I would like to introduce ourselves as 'Pragathi Organization'. Pragathi was founded in 1987, it is a non-government, non-profit and non-religious organization that works for the welfare and development of the tribal and marginalized sections of society, particularly targeting women and children. It focuses its development attention on the most underprivileged communities, helping them to attain their rightful place and dignity within society. It does this through a variety of methods; providing safe drinking water, health and sanitation, also through economic, educational, health, environmental and skill development programs. So that they can have a better standard of living. Pragathi is working in Mysore and Chamarajnagar District, covering more than 100 tribal villages with approximately 9600 families.

Currently we are working on the 'Bio Sand Water Filter' project, the technical support has been provided by CAWST Canada, who have trained members of staff from our organization on health, sanitation and safe drinking water, also the construction of the 'Bio Sand Water Filters'.

What is a Biosand Filter?
A biosand filter (BSF) is an adaptation of the traditional slow sand filter, which has been used for community drinking water treatment for 200 years. The biosand filter is smaller (about 1 m tall, 0.3 m wide on each side) and adapted so that it does not flow continuously, making it suitable for use in people’s homes. The filter container can be made of concrete or plastic. It is filled with layers of specially selected and prepared sand and gravel. The sand removes pathogens and suspended solids from contaminated drinking water. A biological community of bacteria and other micro-organisms grows in the top 2 cm of sand. This is called the biolayer. The micro-organisms in the biolayer eat many of the pathogens in the water, improving the water treatment.

Pathogens – micro-organisms in water that make us sick
Suspended Solids – dirt and other small pieces in the water (may also be called “turbidity”)
How Does the Biosand Filter Work?
You can use any kind of water in the biosand filter – well water, borehole water, pond or river water, tap-stand water, or rainwater. This makes it very convenient for people because they can use whichever water source is closest to home, make it safe to drink. The water must not have been chlorinated though, or the chlorine will kill the biolayer. The water should also not contain any dangerous chemicals, because the biosand filter cannot remove most chemicals from water. Contaminated water is poured into the top of the biosand filter at least once per day (but not continuously). The water poured into the top of the filter slowly drips through the holes in the diffuser, and flows down through the sand and gravel. Treated water flows out of the outlet tube. No power is required - the filter works by gravity. It should take about 1 hour to get 12-18 litres of filtered drinking water.

Pathogens and suspended solids are removed through biological and physical processes that take place in the sand. These processes include: mechanical trapping, predation, adsorption, and natural death.
This project we are planning to implement in the Tribal Villages, as clean drinking water is a necessity in these areas. Currently they attain water supplies from disease ridden ponds, rivers,
and old water tanks. We are in much need of financial support to help us carry out this project successfully, could you please forward us an application for submission of the project.

For more information please see link below: