The water filtration project aimed at harvesting the rain water in public ponds and supply of filtered drinking water by installing BARC Ultra Filtration Units and make the people aware of drinking filtered pond water in two schedule cast (SC) and three schedule tribe (ST) villages of Imphal Western district of Manipur, India. The facility was funded by Department of Science and Technology, (DST) and Bhabha Atomic Research Centre (BARC), Govt. of India.

Five Ultra Water Filtration Units of capacity of 2000L were developed by BARC licensee M/s Sonadka, Pune, were installed in such SC/ST areas. The polysulfone membrane filtration system was designed in a compact manner in a stainless steel container (300 x 350 mm) containing 23 Cartridges (45 mm diameter, and 250 mm length). The raw water tank was placed overhead at a head difference of about 3m with the membrane filtration system and the public pumps water was pumped into the in it via the desilting tank. The raw water flows gravitationally through the membrane filtration system and the filtered water is collected for drinking in a water tank.

The water filtration rate of the filtration unit is 90 to 100 litres per hour. Since the installation of the water filtration units, the water of community ponds in the remote SC/ST villages has been changed into drinking/potable water. Further, people of such villages were trained to operate and maintain the BARC-UF Water Filtration System installed in their respective villages.

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