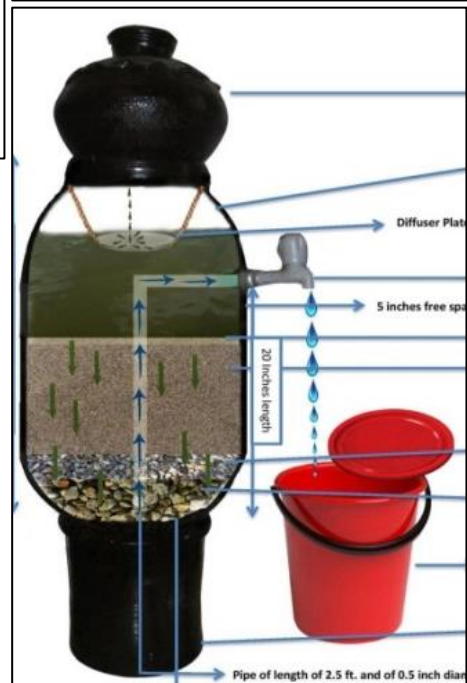
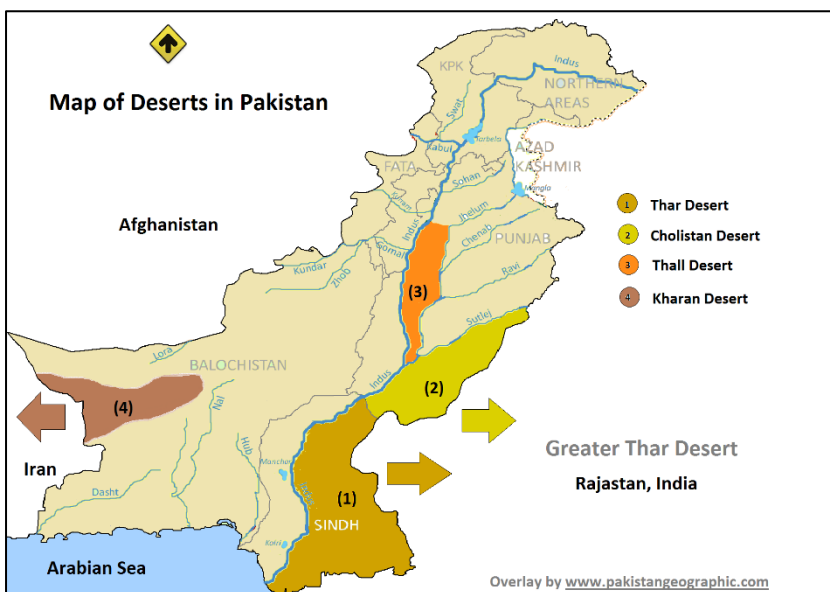


Drinking Water Security: Distribution and Demonstration of Assembling Bio-Sand Water Filters to the Communities in Cholistan, Pakistan

WACREP Activity No. 1.3.1B

The Cholistan Desert also locally known as "Rohi", sprawls 30 kilometres from Bahawalpur, Punjab, Pakistan and covers an area of 26,300 square kilometres. It adjoins the Thar Desert, extending over to Sindh and into India. The backbone of Cholistan economy is cattle breeding while it caters the area's needs for cottage industry, production of milk, meat and fat. In their nomadic life, the main wealth of the people in Cholistan is their cattle that are bred for sale, milk or shorn for their wool.



People in Cholistan drink saline water and frequently suffer from abdominal deceases. They have discoloured teeth due to long use of poor quality water. Therefore, PWP with collaboration of Area Water Partnerships (AWPs) introduced a simple, cheap and easy to make water filter to the communities in isolated villages in Cholistan where there is no provision to safe and reliable water sources. The targeted areas for the drinking water security project were Katchi Basti Union Council 14, Jinnah Abadi (Gareebabad) Union Council 17, Deravar Cholistan, Basti Meegwala, Kasaeya Wala Tobha, Mahr Di Basti, Basti Sadaat, Mosa Colony, Laal Suharna, Chak Alif 71 DB and Basti Sinjarani.

PWP distributed 14 Bio-Sand Water Filters in interior Cholistan with the support of Bahawalpur AWP and trained villages to prepare their own Bio-Sand Water Filter at home. PWP monitored the filters which were previously installed in the area.

The Bio-Sand Filter

The Bio-Sand Water Filter can be made by using materials available in the local market. It is made out of pitchers, a PVC pipe, tapes and graded filters which costs only Pakistan Rupees 500-600 (US\$ 5-6). In

addition there is no or minimum maintenance cost involved in the long run. These filters are capable in removing up to 97 per cent bacteria, 100 per cent parasites and turbidity, iron, manganese, bad odour and taste from water by allowing to grow good microbes after contaminated water is left in the pitcher for two to three weeks.

Materials:

Pitcher or a plastic can: 30–34 inches tall; Pipe: 2.5 feet long with 1 inch diameter; Gravel: Fine (2–6mm), Medium (6–20 mm); Sand: fine (0.06–0.2 mm), coarse sand (0.6–2 mm); Lid and a diffuser plate



Demonstration of bio-sand water filter installation

Monitoring the previously installed Bio-Sand Water Filters

It was observed during the monitoring visit that communities in Dera Ismail Khan who received five bio-sand water filters in collaboration with Southern District AWP are using these filters for meeting their drinking water requirement. PWP is willing to replicate the project further to other needy desert communities in Pakistan and seeking for generous contributions from donors.



Water and Climate Resilience Programme (WACREP) is an innovative initiative of Global Water Partnership (GWP) South Asia devised to improve the climate resilience of South Asian countries to withstand the impact of climate change. More than 40 climate resilience interventions were undertaken in the first phase of WACREP.

This is a Success Story documented by Pakistan Water Partnership.

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