

“INTRODUCTION OF URINE DIVERSION IN SOUTH AFRICA”

by

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In South Africa the objective of the National Sanitation Programme is to ensure that everyone has access to adequate sanitation. This is defined as a minimum of a Ventilated Improved Pit Toilet. Although people were supposed to be offered choice of technologies in reality this has not happened and only a VIP was offered. This approach has hit major problems in areas of rock, high water tables and collapsing sands which makes the cost of a VIP exorbitant. Also the question of emptying pits has been avoided. The result in Zimbabwe has been that the pits are now full and there is no mechanism in place to empty them.

The CSIR and the Mvula Trust were introduced to urine diversion technology through Sida and SARAR Transformation, Mexico. They realised that this might prove a realistic alternative to a VIP. The most pressing questions were:

1. How to provide a cost effective technical solution to the problem of urine diversion; and
2. How to overcome social issues surrounding the handling of the dried faeces, urine and the fact that a man must sit down to urinate unless a separate urinal is provided.

The CSIR have undertaken a pilot project at Umtata, Eastern Cape where fully subsidised toilets were constructed for the community (Refer to the paper Case Study: Urine Diversion Technology) and the Mvula Trust have introduced urine diversion technology to the National Sanitation Programme where sanitation is being improved on partial or no subsidy basis. The paper looks at the social issues and the problems associated with the transfer of technology between developing countries provoke discussion in an environment where technology is often imposed by outside agencies.

Aussie Austin graduated with a degree in civil engineering from the University of Pretoria in 1973. 20 years consulting engineering: diverse range of infrastructural projects. Last 5 years with the CSIR Division of Building & Construction Technology (Housing & Municipal Engineering Programme): Main projects are preparing guidelines for the provision of engineering services, research and development of alternative on-site water and sanitation technologies, monitoring and evaluation of projects, technology transfer to communities, etc. Richard Holden graduated with a degree in civil and structural engineering from the University of Sheffield in 1982. He spent 13 years with consulting engineers which included substantial period on the maintenance and provision of services in low-income areas. He joined the Trust in 1996 and initiated the implementation of a National Sanitation programme within the Trust. He is currently the Technical Manager and a Regional Co-ordinator for the North West Province.