Clay water filter monitoring, testing, supplying and awareness

In Sri Lanka, Kidney disease if prevailing in north western and north central provinces and as preventive means fresh water is introduced by the government through Reverse osmosis during the past decade. However, to the date kidney patients are randomly exists in other areas of the country as well. Different types of filters are imported to Sri Lanka the quality of which is not tested by any recognized bodies in Sri Lanka. Understanding the national need Industrial Technology Institute has identified the significant of supplying pure water individually as a reliable governmental source. As a result, a ceramic filter with clay cartridge was introduced by ITI for the first time which is quality guaranteed for removal of most suspected elements from drinking water that could cause kidney disease. ITI undertakes quality monitoring, testing supplying and awareness of the clay water filter since 2015.





CLAY WATER FILTER

Invention Summary:

ITI water filter developed using a clay mixture to filter unwanted contamination from drinking water is now available in two sizes after a decade of R&D investigation since 2011. The filter removes fluoride, arsenic and cadmium in drinking water for levels less than the acceptable levels of contamination by the World Health Organization (WHO). It reduces water hardness as well.

Technology overview:

Chronic kidney disease (CKD) is a worldwide health crisis. In Sri Lanka CKD is suspected to cause by consumption of contaminated water in north central & western provinces. The water filter technology developed by ITI scientifically optimized to remove most of the suspected contaminant from water according to standards. The technology is transferred and commercialized.

Potential Applications:

Filter is suitable to use in countries where water is contaminated with fluoride, heavy metals and water hardness.

Product Advantages:

- Scientifically proven for removal of fluoride, As and Cd from water
- With regenerating procedure for fluoride (possible at domestic level)
- Water quality was tested by ITI and by other recognized institutions according to the standard
- A reliable import substitution
- Low cost and eco-friendly
- Benefits the low income community

Inventor/s:

Dr. Iresha Kottegoda Mr. R.C.W. Arachchi Mr. Induwan Gunathilake Dr. Dineth Samarawickrama



Technology Information:

Director

Materials Technology Section Industrial Technology Institute No.363, Bauddhaloka Mawatha Colombo 7.

Tel: +94112379851

+94112379849

E-mail: mts@iti.lk

dir_mts@iti.lk