



**ecosan – newsletter - no. 9 - 08/2003 - english**

**This regular electronic news bulletin from the ecosan project of GTZ, Germany, addresses a network of friends and professionals involved in initiatives and projects in the field of closed-loop wastewater management and sanitation.**

**Dear friends and colleagues!**

Welcome to GTZ's ecosan newsletter in English, French, Spanish and German; issue no. 9!

The latest editions of the English version are distributed directly via e-mail in the globally-readable, text-only format. You can also download German, French, Spanish and English versions as easy-to-read pdf files from our website.

**!!! Downloads:**

- German:** <http://www.gtz.de/ecosan/download/nl9dt.pdf>  
**Spanish:** <http://www.gtz.de/ecosan/download/nl9esp.pdf>  
**French:** <http://www.gtz.de/ecosan/download/nl9fr.pdf>  
**English:** <http://www.gtz.de/ecosan/download/nl9eng.pdf>

Your ecosan team hopes you enjoy our current issue!

**Your contribution**

This medium lives through interaction. So please keep sending your suggestions, requests and information to be published via this newsletter to the addresses at the end of this issue. Thank you for any contribution!

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  - **Rainwater Harvesting Website** of CSE India revised
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  - Minutes of the **1<sup>st</sup> IWA specialist group conference in Sustainable Sanitation**, Lübeck, April 2003
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  - Conference report **“The EU between Jo´burg follow up and Cancun politics”**
- new upcoming events**
- 09-12 / 09 / 2003 **6th Water and Information Summit**; Delft
  - 14-17 / 09 / 2003 **5<sup>th</sup> IWA Biofilm Congress**; Cape Town
  - 23-25 / 09 / 2003 **Water & Wastewater Asia**; Ho Chi Minh City
  - 22-23 / 09 / 2003 **12th Northwest on-site wastewater short course**; Seattle
  - 23-27 / 09 / 2003 **ENTSORGA, Global Environment Fair**; Köln
  - 30/9 - 1/10/ 2003 **5th . conf. on sanitary and process engineering (..)**; Aachen
  - 02-04 / 10 / 2003 **Int. exhibition / conference on water technology (..)**; Bangkok
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  - 08-10 / 10 / 2003 **Plumbing and Restroom Asia**; Singapore Expo
  - 15-16 / 10 / 2003 **2. ATV Regenwassertage**; Landau
  - 06-07 / 11 / 2003 **Wastewater Hygienisation in Constructed Wetlands(..)**; Leipzig
  - 10-13 / 03 / 2004 **5th Water China**, Guangzhou
  - 18-22 / 03 / 2004 **Global WASH Forum**; Dakar
  - 07-10 / 06 / 2004 **WEMT 2004**; Seoul
  - 27-30 / 09 / 2004 **9<sup>th</sup> Int. conference on Wetland Systems & 6<sup>th</sup>(...)**; Avignon
- workshops / training courses**
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## In-house news

### GTZ-core group works on awareness, information and participation

As discussed and suggested during a side-event at the Luebeck Symposium in April 2003 a core group of the ecosan team currently is busy developing a first draft of what is called a "provisional guideline for awareness, information and participation in ecosan-projects". This first draft will be ready by the end of September 2003, and will then be presented to the international working group, which was formed at this side event, for discussion. The provisional guideline will be accompanied by a corresponding toolbox. Both of these will be based on the HCES and the Bellagio-Principles and largely try to give ideas on how to adopt the 10 Step programme of the implementation guidelines of the Bellagio-principles in the practice of ecosan-projects.

The draft will first be circulated to the international working group for an e-mail based exchange and then a workshop may be organised conjointly for an international core group of people who previously have actively contributed to further develop the draft of the guideline.

