



WaterTRACS

(Testing, Research, and Capacity Strengthening) Program

With financial support from the Conrad N. Hilton Foundation, The Aquaya Institute is collaborating with local universities and laboratories to enhance water quality testing capacity and is monitoring water quality in select districts in Ethiopia, Ghana, and Uganda. This three-year program (2023–2026) builds upon Aquaya’s prior Africa Water Quality Testing Fellowship pilot program (2021–2023).

MOTIVATION

Water quality data are vital for making informed decisions that enhance water safety. However, collecting and using these data requires skilled professionals and reliable systems. That’s why Aquaya’s WaterTRACS program focuses on three key areas: monitoring water quality, conducting research to translate data into action, and strengthening the capacity of water sector stakeholders. Through these activities, WaterTRACS aims to address the pressing needs of water quality management.

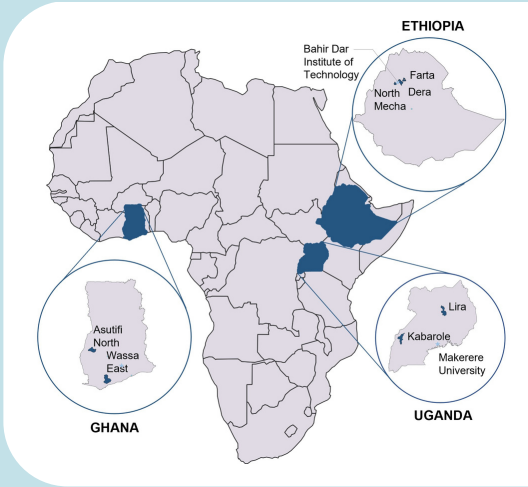


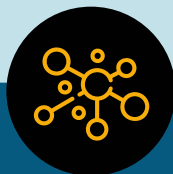
Figure 1: Under the WaterTRACS program, Aquaya monitors drinking water quality in seven districts and collaborates with two universities to host an undergraduate water quality testing fellowship program.



WATER QUALITY MONITORING

Aquaya facilitates water quality testing at households, community water points, schools, and healthcare facilities in seven districts across Ethiopia, Ghana, and Uganda. We monitor microbial and physical-chemical parameters, and test lead and other priority chemicals.

The goal is to identify seasonal trends, wealth-based disparities, and track drinking water quality changes over time.



EVIDENCE-TO-ACTION RESEARCH

Aquaya is collaborating with district governments and relevant institutions to maximize the use of water quality information for decision-making through

- 1) dissemination of results to institutions and communities,
- 2) research to identify optimal messaging strategies, and
- 3) integration of results into data management systems.

This activity will help elicit effective communication strategies for water quality information to inform stakeholder decisions and household health behaviors.



CAPACITY STRENGTHENING

With Makerere University in Uganda and Bahir Dar Institute of Technology in Ethiopia, Aquaya is facilitating a water quality testing fellowship program for undergraduate students. Additionally, Aquaya engages closely with local laboratories providing water quality testing services.

These efforts reinforce capacity for water quality testing by skilled professionals.