

Urine for sale? South African city wants to buy

7 November 2010, by Marine Veith

Get paid to pee. That's the deal on offer in the South African city of Durban, where the city is looking to buy liquid waste to encourage residents to use dry toilets.

Aiming to improve hygiene and save money, the port city has installed in home gardens about 90,000 toilets that don't use a single drop of water.

Now Durban wants to install 20-litre (quart) containers on 500 of the toilets to capture [urine](#) -- rich in nitrates, phosphorus and potassium, which can be turned into fertiliser.

A municipal worker would collect the jerry cans once a week and could pay around 30 rands (four dollars, three euros) to the family -- not a small sum in a country where 43 percent of the population lives on less than two dollars a day.

Currently the tanks are emptied by each household, and the waste often ends up getting dumped into the environment.

Swiss lab Eawag and the Bill and Melinda Gates Foundation are backing a study to draw up the modalities for the scheme, which is already winning fans.

"If we can turn the toilets into a source of revenues, then they will want to use the toilets," said Neil MacLeod, Durban's head of water and sanitation.

Most people are reluctant to use the dry toilets. In the sprawling township of Inanda, residents have ripped doors and roofs off the outhouses, annexed them to the main house, or completely stripped them away.

Discussing bodily fluids is so taboo that people are reluctant to explain their discomfort. One young mother accused thieves of stealing "the door and the toilet" from her outhouse, which she now uses

as a garage.

"When the (city) council brings the toilets to them, they look at it as an inferior system," said Lucky Sibiyi, an outreach officer with the water department.

"People don't understand how important it is," he said. "There is a belief saying that touching the faeces brings misfortune."

As soon as they can afford it, people invest in a septic tank and abandon the dry toilets, which require spreading a layer of sand after each use and using separate sections for the urine and the solid waste. The tanks then must be emptied regularly.

Dry toilets were invented in Yemen centuries ago.

"They work well in rural areas because the fertiliser produced from the urine and the faeces is used locally," said Pierre-Yves Oger, a water and sanitation consultant based in South Africa.

"But in urban areas, there's a dissociation between the producer (of the waste) and the user of the recycled products, and it's very hard to overcome the psychological block," he said.

That's why few cities have launched large-scale dry toilet projects. Durban began its programme in 2002 when a cholera outbreak revealed the lack of hygiene in a city where more than a quarter of the four million residents have no sanitation.

To avoid having to install an entire sanitation system, and to save water, Durban opted for dry toilets. The [city](#) remains convinced that was the right choice.

"South Africa is a water-stressed country," said Teddy Gounden, who heads the project. "With the increase in demand for drinking water, we cannot

afford to flush this valuable resource down the sewer."

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