People interested in the e-mail discussion may send an e-mail to [ecosan@gtz.de](mailto:ecosan@gtz.de)

### Guideline for ecosan baseline study in process

The starting procedure is an important and crucial period in any ecosan project. The ecosan principles, the benefits of, and constraints facing ecosan and the experiences from existing ecosan projects are still unknown to most people. As long as the existence of a possible ecosan solution to an existing sanitary problem remains unknown, the use of a closed loop oriented approach to sanitation is very unlikely to develop. Feasibility studies are therefore currently useful in ecosan projects only as a second step in a planning and implementation process. Beforehand, the stakeholders should have to some extent identified their sanitary problem, become aware of all the possible ways in which it may be solved, and made an informed decision that they wish to use the ecosan philosophy to solve it.

In this situation it is therefore very useful to undertake a so called baseline study prior to a feasibility study. The baseline study serves as an instrument to: (1) describe and define together with all stakeholders the current situation and identify what the problems are; (2) gather basic information and background data; (3) ensure that there is an enabling environment for an ecosan project among the stakeholders.

Currently a tentative standard procedure / formula is being developed by the GTZ ecosan team, that should be a useful guide for all those who are undertaking such baseline studies for ecosan projects. It is based on the experiences with baseline studies undertaken in ongoing GTZ projects, namely in the projects in China, Burkina Faso and Mali.

### New members of the GTZ ecosan team

We are pleased to welcome the new trainees to the ecosan team:

**Silke Demsat** from Germany: student of civil engineering, university of applied sciences Nordost-Niedersachsen, Germany (6 months)

**Tobias Hanke** from Germany: civil engineer, University of Braunschweig, Germany (6 weeks)

**Kalidas Neupane** from Nepal: post graduate student of „water management in tropical and subtropical regions“, university of applied sciences Nordost-Niedersachsen, Germany (3 months)

**Andreas Rabiega** from Germany: political scientist (3 months)

**Martin Wafler** from Austria: student of "Land and Water Management and Engineering" at the University of Natural Resources and Applied Life Sciences, Vienna, Austria (3 months)

## Recent news

### Prof. Wilderer wins Stockholm Water Prize

The German Professor Peter A. Wilderer has won the US\$ 150,000 (EUR 141,000) Stockholm Water Prize. He is a Professor at the Technical University of Munich and serves also as Director of the Institute of Advanced Studies on Sustainability (IoS). Prof. Wilderer received the prize "for the development and demonstration of integrative approaches to water and wastewater management across the spectrum of fundamental research, applied research, technology implementation and sustainable water management". He was one of the first researchers to promote decentralised, cost-effective small-scale wastewater treatment and reuse of water for developing countries. Prof Wilderer will receive the Prize from His Majesty King Carl XVI Gustaf of Sweden on 14 Aug 2003 during the annual World Water Week in Stockholm.

!!! information: <http://www.siwi.org/swp/swp.html>

### Nominations for Stockholm Water Prize 2004

Until September 30, leading scientific organisations, universities, colleges, academies, learned bodies and individuals are invited to nominate candidates for the Prize. The span of disciplines and activities from which a nominee may be chosen is very wide. Any field of research or practice is eligible, such as natural science, technology and engineering, economy, health and water, water management, integrated water resources management, coastal zone management, wetlands, aquatic ecology and water resources in any form. The work of nominees should have potential or proven international impact in the science, engineering, technology, education, awareness or public policy sectors.

Nominations are due by September 30, after which a nine-member international Nominating Committee reviews the nominations and recommends a Prize Laureate to the Board of the Stockholm Water Foundation, which makes the final decision. The Royal Swedish Academy of Sciences appoints the Committee members.

!!! For information or suggestions: [www.siwi.org](http://www.siwi.org)

### IWA president signals development of 5 urban ecosan projects

WSSCC and IRC published in their joint newsletter "source weekly" No. 13-14, that IWA president Michael Rouse has announced the development of five projects of dry sanitation and alternative treatment for settlements of around 100.000 people in middle income and poor countries within two years. Those projects shall be subsidized and demonstrate that ecosan principles work better than conventional sewerage systems.

