How much does it cost?

Capital:

The cost of concrete filter is about Php.1,700.00 or more or less $37.00 (this is inclusive of labor and materials), depending upon the area in which it is being manufactured and the amount of paid/volunteer labour available as well as LGU or NGO grants.

Using concrete to build the container, costs less for several reasons:

- Cement and material is readily available
- People are familiar with construction techniques used
- Household labour or volunteer labour can be utilized in the manufacturing process
- The concrete container is heavy and durable
- The plastic piping is located inside the filter so no breakage
- As consumables are not required for successfull filter operation, the operating costs are negligible.

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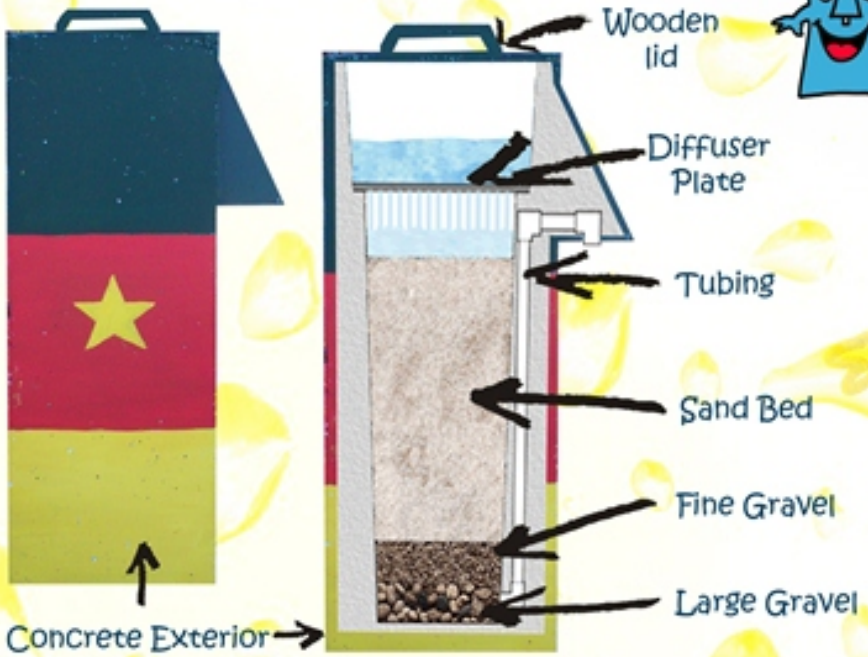
A SINGLE DROP
FOR SAFE WATER

The Bio Sand Filter

communities united through water

The Bio Sand Filter is a household point-of-use water treatment that provides up to 200 liters per day of clean water. It is simple and easy to maintain. It is also an entry point to the community to raise awareness on Sanitation and Hygiene as well as Water Resource Management.

The BioSand Filter Box



DO's

1. Use the Filter daily. This will maintain the water level 5cm above the sand and keeps the bio-layer alive.
2. Always use the same water source.
3. Ensure that the receiving container is clean.
4. Slowly pour a bucket of water, without letting the sediments, and then replace the lid.
5. For best water quality, add 1-5 drops of bleach for each liter in the filtered water and allow 30 minutes of contact before drinking.
6. Clean the spout daily.
7. Do the "Swirl and Dump" to clean filter when flow rate decreases.
8. Filtered water is also use for bathing, dishwashing and cooking.

DON'T's

1. As much as possible, do not put the filter outdoors, this increases the risk of contamination. (Placing it indoor will keep animals or insect away from the spout, as well as the filtered water. It will also be protected from weather—dust and wind)
2. Do not transfer the filter. (Transfering an installed filter will disturbed the sand level or might damage the filter box. If transfer is needed, please inform your BSF supplier and they will help you in re-installing the filter.)
3. Do not "Swirl and dump" too often. (It will reduce the effectiveness of the filter.)
4. Do not pour chlorinated water in the filter. (Adding Chlorine on top of the filter will kill the bio-layer.)
5. Do not attach a valve or faucet in the spout. (This will keep the level too high or might damage the filter box.)
6. Do not store food on the diffuser plate.

How BioSand Filter Works?

Inlet Reservoir Zone
Water is pour into the filter

Standing Water Zone
This water keep the sand wet while letting oxygen pass the Biolayer

Biological Zone
This biological layer or "shmutzdecke", develops at the top 2-4 inches of the sand surface. The filtration sand removes pathogens and suspended sediments

Non-biological Zone
Contains virtually no living micro-organism due to the lack of nutrients and oxygen

Gravel Zone
Holds the sand and protects the outlet tube from clogging

BioSand Filter Remover:

- ✓ 100% of Parasites, Protozoa and worms.
- ✓ 98.5% of Bacteria
- ✓ 95-99% of Zinc, Copper and Cadmium
- ✓ Most, if not all, suspended sediments
- ✓ Turbidity down to <1 NTU(max drinking water turbidity <5 NTU)