> <p><u>Evidence Action (project implementer):</u></p> <p>Evidence Action Country office: Contact person: Andrew Ocama Andrew.ocama@evidenceaction.org</p> <p>Evidence Action Mbale office: Contact person: Irene Neumbe Irene.neumbe@evidenceaction.org</p> <p><u>Pure Water Ltd. (CME):</u></p> <p>Contact person: Jane Duan j.duan@southpole.com</p> <p><u>Gold Standard:</u></p> <p>help@goldstandard.org</p>	<p>Inputs or grievances can be sent at any time to the Evidence Action Uganda country office in Kampala or via email to the contact person.</p>