!!! More information: <http://www.tu-harburg.de/susan/>

### Strange quotes in Source Weekly

Readers of the ecosan newsletter may have been – like ourselves - unpleasantly surprised when reading a recent edition of WSSCC / IRC Source Weekly (Source Weekly No. 29-30, 28 July 2003).

As quote of the week, Source opted for the following:

"The dry or compost toilet might suit those who wish to drop out of highly developed industrial society, but to advocate them as a solution for developing countries is totally unacceptable and represents little more than a celebration of primitivism." from Ceri Dingle, the director of WORLDwrite, a UK based education charity, with a mission supposedly to "challenge prejudices and stereotypes by giving young people a unique opportunity to see the world from a fresh perspective through a first hand investigative experience."

!!! See <http://www.worldwrite.org.uk/> <mailto:world.write@btconnect.com>

A section of this ill informed quote was repeated in a subsequent article on ecological sanitation within that edition of Source. This article also contained further erroneous information concerning ecological sanitation systems, along with a links to several derogatory articles:

**!!! See:**

Flush toilets called 'environmental disaster' CNSNews.com, 12 Jun 2003:

<http://www.cnsnews.com/Culture/archive/200306/CUL20030612b.html>

and: Introduction of the flush toilet deplored at Earth Summit:

<http://www.cnsnews.com/ForeignBureaus/Archive/200208/FOR20020830c.html>

We at the GTZ ecosan office believe that such disinformation concerning the closed loop approach to sanitation cannot be allowed to go uncountered.

We have therefore written a response to the Source article that we have sent to that publication and have made available for download with this newsletter.

**!!! For comments regarding the article:** contact Mr. Cor Dietvorst [dietvorst@irc.nl](mailto:dietvorst@irc.nl)

If you choose to do this, please also send us a copy of this mail to [ecosan@gtz.de](mailto:ecosan@gtz.de).

### **Egypt: Ministry supports reuse of sewage in forestry**

According to Al-Ahram Weekly Online, 5-11 Jun 2003 and "Source Water and Sanitation Weekly" of the WSSCC the Egyptian Ministry of Environmental Affairs recently adopted an innovative programme through which treated sewage water would be used for forestry projects. According to Mamdouh Riyad, minister of state for environmental affairs "both the preservation of the environment and our recognition of the need to use treated sewage water are strategic requirements. We need to utilise waste water in a manner that increases our national income, as well as limiting its damaging effect on the environment." At present, treated effluent generated in cities is used in the cultivation of forests in desert areas bordering sewage treatment plants. "The results are encouraging," said the minister, "the forests help reduce the severity of sand storms, as well as being economically viable." Annually Egypt generates around 5.5 billion cubic metres of sewage, which corresponds to 10% of Egypt's share of the Nile waters. Less than half of the sewage is treated. This has resulted in the pollution of beaches, desert areas and valuable underground water sources.

### **Afghanistan: German NGO implements ecosan toilets**

In the north Afghan village of Katachel, the "association for humanitarian assistance in Afghanistan" has recently successfully installed several ecosan dry separating toilets. The models installed were originally pre-fabricated plastic separating toilets manufactured in China in co-operation with EcoSanRes, which the director of the association had brought directly from the World Water Forum in Kyoto. The operational principle of such ecosan toilets and the advantages of ecosan systems were presented to the inhabitants in a lecture, which was also transmitted on television.

As urine and faeces are traditionally separated, although the reuse, particularly of urine, is not widespread, this initiative received a great deal of interest and the toilets were in great demand. The association is now currently seeking support in importing a large number of these toilets directly from China to Afghanistan for use in the Katachel region, where the sanitary situation is currently desolate.

**!!! For further information:** contact <http://katachel.de>

**!!! A short project visit report is available under:**  
[www.gtz.de/ecosan/download/septoi-afghan.pdf](http://www.gtz.de/ecosan/download/septoi-afghan.pdf)

### **Iran: ecosan presentation during "4<sup>th</sup> International Environmental Exhibition" in Iran**

In the first week of July 2003 the "4<sup>th</sup> International Environment Exhibition" was held in Teheran, addressing various environmental issues facing Iran. In this exhibition the ecosan team of Engineers Without Borders International e.V. (EWBI), led by Dr A.A. Talebi held a successful introduction to the theme of ecosan using their own Arabic translation of the ecosan poster of the GTZ ecosan project.

