

Solar Ceramic Combined Household Water Treatment System



Water Sustainable Point of Use Treatment Technologies (WaterSPOUTT) is a 4 year research project across 18 institutions exploring opportunities for large volume treatment of drinking water using solar water disinfection. In Malawi, the project is focussed on the development of a combined solar and ceramic filtration treatment system

The situation



1.7 million people in Malawi do not have access o safe drinking water



1,700 children die each year in Malawi from diseases related to unsafe water and poor sanitation

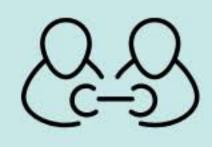


Solar water disinfection (SODIS) can be used to effectively treat unsafe water making it safe for consumption



Ceramic filters can be used to treat water but they may not remove viruses and some pathogens

The research project



Understand the context of water access, use, governance and quality



Design of solar ceramic filtration system using local materials and end user input



Evaluate the prototype design to ensure it is safe and effective



Finalise prototype design

Product design



Identification of 750 households in Chikwawa District to test system



Test system and health impact at households for 14 months



Evaluate all data on system and health impact





Report and scale up and commercialisation

Field testing and evaluation



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement number 688928





