

Charcoal Water Purifier



Social Forestry Extension Model Development Project

SOFEM

Water scarcity is one of the most serious problems for the people living in arid and semi-arid areas. Furthermore, obtaining clean water for domestic use is not easy in such areas because the water procured from their main water sources, earth dams, riverbed and shallow wells, is often very brown due to accumulated soil.

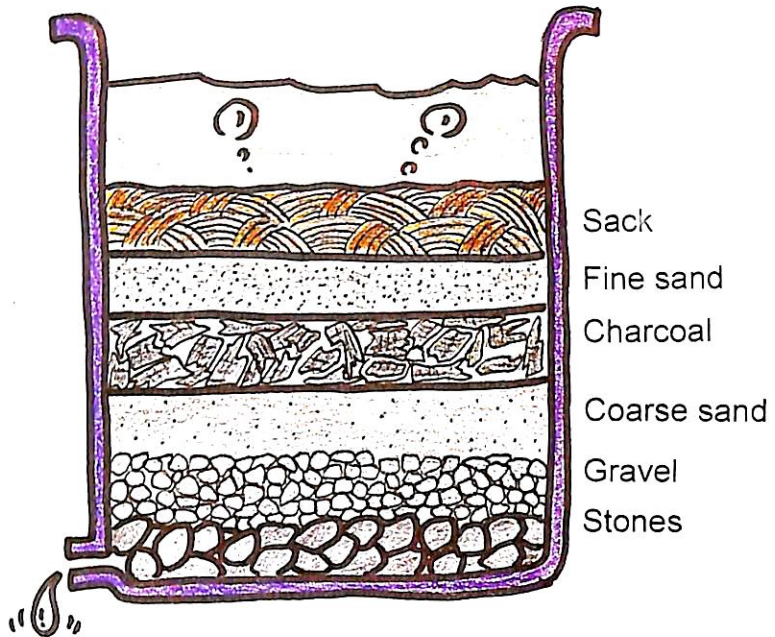
Charcoal water purifier is simple technology to purify the water for domestic use. It is affordable to most of the people because it utilizes local materials that are easily available and at low or no cost.

Main material is charcoal which plays very important function to remove bad smell and to absorb some bacteria in contaminated water. The other materials used are: stones, gravel, coarse sand, fine sand, sack and bucket (or drum) with tap or hole.

Appropriate size of the bucket for family use is around 50 cm in Height and 40 cm in Diameter (price with tap: 550 shillings in Kitui town) and thickness of each layer, except for sack, is around 5 -10 cm.

Sieving depends on the dirtiness of water. If the water is still dirty after first sieving, it is necessary to repeat until you get clear water.

Charcoal Water Purifier Structure



(Bigger sack can cover the top like cover photo)

Important points

- ⇒ Use completely burnt charcoal.
- ⇒ Clean all the materials before setting.
- ⇒ Boil water before drinking.
- ⇒ Wash or change materials after some time of usage (when water cannot be sieved well).



SOFEM (Extension section)
KEFRI Kitui Regional Training Centre
P.O. BOX 892, Kitui, KENYA
Tel: +254-141-22626/22807/22471
Fax: +254-141-22807
E-mail: kefrikti@arcc.or.ke
sofemjpn@arcc.or.ke

*produced by Damaris M. Munyao & Hiro Miyazono
in March 1999*