

Why no EcoSan?

1. Low-income high-density urban areas

The figure below is part of a slide from *Pathways for future development in sanitation* by Univ. Prof. Dr.-Ing. Ralf Otterpohl of the Institute of Wastewater Management and Water Protection at Hamburg University of Technology (presented at the international conference “Sanitation Challenge” held in Wageningen, The Netherlands, 19–21 May 2008).¹

Dry sanitation / Low Cost solutions

**not really ready for the very
large scale, (except for rural areas)**

The reference to “Dry sanitation / Low Cost solutions” is to EcoSan. So here is Germany’s leading advocate of EcoSan saying that EcoSan in urban areas of developing countries is not yet ready for large-scale application. Who can or would want to argue with this?

2. Low-income rural areas

In dispersed rural areas Arborloos and ‘Fossas Alternas’² are the simplest form of using the nutrients in human (and animal) excreta. More complex systems – i.e., ‘standard’ EcoSan systems, such as those described in *Ecological Sanitation*³ – are at present just too complex and too expensive, even for use in large-scale villages and small towns.

WaterAid Nepal has this to say: “Although EcoSan toilets also provide some benefits in terms of fertiliser, the benefits are difficult to quantify and the high initial cost is a barrier for

¹ The whole presentation is available at <http://www.sanitation-challenge.wur.nl/UK/Conference+Presentations/> (click on ‘Otterpohl’ to download). The figure is part of slide #48.

² See *Toilets that Make Compost* by Peter Morgan (EcoSanRes Programme, Stockholm, 2007) – available at http://www.ecosanres.org/toilets_that_make_compost.htm. See also (a) *Introducing Ecological Sanitation in Northern Mozambique* by Edward Breslin and Feliciano dos Santos (WaterAid, London, 2003) – available at http://www.wateraid.org/documents/plugin_documents/ecosanmozambique.pdf; (b) *Lessons from a Low-cost Ecological Approach to Sanitation in Malawi* (Water and Sanitation Program, 2007) – available at http://www.wsp.org/UserFiles/file/926200795611_Malawiecotoilets.pdf; and (c) *Sanitation and Hygiene in Kenya: Lessons on What Drives Demand for Improved Sanitation* (WSP, 2004) – available at http://www.wsp.org/UserFiles/file/af_kenya_hygiene.pdf.

³ *Ecological Sanitation* (revised and enlarged edition) by Uno Winblad & Mayling Simpson-Hébert (Stockholm Environment Institute, 2004) – available at http://www.ecosanres.org/pdf_files/Ecological_Sanitation_2004.pdf.

most poor families”.⁴ WaterAid makes a strong case for subsidizing EcoSan toilets, but for large-scale application subsidies are a non-starter as there will never be enough money available to subsidize *all* the EcoSan latrines required in the world – remember that EcoSan advocates promote EcoSan as *the* solution to *all* the world’s sanitation needs.

EcoSan costs *are* high – for example, in The Philippines the cost of a simple EcoSan toilet in 2005 was the equivalent of USD 363, whereas the cost of a VIP latrine was only USD 91.⁵

►eThekwini latrines (urine-diverting alternating twin-vault ventilated improved vault latrines, or UD-VIVs)⁶ are easily convertible to a ‘true’ EcoSan system if that is what the users want – however, for first-time sanitation users it is generally better to operate it as a non-EcoSan system initially and then, but only if the users so wish, convert it to EcoSan operation after a couple of years when the users are accustomed to using a latrine.

In fact many ‘EcoSan’ toilets are essentially UD-VIVs as the urine soaks away into the ground and the dehydrated faeces are not really used to fertilize food crops (although they could be).

⁴ *Assessment of Urine-diverting EcoSan Toilets in Nepal* (WaterAid Nepal, Kathmandu, 2008) – available at http://www.wateraid.org/documents/plugin_documents/wa_nep_ecosan_asst_rep_sept08_final.pdf.

⁵ *Economic Impacts of Sanitation in the Philippines* (World Bank, Jakarta, 2008), see pdf page 107 – available at http://www.wsp.org/UserFiles/file/529200894452_ESI_Long_Report_Philippines.pdf.

⁶ See <http://www.personal.leeds.ac.uk/~cen6ddm/eThekwiniLatrines.html>.