





Overview

Many regions in Malawi, Africa are struggling with access to safe drinking water. Urban areas are subject to tap water supplies of little to no water treatment while the rural communities are forced to drink from untreated and poorly maintained wells and boreholes.

Puralytics' SolarBags are a good solution to bring improved drinking water safety to the community without the use of power, consumables, or significant training.

Trial

The study was conducted in conjunction with GS Malawi, an aid organization with an established presence in the Bolero and Mzuzu regions of Malawi. SolarBags were purchased with donor funds and distributed to 114 households in these regions who agreed to participate in the program. Distribution and training was conducted in the community by GS Malawi staff.

After the introduction, the SolarBags were used one to two times per day over a period of 6 months from November of 2012 to May of 2013. At monthly intervals, study participants would bring their SolarBag to a GS Malawi meeting for testing and surveying.







Outcomes

The results of the field use evaluation were overwhelmingly positive.



Adoption

The SolarBag is easy to use and training was successfully completed. After people started using the SolarBag, interest spread throughout the community. The use of the bag eliminated the need for water boiling. Over 90% of the users reported saving money by reducing their fuel needs previously employed for boiling practices. As a comparison, the SolarBag costs half of what it would to boil water and over ten times less than the purchase of bottled water.



Aesthetics

Nearly all of the participants liked the way the water tasted and smelled after using the SolarBag. This was a significant improvement over previously used boiled water that only had microbiological kill and no other improvements in water quality.

Health

Survey participants noted that they drank more water and 89% of them claimed they felt sick less frequently.



Outlook

This study had very positive results and users enjoyed the availability of clean good tasting water. It was concluded that over 600 people were able to drink more than 900,000 liters of purified water using the 114 SolarBags distributed. Ideally, the Solarbags will be made available through a microbusiness model that can give business owners a profit and save the users money while providing them with improved water taste and quality.

Partners

Puralytics produced the SolarBags which were brought into the community by GS Malawi. In the community, GS Malawi local leaders monitored user response. Puralytics thanks all of the participants who helped bring the SolarBag to Malawians.