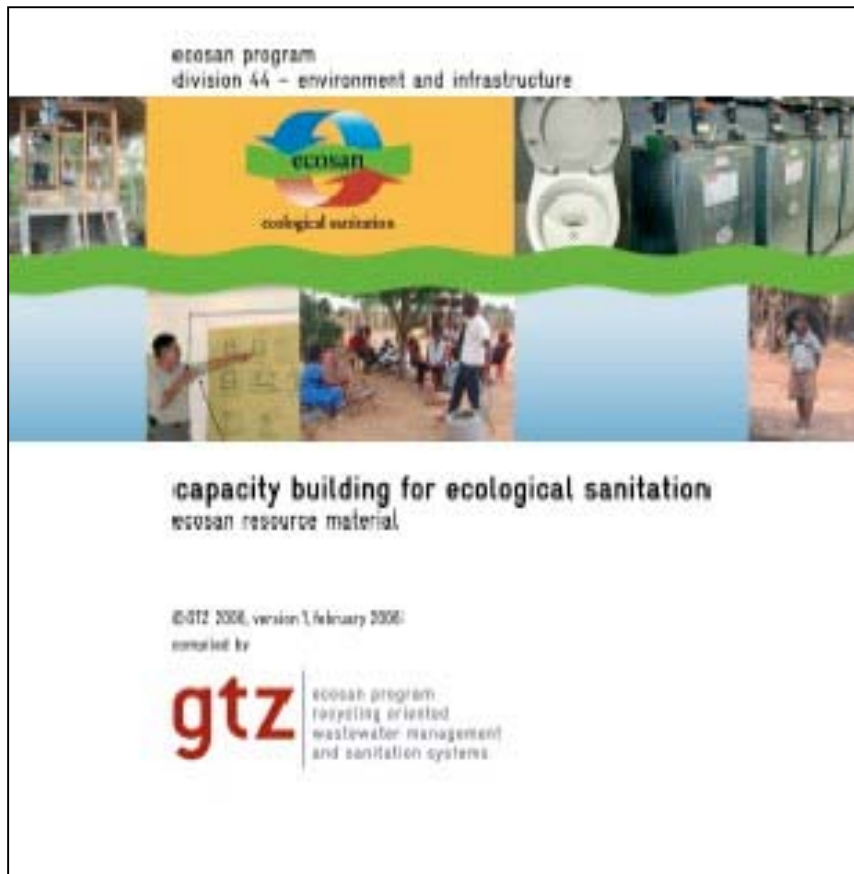


### Starting point: „Capacity building for ecological Sanitation“ CD-ROM



The CD-ROM / www material collection “capacity building for ecological sanitation” follows the open-source concept for capacity building and non-profit use and is the result of the

**joint effort of many institutions.**

It provides support for academic institutes, training organisations and individuals in developing training and education material for ecological sanitation.

**It will be up-dated towards sustainable sanitation in a broad sense, by including additional material, e.g. from the SuSanA-Partners.**

# content of the CD-ROM / www (1)

## Main Contributors:



## capacity building for ecological sanitation – ecosan resource material

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Check for up -to- date on -line versions under: [www.gtz.de/dokumente/en](http://www.gtz.de/dokumente/en) -ecosan - education -resources -2006

compiled by:

### GTZ ecosan program

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**gtz** ecosan program  
recycling oriented  
wastewater management  
and sanitation systems

commissioned by

 Federal Ministry  
for Economic Cooperation  
and Development

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Example of a  
training course  
and of the related material  
available in the collection:

