Developing Affordable Water Solutions for the World's Rural Poor

The problem of water-borne diseases is a worldwide pandemic. Globally, there are over one billion people without access to clean drinking water. Every year millions of these people die from illnesses acquired from their unsafe drinking water. Most of these people are living on American equivalent of less than three dollars per day.

By eliminating the threat of water-borne diseases, the life expectancy and quality of life of poor people worldwide will improve. A preliminary literature search found a uniquely sustainable water treatment technique that has been implemented in several third world countries: the SODIS (Solar Water Disinfection Technique). Use of solar radiation is often an economical "low-tech" method to disinfect, at point of use, water containing pathogens, but cannot be used with turbid water which blocks the radiation. The two bucket filtration system is intended to expand the areas of the utility of the SODIS method by reducing the turbidity of the source water. This method is superior in efficacy to the sedimentation method presently used by the SODIS.

2 Bucket filtration system prototype is an affordable solution build using locally available materials costing $5 or less to clear the turbidity of the water.
We have also developed workshops to and field manuals, mainly pictorial, to educate the people about the need for the system, instruct them how to construct and maintain it.