



APPLICATION BULLETIN KENYA

The Safe Water Project: Obambo-Kadenge in Kenya provides accessible and safe drinking water for a community in Kenya that extracted untreated drinking water from a contaminated dam. The Tweed Shire Council Kenya Mentoring Program in conjunction with SkyJuice™ Foundation provided 3 SkyHydrants™ water filters for installation in March 2007. The remote Obambo region has a scattered population of several thousands people. There is little paid employment and the majority of the population live on less than USD1.00 per day. Maize and beans are the staple crops and fishing and small scale livestock rearing is practiced; these animals are grazed at the communal grazing land where the dam water source is located.

Water Issues: The community of Obambo-Kadenge relies on water from the Gona Dam which is a small shallow dam on the floodplain. The water is very turbid (>400NTU) and is contaminated by human and livestock wastes which results in a high mortality rate particularly amongst the young, sick and elderly. Outbreaks of water borne diseases such as cholera, typhoid and dysentery are common. There is virtually no sanitation in the catchment area.

The alternate water source is a hand operated bore pump however; the water tastes salty and is very hard mainly because the groundwater is high in Calcium and Magnesium. There is little likelihood of major infrastructure development and reticulation schemes so the best solution for the community is to treat the water of Gona Dam.

Project: The first action of the Safe Water Project was the development of the committee who were instrumental in overseeing site selection, land acquisition, construction of the kiosk, tank stand and windmill and wind generator. The committee decided that the wind generator and electric pump would be the most sustainable option for the volume of water to be pumped. Installation of the SkyHydrant™ water filters quickly established a reliable safe water supply from the water kiosk however as the water was extremely turbid more frequent cleaning of the filters is required. Training was provided to the committee and then the committee nominated a subcommittee to be trained in operation and maintenance of the filters and pumps.

Lessons learnt: Cultural issues impact greatly on the timeliness of project completion. Operator training was quickly grasped by the committee however security was raised as a major concern, so the committee appointed a security person. The committee charges a small fee for the water and monitors water usage. The collected funds cover the cost of the security person and any ongoing maintenance. Fees are levied on an ability to pay however, as SkyHydrants have low maintenance requirements, are efficient and have high throughput the end result is affordable safe drinking water to a community that previously had no choice but to rely on unsafe water.

Contaminated water source at Gona Dam



Water kiosk & wind generator



Clean water for Obambo Kadenge community

