

Abstract

Most of the areas in rural Sindh suffer from lack of safe and clean drinking water. One of the reasons is that most of drinking water schemes fail shortly after its development. In 2010, Government of Sindh decided to install the Reverse Osmosis (RO) plants at different locations of rural areas of Sindh to provide safe and clean drinking water to the local community. Most of the plants are still running very smoothly and providing clean and drinkable water to the local community. The goal of this study is to find the reasons of success and/or failure of the RO plants. The survey was conducted on 23 RO plants that are installed at different locations of rural areas near Hyderabad. Out of 23 plants 18 are operational on solar system and providing good quality of water to the local people and the main reason for their successful operation is the willingness of the community to run the plants.

The few factors identified for the failure of the plants from this survey were the weak institutional support for reverse osmosis system due to lack of staff, lack of training and educational qualification of the operators. Moreover as far as success is concerned it was found that with providing proper technical training and awareness to community members including operators and local leaders, make them feel as the real custodians of the plants by realizing them their responsibility for operation and maintenance, will reduce most of the problems in the system. By considering the above mentioned factors, the failure rate of newly installed RO plants can be decreased.

Keywords: Reverse Osmosis, clean drinking water, local community, Hyderabad