**!!! If you wish to know more:** contact [karun\\_ngo@yahoo.com](mailto:karun_ngo@yahoo.com)

## Pilot project news

### ...German ecosan cooperations

#### Algeria: project agreement including an ecosan component is signed

An agreement on a second phase for the national Integrated Water Management project, supported by the Algerian and German Governments, was signed on July, 8. It is planned that a new project component about integrated water management in oasis townships including ecosan strategies will be developed and implemented during the next 3 years.

#### Benin: Planned construction of ecosan demonstration latrines at 4 different locations

The construction of ecosan demonstration latrines is planned in the framework of the project for rural water supply in the departments of Mono and Ouémé, currently being implemented by IGIP-Consult on behalf of the GTZ. The GTZ ecosan project, CREPA and Otterwasser GmbH are involved as advisors in the planning and construction of these installations.

#### Botswana – Namibia – Lesotho: ecosan-promotion- and information-tour

In September 2003 the GTZ ecosan project will support urban ecosan initiatives in Botswana, Namibia and Lesotho by introducing workshops within the scope of a three countries ecosan promotion and information tour. The workshops will be organised by IUCN/DED in Botswana, GTZ/BORDA in Namibia and GTZ/DED in Lesotho, each in cooperation with local government representatives. In addition Aussie Austin of CSIR South Africa will join the initiative.

!!! If you are interested in more information, contact : [heinz-peter.mang@gtz.de](mailto:heinz-peter.mang@gtz.de)

#### Burkina Faso: ONEA project in Ougadougou continues

The GTZ has assigned Dorsch Consult to prepare a future ecosan component for the sanitation of Ouagadougou, in the framework of their consultation work to the national water authority in Burkina Faso. At the same time the NGOs CREPA and BOATA will also be working to prepare an ecosan pilot scheme in Ouagadougou on behalf European Union.

!!! For more information contact: [crepa@fasonet.bf](mailto:crepa@fasonet.bf)

#### China: Yang Song ecosan workshop report now available in Chinese and English

Yang Song was named as a “model township” for small-town construction in 1997. This status obliges the government to develop the industrial and urban sector, and to protect and improve environmental conditions. With regard to the model-status of Yang Song township and the upcoming Beijing Olympic games in 2008, the local council is currently considering various treatment technologies for municipal wastewater and an ecological sanitation strategy for the urban and rural district.

To demonstrate the application of ecosan-principles in township planning in China an ecosan baseline study was carried out in the township of Yang Song summer 2002. The study aims to come out with a definition of an ecosan-strategy for the township of Yang Song and could be the base for joint project proposals in the field of integrated ecological sanitation, preferably suitable for innovative technologies.

A workshop “Ecological sanitation for eco model cities”, jointly organized by the People’s Government of Yang Song, the German Agency for Technical Cooperation (GTZ) and the Institute for Energy and Environment Protection (IEEP), Beijing, was held in Yang Song Township, Beijing City in March 2003. Within that workshop ecosan principles were introduced to the inhabitants and the baseline study was presented to discuss and plan further steps for the implementation of ecosan in Yang Song.

Both the workshop report and the baseline study are ready for download now.

**!!! downloads:** <http://www.gtz.de/ecosan/download/workshop-yangsong-chin.pdf>  
<http://www.gtz.de/ecosan/download/workshop-yangsong-eng.pdf>  
<http://www.gtz.de/ecosan/download/baseline-yangsong-chin.pdf>  
<http://www.gtz.de/ecosan/download/baseline-yangsong-eng.pdf>

### **China: Sino-German eco-City-programme launches bidding process for project component including ecosan**

The Eco City Planning and Management Programme is a Sino-German cooperation Programme, implemented by the municipal governments of Yangzhou and Changzhou and the GTZ. The provincial government of Jiangsu, through the Department of Foreign Trade and Economic Cooperation (DOFTEC), is the executing agency of the programme. The programme contributes to a strengthening of the Eco City strategies in China for a more sustainable (socially, economically, and ecologically balanced and efficiently managed) urbanization process. It has now advertised the post of an adviser.

