



Sustainability action · Project Water

Dispensers for Safe Water

Combat water-borne diseases in Eastern Uganda

Chlorine dispensers are an innovative, low-cost approach proven to significantly reduce water-borne diseases such as diarrhoea, while at the same time contributing to forest and climate protection.

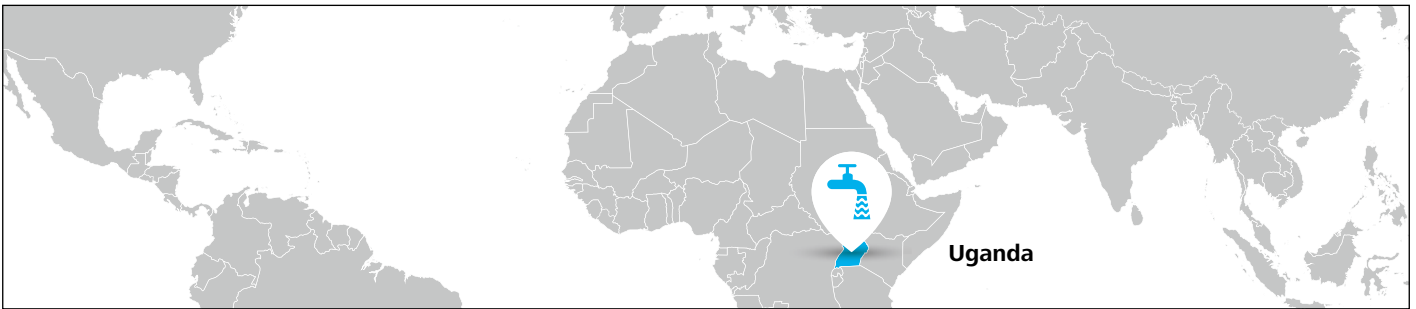
Project

The incidence of diarrhoea in Uganda is among the worst in the world: nationally, the diarrhoea prevalence rate is nearly one-quarter in all children under five. Approximately 23,000 Ugandans, mostly children, die each year from diarrhoeal diseases – nearly 90% are caused by poor water, sanitation and hygiene. The use of unsafe water sources is most common in rural regions. Treating water with chlorine at the source provides an effective, low cost and safe approach to improving water quality and reducing the impact of child diarrhoea in Uganda. Chlorine kills 99.99% of harmful

bacteria, keeps water free from contamination for up to 72 hours, and reduces the incidence of diarrhoea by 40%. With the project activity's community-based approach, cost will be less than \$ 0.50 per person per year at scale, so it can be financed through carbon revenues.

Community members go to their water source, place their bucket 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. Education is given to the communities about the dangers of contaminated water and how to use the dispenser properly. A community member is elected to be the dispenser 'promoter' who encourages use of the dispenser and reports any problems with the hardware. On-going servicing of the dispensers and a sustainable supply of chlorine is provided so that communities will have access to safe water over the long-term.

Checklist	Additionality and permanence	Transparency	Annual CO ₂ -reduction	Social and environmental benefits	Marketing material
Project 301464/ 301615/301752/ 301753	According to the rules of the CDM and Gold Standard	By Germanischer Lloyd, Carbon Check, Earthood Services, China Classification Society Certification Company, TÜV Nord	200,000 tCO ₂ e	As documented in our database	High resolution pictures available



Location

The project activity is focusing on Eastern and Western Uganda due to the regions' relatively high prevalence of diarrhoea incidences in children under five years (34% and 20%, respectively). The specific water point selection for the dispenser installations is conducted in consultation with local leadership, including the District Health Offices.

Project achievements

Socio-economic impact

- Widespread early morbidity, malnutrition, stunting, and cognitive impairments associated with chronic diarrhoea in early childhood are expected to abate.
- The Ugandan economy suffers from significant productivity losses as a result of time absent from work or school due to diarrhoeal disease, seeking treatment from a health clinic or hospital, and time spent caring for the sick.
- The project activity also focuses on sharing expertise in encouraging adoption of environmentally-friendly water treatment methods, and also on sharing and improving software to facilitate program maintenance and water treatment usage monitoring.
- Almost 20'000 people die as a result of indoor air pollution in Uganda each year. With access to chlorine dispensers, community members no longer have to boil water to make it safe to drink. This reduces smoke emissions and improves indoor air quality, increasing health conditions especially for women who are responsible for most of the kitchen work.
- Studies have found that fuelwood collection takes an average of 2 hours per day in Uganda. The dispensers program alleviates the drudgery of collecting fuel far from home, freeing up women's time for productive endeavors, education, and child care.

Environmental impact

- The Uganda 2011 Demographic and Health Survey found that 38% of rural households boil their drinking water. Combustion of large quantities of wood fuel is a strong driver of deforestation. The WWF estimates that 6,000 hectares of deforestation occurs in Uganda every month. The project activity will reduce the amount of wood fuel consumed and thus support reforestation efforts.

Gold Standard

