



**Cover cum diverter:**  
Made of ceramic, which is a heavier material, so it is not easily displaced

**The raised platform:**  
Measures 1.5m by 0.8m, roughly the size of a shower cubicle of a typical bathroom in an HDB flat. It is also made of fibreglass to ensure durability and toughness. It can support the weight of two adults.

**Urine collector**

**Compost chamber:**  
Made of fibreglass and used to store faeces, it is divided in half. Once one half is filled, sawdust and dry leaves are thrown in to make the faeces dry more quickly and it is covered to prevent flies from swarming the area. It has an attached ventilation pipe (hidden) that also ensures smell is kept out.

Each toilet comes in colours such as black, red, white and grey and can last for up to eight years.

GRAPHICS: TIEN CHUNG PING TEXT: AMRESH GUNASINGHAM

# S'pore firm creates toilet-on-wheels

## Eco-friendly loo a potential boon to rural communities

■ BY AMRESH GUNASINGHAM

A SINGAPORE company is planning to roll out a new type of toilet to aid sanitation in developing countries.

Rigel Technology has developed a toilet-on-wheels, which does not require a connection to a sewerage system, representing a potential boon to rural communities in China and India, where such amenities are lacking.

The 25kg device consists of a 20cm-wide squat toilet, a compost chamber and a urine collector, where liquid waste is chan-

nelled to via a built-in diverter.

After six weeks, the collected waste can be composted for reuse as fertiliser.

Rigel Technology's managing director Christopher Ng said it will be eco-friendly as it will be made from ceramic, clay and fibreglass extracted from recycled material. "We want to create a better toilet for the poor, and in a cost-effective manner that is also commercially viable."

He anticipates sales of up to 10,000 units a month once production commences at its factory in Sichuan province, China. The projection is based on the estimated US\$1 trillion (S\$1.39 trillion) value of the sanitation market.

The product will retail on the market in three months, at prices ranging between \$42 and \$139.

Toilets with similar features

are already available, but not to this standard, said Mr Jack Sim, founder of the World Toilet Organisation (WTO), adding that up to 15 million similarly priced systems have been sold in China's Yunnan province so far.

He said creating an "emotional appeal" for better toilets was the key to making the product commercially successful, while also raising sanitation standards.

A \$100,000 prototype will be unveiled at the World Toilet Summit and Expo to be held at Suntec City next month, where a Memorandum of Understanding will be signed between Rigel Technology and WTO.

It is estimated that 2.5 billion people in the world live without access to proper sanitation.

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