**!!! more information:** <http://www.ecocity-programme.org>

### **Cuba: agreements signed for ecosan baseline studies in Havana**

The agreements for feasibility studies for the implementation of ecosan projects in the province of Havana have now been signed. The project will start in September 2003. Partners in this project are the Instituto de Investigaciones Fundamentales en Agricultura Tropical (INIFAT), the Instituto de Investigaciones Porcinas (IPP), Centro de Investigaciones Hidraulicas- CUJAE, and GTZ ecosan. A national workshop will be held from 19-21 November 2003 in Havana in co-operation with EPROYIV Consulting and SARAR Transformación.

**!!! for more information, please contact:** [eproiyiv@ceniai.inf.cu](mailto:eproiyiv@ceniai.inf.cu)

### **Ecuador : ecosan grassroot workshop and project idea in Pinllo**

In a part of the town Ambato in Ecuador a successful ecosan workshop was held by the former GTZ ecosan trainee Jenny Aragundy. Since people are in need of alternative solutions and are also open for reuse in agriculture, adapted ecosan solutions for the region were discussed and possibilities for the realisation of an ecosan project are currently being investigated.

**!!! If you are interested in more information contact:** [Jenny.Aragundy@web.de](mailto:Jenny.Aragundy@web.de)

### **Egypt: small bore sewer system and treatment pond for small community**

The GTZ-supported Egyptian project "Adapted Wastewater Disposal in the Governorate of Kafr El Sheikh", implemented by RODECO Consulting, and the Kafr El Sheikh Water and Sewerage Company (KWSC) will install a small bore sewer and pond treatment system in the jointly selected small village Al Mouffy Al Kobra. It will be operated as a community run low cost system which is quite a new approach for Egypt, will serve as a pilot site for comparable systems in the Governorate, and is a first step towards the introduction of ecosan solutions for this region.

**!!! If you are interested in more information:** [rodeco@dataxprs.com.eg](mailto:rodeco@dataxprs.com.eg)

### **India: ecological sanitation concepts for poor settlements in tropical high density areas**

To network with other agencies involved in ecological sanitation, the NGO ACTS Ministries has organised an "ecosan workshop" in Bangalore together with BORDA-India/Germany; GTZ-ecosan-Germany and seecon-Switzerland. The workshop looked at perspectives and requirements for ecosan projects in urban and rural areas in South and South East Asia; lessons learned and perspectives of the Bangalore case studies; principles of "good ecosan projects," problems and how to avoid them and other issues.

Based on these experiences the International Centre of Ecological Engineering and the Indian Centre for Scientific Research ACTS has carried out a Swiss-Indian cooperation project. In a Bangalore slum the installation of toilet facilities, recycling of their

wastewater in a composting process together with garbage from the city and educational measures for the slum dwellers were combined.

**!!! For more information on the workshop see the following sources:**

<http://www.deccanherald.com/deccanherald/jun18/c4.asp>

<http://www.hinduonnet.com/thehindu/2003/06/16/stories/2003061607550300.htm>

<http://www.deccanherald.com/deccanherald/jun17/c3.asp>

**!!! Or contact: [johannes.heeb@seecon.ch](mailto:johannes.heeb@seecon.ch)**

### **Jemen: Feasibility study on ecosan**

After a fact finding mission in November 2002 a feasibility study concerning the applicability of ecosan in the four towns in the program "Provincial Towns program II - Water Supply and sanitation in the towns Al Shehr, Jaár, Jiblah and Zunjibar" (financed by KfW) aimed at proposing four ecosan demonstration projects is presently being carried out by the German MVV Consultants and Otterwasser, supported by the GTZ ecosan project.

