## Clean Air and Safe Drinking Water for Soroti/ Uganda





## Project description:

The BOKU climate protection project is contributing to the sustainable development in rural areas through the reduction of CO2-emissions and air pollution in indoor areas, as well as the provision of safe drinking water through the use of solar water disinfection with the WADI device.

The project has the following objectives:

- The reduction of at least 20.000 tons of CO2 over five years (replacement of firewood for water disinfection with WADI)
- The provision of daily safe drinking water for 12.000 people
- The disinfection of 40.000 liters of water per day (15 mil. Liters per year)

https://xn--klimaneutralitt-elb.boku.ac.at/projects/sicheres-trinkwasser-und-saubereluft-fur-soroti-uganda/

The project was officially launched in February 2019. It is financed by the BOKU CO2-Compensation-System and carried out by the following project partners:

- Austrian social Enterprise HELIOZ (<a href="https://www.helioz.org/en/home">https://www.helioz.org/en/home</a>)
- BOKU Institute of Sanitary Engineering and Water Pollution Control (SIG) (<a href="https://boku.ac.at/en/wau/sig">https://boku.ac.at/en/wau/sig</a>)
- Water School Uganda (<a href="https://waterschooluganda.org/">https://waterschooluganda.org/</a>)



The project is scientifically supported by three master theses:

- The first Master student did a baseline study on the status quo in the project region. The focus was not only on the CO2-compensation, but also on the SDGs.
  - Based on the results, a first estimate concerning the expected CO2 reduction could be made: 2 tons of CO2/WADI per year.
  - More information about the WADI device can be found here: https://www.helioz.org/en/wadi
  - A monitoring protocol has been developed and is implemented by the local NGO partner Water School Uganda in concert with the HELIOZ program manager. This is an ongoing task.
- The second Master student started with the second questionnaire, which is conducted by the WSU team under supervision by BOKU. These data will help to recalculate the previous estimation of the CO2-reduction.
- The third Master thesis was postponed due to travel restrictions during the pandemic.

From April/May 2019 the distribution of 2000 WADIs and PET bottles to the selected households started and they use the SODIS/WADI system. Water School Uganda monitors the performance. The households have also been sensitized concerning sanitation and hygiene practices, trained in the use of Solar Water Disinfection (SODIS) with WADI as well as WASH measures and informed about household adaptations to improve sanitation and hygiene status (e.g. hand washing facility, drying rack, bathing shelter, latrine, etc.). Water School Uganda helped to establish the necessary facilities.

