

Abstract: Third International Conference on Ecological Sanitation

Title	Ecological Sanitation: a cross-cutting option for water management, sanitation and food security in Botswana?
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Author(s)	Cathrine Wirbelauer
Address	PO Box 202 Gaborone, Botswana
Telephone	
Fax	
Mobile	++267/71798566
E-mail	cathrine.wirbelauer@iucn.org
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Ecological Sanitation: a cross-cutting option for water management, sanitation and food security in Botswana?

This paper is a short compilation of experiences gained in Ecological Sanitation within the CBNRM-Missing Link project implemented in Botswana. Sanitation is in a crisis worldwide. Uncontained and untreated human excreta pollute groundwater tables and streams perpetuating the cycle of human diseases and upsetting fragile ecosystems; there is increasing scarcity and degrading quality of the world's freshwater with about 1.1 billion people around the world that have no access to safe drinking water. With a dramatically increasing world's population an enormous challenge to all those who work towards resolving the water crisis lies ahead.

Although UNICEF identified Botswana as having a medium coverage with improved sanitation (51-75%), some of the latest data show that 47% of the households in urban and 82% of the households in rural areas do not have access to sanitation¹ and that the nitrate pollution of groundwater remains a major problem. The CBNRM-Missing Link project defines the concept of environmental management as "the implementation of a set of activities, which pursue sustainable natural resource utilisation and safe environmental sanitation at household and community level". It aims at understanding the interactions between people and their environment and piloting the integrated management of natural resources through the Ecological Sanitation concept. The concept of Ecological Sanitation looks at improved sanitation, water management and resources conservation, and links these to food production; but how do they really link? Ecological Sanitation is implemented through the use of water saving/protecting toilets, and generally looks at the re-use of greywater and all organic material available within the community for agricultural purposes. Although this seems to be easy to implement it faces the negative impact of cultural beliefs and acceptability problems.

Since 2001 the project has identified approaches, methodologies and guidelines for the implementation of ecosan in Botswana and has undertaken field research on urine-diverting systems and the use of by-products for gardening. It has been piloting the approach in three communities of Eastern and Western Botswana with the aim of integrating peoples' needs, environmental issues and government policies. Here emphasis is put on challenges to be overcome before Ecological Sanitation can even be considered an option to sanitation and water management. In fact, although far from being widely implemented in the country it has so far shown that once all the EcoSan components are put together they naturally contribute to improved sanitation and health, improved water management, improved soil conditions thus generally to improved livelihoods.

¹ Census 2001