

Study on ecosan project experiences by the help of gtz-ecosan project data sheets

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INTRODUCTION

The data sheets for ecosan projects present concise information on projects around the world where ecosan concepts have been implemented successfully.

They cover projects from both developing and industrialised countries, high and low tech systems, rural and urban locations, pilot and large scale projects, and projects in various cultural settings. They demonstrate the wide range of possible fields of application for ecosan systems. The project data sheets therefore represent a valuable tool for information and promotion activities.

The data sheets contain in a very compact form all relevant technical, organisational, and financial data on the project, as well as a description of particular experience, problems and lessons learned. As long-term experience is still not available for many ecosan technologies, experience from reference projects often constitutes the only basis for technology selection and system design. The ecosan project data sheets make that valuable experience available to planners and engineers.

For easy understanding and to facilitate comparison between projects, the main features of a project are visualised in the header of every sheet (see Figure 1.1). All employed technologies and reuse schemes are represented clearly in a matrix of different material streams (horizontally: solid bio-waste, faeces, urine, greywater and rainwater) and the different steps in a material flow cycle (vertically: collection, treatment, and utilisation).



Figure 1.1. Screenshot of an ecosan project data sheet (source GTZ)

Following the introductory header, a box summarises all relevant general data such as the type of project, project period, project scale, planning institution, executing institution and supporting agency. The text body covers information on project objectives, local and general conditions, technologies applied, types of reuse, project history, costs, operation and maintenance, design information and technical specifications, practical experience and lessons learned, available documents and references as well as contact details of involved institutions, organisations and individuals. Photos and drawings complement the information, making the data sheets easy and pleasant to read.

CURRENT STATUS AND DEVELOPMENTS

At present status (September 2008) 31 project data sheets are published on the website of gtz-ecosan (see references) identifying a wide range of best practice examples in the field of sustainable sanitation. Ideas for further 30 data sheets are presently being considered. As it can be seen in the following table, the project data sheets cover a wide range of different regional and cultural settings:

Table 1.1 Number of published ecosan project data sheets according to several criteria

Criteria	Description	# of datasheets
region	➤ Africa	4
	➤ Asia	8
	➤ Eastern Europe and Middle East	6
	➤ Latin America	2
	➤ Western Europe	11
location	➤ rural setting	19
	➤ urban setting	12
type of installation	➤ residential	13
	➤ educational institution	6
	➤ institutional / business / tourism	7
	➤ mixed type	5
treatment components	➤ faeces and urine treatment only	10
	➤ faeces, urine and greywater treatment	8
	➤ treatment of more than three flow streams (incl. solid biowaste, rainwater, etc.)	13
type of reuse *	➤ use of treated material as fertilizer	20
	➤ use of treated material as soil conditioner	21
	➤ use of treated water	14

*: Multiple answers are possible

Considering this wide range of applications of ecological sanitation practices, the collection of gtz project data sheets can be seen as a good compilation of ecosan know-how from project experiences all over the world. This is why they have been chosen as a starting point for collecting best practice examples in two working groups of the Sustainable Sanitation Alliance (SuSanA) for the implementation of sustainable sanitation within the UN International Year of Sanitation 2008. These two working groups, “Sustainable sanitation for cities” and “Food security and productive sanitation systems”, will continue to work on some of the project data sheets to further improve the descriptions of urban application of ecological sanitation and of the strong connection between sustainable sanitation practices and reusing the treated products in agriculture.

References

GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit) (2007): "Project data sheets for ecosan." – GTZ- ecosan program, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), Eschborn, Germany, digitally available at: <http://www.gtz.de/en/themen/umwelt-infrastruktur/wasser/9399.htm>