In the market for proper sanitation

Poor sanitation helps spread disease, yet efforts to provide subsidized toilets have been resisted for cultural reasons in many developing countries. To improve the rate of uptake, some people are now advocating a market-based approach. Kathryn Senior reports.

The main reason so many people are without toilets is because they don't see a need for them, according to Jack Sim, founder of the World Toilet Organization, based in Singapore. Without demand, he says, there is no supply, no distribution network and no interest. "When people talk about sanitation, they usually talk water; it is easier from a social point of view. They even describe human faeces as 'waste water', 'grey water', 'black water', anything but what it is," Sim adds.

Toilets are often regarded with suspicion in parts of the developing world. The relative failure of projects that provided heavily subsidized or free toilets has caused policy-makers to rethink how the United Nations' Millennium Development Goal (MDG 7) on environmental sustainability might be met by 2015.

MDG 7 aims to halve the proportion of people living without access to an improved source of drinkingwater and basic sanitation by 2015. Basic sanitation is defined as having access to excreta disposal facilities, such as a sewer or a septic tank, a pour-flush latrine, a simple pit latrine or a ventilated improved latrine. "Improved sanitation" facilities include flush toilets or pit latrines, if they are

not shared between households and provide privacy.

The latest trends reported by the Joint Monitoring Programme (2008) of the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) show that the global MDG 7 drinking-water target will be met, but progress towards the sanitation target is significantly off-track.

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Jack Sim

In 1990, 46% of people worldwide had no access to "improved sanitation". By 2008 this had been reduced to 38% and is projected to fall to 33% by 2015, while the MDG target is to bring this down to 23% of the projected world population of 7.3 billion. Even if this target is met, 1.7 billion people will remain without access. The WHO/UNICEF programme projects that

by 2015, 2.4 billion people will lack "improved sanitation" and 1.1 billion of those people will still defecate in the open.

Jean Humphrey, an associate professor at Johns Hopkins Bloomberg School of Public Health in the United States of America, says that most people involved in the provision of sanitation believe free toilets will not be used. "Some methods (such as the community-led total sanitation projects promoted by UNICEF) do not provide any subsidies. Instead, people are triggered to want a toilet and to build it out of existing sticks, grass, logs, stones, etc.," she says.

Sanitation is central to the Asian Development Bank's development agenda and the organization is keen to improve toilet provision. Anand Chiplunkar, principal water supply and sanitation specialist at the bank, says: "The economic returns of good sanitation have been demonstrated universally. We must find innovative ways of translating them into effective and sustainable solutions to provide environmentally sound sanitation. The task is difficult, as we need to overcome traditions, beliefs, politics and poverty."

An internal evaluation of several projects undertaken by the Water and Sanitation Program, an international partnership led by The World Bank, revealed the most successful projects provided only a small subsidy, equal to about half the cost of the latrine. The more heavily subsidized projects failed. "The reasons for this are interesting; in some cases the subsidies are given as a sort of reward to political leadership for universal toilet construction," says Humphrey. "The leadership, anxious for the money, impose toilets on the most resistant households, who then do not use them because they didn't want them in the first place.'

A second reason is that sanitation promotion or behaviour change is essential for success. Programmes that used all or most of their budget on building toilets without using any resources to change people's behaviour



A boy stands on an overpass above a drainage canal containing raw sewage in Denham Town, Jamaica.

Susan Markisz/UNICEF

have failed. "In my mind, the cause of failure may be not so much that money was spent on subsidies, as that money was not spent on social mediation," adds Humphrey.

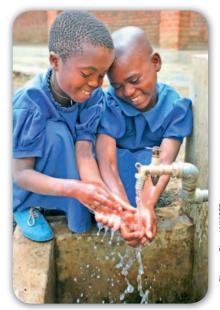
"Subsidies are often a controversial issue," says Chiplunkar. "In the long term, the Asian Development Bank will try to persuade governments and regulatory agencies to phase out subsidies as economic conditions improve." He says many community-based organizations, such as Gram Vikas in Orissa, India, have pursued innovative, socialized, community fund-raising. "Families contribute according to their economic capacity. This demonstrates that, with awareness, the financing need can be met without subsidies."

Sim says that there are compelling reasons why people resist changing their sanitary habits. "People enjoy daily sessions squatting in social groups and public defecating is accepted as normal," he says. Some academic studies, including one on the Orissa project, have suggested that shaming people about this practice can motivate them to buy and install a toilet, but Sim disagrees. "You can give people information on the privacy advantages of toilets, how their use can cut down disease and death and lecture them on hygiene

but none of that will convince enough people to change their view. Envy is the only way to sell toilets; people need an emotional trigger."

Getting people to use toilets requires imagination, says Sim. "Toilets need to be as sexy as mobile phones and TVs so that people really want them in their homes. It is not unusual to find houses in Africa and Asia where people have high-tech gadgets but no toilet, so it's not really about their ability to afford one." He believes charitable projects are inefficient because too much money is wasted on administration and too little spent on toilets and education. "Grey, boring concrete toilets installed for free don't appeal at any level. People don't understand why they have been installed, they don't know how to maintain them and they often abandon them when they get smelly."

The market model advocated by Sim is being developed in Cambodia but should be rolled out in other developing countries in the next three years. "Our idea is to manufacture bright, colourful toilets that are simple to use, easy to maintain and can be bought for less than US\$ 100. The only way to supply toilets in a sustainable way is to create a market and a demand for



Two girls wash their hands at a primary school in Busamana, Rwanda.

them. When people invest their money in a toilet, they are more likely to accept it and use it."

Sim and others at the World Toilet Organization have been collaborating with Christopher Ng and Rigel Technology to develop an alternative to the "sticks and stones" self-built latrine. "The basic concept is to provide an economically sustainable and yet affordable toilet. Hence, with Rigel, we are trying to develop toilets for as little as US\$ 30 each. The products will be ready around March to April this year," says Ng, the managing director of the Rigel Technology Group, based in Kaki Bukit, Singapore.

Rigel exhibited its latest toilet at the World Toilet Organization Summit in December 2009. It is attractive and ecologically sound, turning excrement into fertilizer. "It doesn't need running water to flush it, although water is still needed for washing and hygiene," says Sim.

In Cambodia, toilets are being provided to villages, where families work together to pay by monthly instalment. "This is arranged on rotation, with one family receiving a toilet each month. At the end of the year, all 12 families have toilets," says Sim. He is promoting a franchise concept to encourage people to become distributors and suppliers in their area. "Then the market model becomes a 'no-brainer'," he says.



Girls clean latrines at Mussaia Primary School in Maganja da Costa, Mozambique.