



Sustainability action - Improving family health with safe drinking water

Malawi Chlorine Dispensers, Africa

This project aims to provide the community with access to safe drinking water, reducing the number of diarrhoea related deaths. Unsafe drinking water is a leading cause of diarrhoea resulting in nearly two billion cases each year. An estimated 760,000 children under the age of five die from diarrhoea each year.

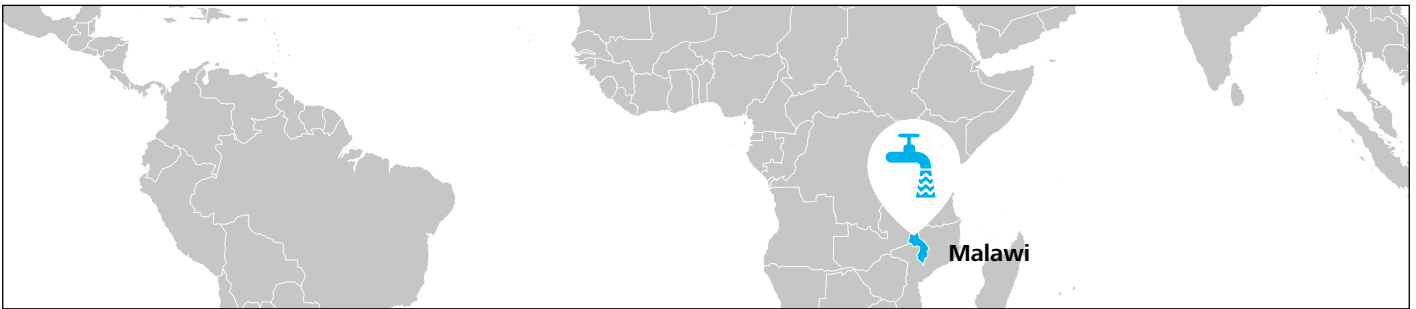
Project

Malawi is one of the world's poorest countries, ranking 170 out of 186 on the Human Development Index and with a GDP per capita of only US\$805 (HDI 2013). Diarrhoea is the fifth leading cause of death among children under five, the mortality rate stands at 71 deaths per 1000 live births. Cholera remains a significant threat to the populations, particularly during the rainy season and mainly in the Southern Region where this project is located. It aims to install 12,000 chlorine dispensers across rural Malawi, home to an estimated 85 percent of the country's 13 million population.

The support and education of the local community is essential to the success of this project. In each village where the Chlorine Dispenser System is set up, a community member is elected to be the 'promoter' - encouraging use of the dispenser, reports any problems, and refills the dispenser with chlorine. This follows on from a community engagement program which educates the community about the dangers of contaminated water and how to use the dispenser to treat their water.

The process is simple. To use the dispenser, community members go to their water source, place their bucket or jerrycan 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. The Chlorine Dispenser System itself 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.

Checklist	Additionality and permanence	Transparency	Annual CO ₂ -reduction	Social and environmental benefits	Marketing material
Project 301 618 / 301 751 / 301 754	According to the rules of the CDM	By Germanischer Lloyd, TÜV Nord	150,000 tCO ₂ e	As documented in our database	High resolution pictures available



Location

The Malawi Chlorine Dispensers Project is located in the Zomba District in the South of the Country. It is home to the Zomba Nature Reserve and part of the Malosa Forest Reserve, and Lake Chilwa, the second largest lake in Malawi. The Lake is surrounded by extensive wetlands which are home to over 1.5 million waterbirds representing 160 different species.

Project achievements

Socio-economic benefits

- Health Impacts: Reduction of the burden of disease from diarrhoea in target populations, particularly in children under five.
- 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, having a positive impact on human health.
- Social and Economic Impacts: Households that use the Chlorine Dispenser System have to spend less time and money collecting firewood.

Environmental benefits

- Environmental Impacts: Harvesting wood for domestic cooking and boiling water is one of the main causes of deforestation in Malawi. Dispensers decrease the need to collect firewood which contributes to reduce pressure on the local vegetation.
- Reduced burning of non-renewable firewood will lead to reduced greenhouse gas emissions that contribute to climate change.

