

## Shaffaf Pani BSF for Households

**Easy to Use  
& Maintain  
No Electricity  
Needed**

**Made of  
Stainless Steel**

**Pre-Washed Graded  
& Graduated  
Sand and Gravel Bags**



- **Removes Biological Hazards and Suspended Particle Turbidity**
- **Removes 98.5% Bacteria, & 70 to 99% Viruses**
- **Removes 100% of Protozoa**
- **Removes 100% Helminths (worms, larvae)**
- **Removes 95% Iron**
- **The Shaffaf Pani Bio-Sand Filtration System Provides upto 40 Liters of Filtered Water/Day for Clean Drinking Water and Cooking Needs of a household**
- **Water Sources could be Well, Pond, Lake, River and Raw Tap Water**

### → **How does the Bio-Sand Filter work?**

Bio-Sand Filtration Systems are columns of sand and graded crushed rock on which natural beneficial microorganisms are living. When water is poured in the top most layer of the column, it spends a period of time in contact with the sand, where predation in the biolayer takes place, allowing the microorganisms in the biolayer to engulf harmful bacteria, viruses, protozoa, larvae etc. As water percolates down through sand & graded gravel to the outflow it is cleansed through predation, adsorption, natural death, and mechanical trapping, to remove pathogens and turbidity in the water. Water is added in batches to the system, giving the system rest in between, designed on the intermittent Slow Sand Filtration method. Modelled on processes that naturally occur in sand and gravel aquifers.

Our Shaffaf Pani BSF System is adapted from the Bio-Sand Filtration system of water purification designed in the early 1990s at the University of Calgary, Canada. These BSF Systems can provide clean and safe drinking water to under-privileged and remote communities.