South Africa: the Roundabout Outdoor Playpump

A common sight in rural South Africa is that of water carriers covering long distances twice a day, in order to fulfil their daily water requirements. This chore usually falls to women, young girls and children, who collect from neighbouring springs, rivers, streams, dams and farm reservoirs.

Though the Department of Water Affairs & Forestry is putting in pipelines, the existing boreholes are mostly operated by hand pumps as the use of modern mechanical pumps is costly and has the constant financial burden of fuel and maintenance costs.

Hand pumps are physically gruelling for women and wasteful of a strained resource.

Now a patented South African invention the Roundabout Playpump simplifies the whole exercise by providing a maintenance-free pump that is easy to use and provides many other benefits.

How it works

Playpumps are specifically designed and patented roundabouts that drive conventional borehole pumps. The revolutionary pump design converts rotational movement to reciprocating linear movement by a driving mechanism consisting of only two working parts. This makes the pump highly effective, easy to operate and very economical. The pump is capable of producing 1400 litres per hour at 16 rpm from a depth of 40 metres and is effective up to a depth of 100 metres. A typical hand pump installation cannot compete with this delivery rate, even with substantial effort.

Playing on a roundabout or merry-go-round has always been fun for children, so there is never a shortage of 'volunteers'. As the children spin, water is pumped from underground into 2500 litre tanks, standing seven metres above the ground, keeping costs and maintenance to an absolute minimum, while at the same time entertaining the children.

How it is sustained

Trevor Field, marketing director of Roundabout Outdoor explains that following the company's win at the World Bank's Development Marketplace in 2000, "international donor money from the World Bank and Kaiser Family Foundation enabled us to get the project going and install many more pumps."

"Without World Bank funding we'd still be in our infancy. We also
feel that this support paved the way to forging a mutually beneficial partnership with the Department of Water Affairs & Forestry that has brought in local funding so that all installation costs are met by donor money. "So successful is the partnership, that Roundabout Outdoor Playpump is featured on the Department of Water Affairs & Forestry’s postcard, for the World Summit being held in Johannesburg in August.

The tank is screened by four landscape billboards resulting in a unique advertising opportunity for the private sector. Two sides are rented out as billboards for commercial messages. This advertising revenue funds ongoing maintenance and guarantees the sustainability of each installation. As a contractual obligation to advertisers, the company services the sites at regular intervals for general maintenance on the signage. Skilled pump maintenance crews are included in these visits and local labour is trained to take over the ongoing preventative maintenance and repairs from funds provided by Roundabout Outdoor.

Corporate governance

Corporate South Africa is being called upon to meet international corporate governance standards in economic, social responsibility and environmental reporting. The Roundabout Outdoor Playpump provides an unequalled opportunity to satisfy all three in one project.

Making economic sense, this powerful marketing tool reaches thousands of consumers on a daily basis in mostly untouched rural markets. Consumers may use products but they buy ‘brands’, therefore the Playpumps are not branded; they take on the brand of the billboard, which is identified as the ‘provider’ of clean water.

These cost-effective billboards also provide a powerful social responsibility programme as two sides of the billboards are used by the Lovelife campaign which educates the youth on sex issues - particularly needed in rural areas where HIV/AIDS is unchecked.

There are further social responsibility aspects. Playpumps reduce the arduous burdens placed on women, young and old, to fetch water. This task deprives many young women of the opportunity to complete their formal education. Children are provided with play equipment that normally they would never see and they develop social skills through play. Fresh drinking water, on tap, means the children are well-hydrated - an essential element to learning.

On the environmental side, Playpumps access clean water from deep within the water table and reduce evaporation, wastage and contamination through proper storage and plumbing. The Ministry of Water Affairs & Forestry endorses this programme for its environmental and health provisions.

Progress so far

International donor money continues to come in from World Bank and the latest contributor to join is the ClearWater Project. Mention is made of Roundabout Outdoor on the World Bank website www.worldbank.com; ClearWater Project website www.clearwaterproject.org; Intermediate technology www.tve.org and other local and international websites.

Roundabout Outdoor has 130 sites already established and at this year’s National Water Week, South African Breweries handed over a cheque of R5 million (approximately US$500,000) for 110 more sites. These sites are in the Eastern Cape, KwaZulu Natal, Mpumalanga, North West and Limpopo - five of the six provinces designated rural by Statistics South Africa.

Fields concludes "These provinces between them have a population of nearly 13 million people. Of these 2.3 million households, 78 percent have no access to piped water in their house or on the property. That’s where we are—providing playpumps in schools and community centres."

This article was issued by Freelancers—Communication Consultants and is based on an interview with Trevor Field, Marketing Director, Roundabout Outdoor, P. O. Box 449 Rivonia 2128. For more information, contact Trevor Field: tel: (011) 807-4280; fax: (011) 803-1639; cell: (082) 600-7240; email: trevorf@roundabout.co.za