|            |   |
|------------|---|
| <b>B</b>   | <b>Documentation of exemplary ecosan workshops and trainings</b>  |
| <b>B01</b> | <b>ecosan introduction course in Norway (2005)</b>  |
|            | The Agricultural University of Norway (NLH) offers different courses which include ecological sanitation in their curricula. The schedule presented here refers to the course "Appropriate sanitation in the developing world" - a 5-day course for both professionals and students.  |
|            | Course schedule   |
|            | <a href="http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-schedule-ecosan-introduction-course-norway-2005.pdf">http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-schedule-ecosan-introduction-course-norway-2005.pdf</a> , 0,1 MB (English)  |
|            | <b>Available material</b>   |
|            | - Ecological sanitation - an overview (Jenssen P. D.)<br><a href="http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-ecological-sanitation-overview-2005.pdf">http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-ecological-sanitation-overview-2005.pdf</a> , 4,9 MB (English)   |
|            | - Ecological sanitation in developing and emerging countries (Mang H.P.)<br><a href="http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-ecosan-developing-and-emerging-countries-2005.pdf">http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-ecosan-developing-and-emerging-countries-2005.pdf</a> , 3,4 MB (English)                |
|            | - Composting and dry sanitation toilets (Jenssen, P.D.)<br><a href="http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-composting-dry-toilets-2005.pdf">http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-composting-dry-toilets-2005.pdf</a> , 1,8 MB (English)   |
|            | - Vacuum toilets and vacuum transport (JETS)<br><a href="http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-vacuum-toilets-transport-2005.pdf">http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-vacuum-toilets-transport-2005.pdf</a> , 1,8 MB (English)  |
|            | - From blackwater and organic waste to fertilizer (Morken J.)<br><a href="http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-blackwater-organic-waste-to-fertilizer-2005.pdf">http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-blackwater-organic-waste-to-fertilizer-2005.pdf</a> , 1,2 MB (English)                               |
|            | - Urine diverting systems - an overview (Kvarnström E.)<br><a href="http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-ud-systems-examples-experiences-2005.pdf">http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-ud-systems-examples-experiences-2005.pdf</a> , 4,1 MB (English)   |
|            | - Groundwater : supply and protection (Jonasson S.)<br><a href="http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-groundwater-supply-protection-2005.pdf">http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-groundwater-supply-protection-2005.pdf</a> , 1,0 MB (English)   |
|            | - Soil for groundwater protection and wastewater treatment (Jenssen P.D. / Jonasson S.)<br><a href="http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-soil-groundwater-protection-ww-treatment-2005.pdf">http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-soil-groundwater-protection-ww-treatment-2005.pdf</a> , 4,9 MB (English) |
|            | - Nutrients in waste fractions - greywater composition and treatments (Jenssen P.D.)<br><a href="http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-nutrients-greywater-treatment-systems-2005.pdf">http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-nutrients-greywater-treatment-systems-2005.pdf</a> , 5,5 MB (English)          |
|            | - Some reflections on distributed energy and micro wave pyrolysis (Heyerdahl P.H.)<br><a href="http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-distributed-energy-micro-wave-pyrolysis-2005.pdf">http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-distributed-energy-micro-wave-pyrolysis-2005.pdf</a> , 0,8 MB (English)        |
|            | - Biogas sanitation systems (Mang H.P.)<br><a href="http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-biogas-sanitation-systems-2005.pdf">http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-biogas-sanitation-systems-2005.pdf</a> , 7,7 MB (English)   |
|            | - Experience from Munksogaard eco-village (Wulfson D.)<br><a href="http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-ecovillage-experience-denmark-2005.pdf">http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-ecovillage-experience-denmark-2005.pdf</a> , 0,6 MB (English)  |
|            | - Organizing decentralized systems - a GIS based tool (Borch H.)<br><a href="http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-organizing-decentralized-systems-gis-2005.pdf">http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-organizing-decentralized-systems-gis-2005.pdf</a> , 8,1 MB (English)                                |
|            | - Economic aspects of ecological sanitation (Hanserud O.)<br><a href="http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-economic-aspects-ecological-sanitation-2005.pdf">http://www2.gtz.de/dokumente/oe44/ecosan/cb/en-economic-aspects-ecological-sanitation-2005.pdf</a> , 0,1 MB (English)                                   |

# Resource material up-date

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**SuSana publications** (short statement, vision papers, fact - sheets, good practices, global project database,...)

## NEW section "B" for UN-publications

- 2006 WHO guideline set on reuse
- 2006 UNDP PEP Paper on Water & Poverty
- 2006 UNSGAB Hashimoto Action Plan
- 2006 UNESCO-IHP ecosan-capacity publication

- **new training courses** (esf India, Philippines, other languages, video-conference example, NETSSAF, ROSA, ... )

new example for workshops and training courses on innovative approaches to reuse-oriented sustainable sanitation

- esf India, Philippines, ...
- other languages,
- NETSSAF, ROSA,
- (...)

**A Capacity building for ecological sanitation** (click on right column to navigate)

**B Documentation of exemplary ecosan workshops**

|      |  |
|------|--|
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| B 06 | ecosan workshop in Botswana (2003)               |
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| B 08 | ecosan workshop in India (2005)                  |
| B 09 | Expert meetings in the Netherlands (2005)        |

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- new ppt's
- up-date „ecosan curriculum“ (Heeb et al.)
- curriculum from Beijing University / WTO
- curricula from Xavier University
- new e-courses (e.g. UNESCO-IHE)
- films (links to you-tube and others)
- (...)

**C Selected ecosan teaching material**

|      |                                     |
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- 2007 IWA Sanitation21
- 2007 WSP publication from Peter Morgan
- additional technical data sheets on reuse oriented sustainable sanitation components
- conference proceedings (e.g. from the Erdos 2007 conference)