**!!! If you are interested in more information: [oldenburg@otterwasser.de](mailto:oldenburg@otterwasser.de)**

### **Jordan: Jordanian-German cooperation project "Use of treated wastewater" has started**

Succeeding the Jordanian-German cooperation project for the use of brackish water in the Jordan valley, the new project "Use of treated wastewater in the Jordan Valley", supported by GTZ, has started in January 2003.

**!!! If you are interested in more information: [bwp@go.com.jo](mailto:bwp@go.com.jo)**

### **Sambia: regional ecosan workshop in preparation**

Within the German-Sambian Water Programme a regional workshop on ecosan is planned in order to strengthen several local ecosan initiatives and contacts in the Southern Africa region as a preparation for practical ecosan pilot measures.

**!!! If you are interested in more information:**

[werchota@zamnet.zm](mailto:werchota@zamnet.zm) or [simataa@eudoramail.com](mailto:simataa@eudoramail.com)

## **Project news**

### **...of other partners**

### **Mosambique: Introducing ecosan to Northern Mosambique**

Water Aid and ESTAMOS are successfully introducing ecosan in a range of contexts and are proving ecosan to be a viable option for Mozambique. In Niassa two types of latrines were installed: The Fossa Alterna composting toilet with 2 shallow pits and the small Arbour Loo with a moveable superstructure and a pit serving as a "plant pot" when it is full.

The team considers the following factors as contributing to the success:

- the use of participatory methods and social marketing tools including diverse media activating the users
- an ongoing monitoring and evaluation leading to a continuing active learning and modifications process
- the offer of a range of options people can decide for

As a result many people even invest in the alternative sanitation solutions if they already have a conventional one because of the remarkable advantages such as less odours, flies, space saving, simple handling and stability in the rainy season, fertilisation success and last but not least prestige.

**!!! Further information: [www.wateraid.org.uk](http://www.wateraid.org.uk) or**

**!!! contact: [wateraid@wateraid.org.uk](mailto:wateraid@wateraid.org.uk)**



### Uganda: Operational plan to promote and develop ecosan starts now

The Ecosan-Club Austria has just started to support the implementation of a one year operational plan to promote and develop ecological sanitation in Uganda (Directorate for Water Development). Within that context EcoSan Training courses in Northern Uganda (next to take place in Matany, Moroto district from September 22-26, 2003) are organised.

!!! For further information please contact: Markus Lechner, [office@ecosan.at](mailto:office@ecosan.at)

### Uganda: Case study in Lake Victoria fishing village

In March 2002, NETWAS, funded by Lake Victoria Environment Management Programme (LVEMP) completed the construction of the Community latrines, in Pdimu, a village south west of Kampala. Two blocks of double vault latrines with 500 l urine collection tanks were constructed. The urine harvested from the facilities is taken to the gardens of some farmers who stay near the landing site. The balance is rather favourable: The facilities are well accepted by the population paying a certain fee per visit. Statistics show that three times more women, relieved because otherwise they could only defecate in the nature, use the facilities than men. A short report on this project is published.

!!! download: [www.netwasgroup.com/newsletter/articles/2003/05/13](http://www.netwasgroup.com/newsletter/articles/2003/05/13)

### New products

#### software

### SANEX™

SANEX™ was developed by Thomas Loetscher at the Advanced Wastewater Management Centre (AWMC) at the University of Queensland, Australia. The project was co-funded by the Swiss Development Cooperation (SDC). It is a non-commercial computer program to support planners in assessing the suitability of sanitation systems (e.g. latrines, septic tanks, and sewerage) for communities in developing countries. It uses socio-cultural, financial and technical criteria in connection with multicriterion decision analysis techniques to assess the merits of 83 sanitation systems with regards to the circumstances and preferences of beneficiaries. It can also estimate the capital and recurrent costs of these systems. The software runs in the MS Windows operating environment and can be downloaded at no cost in the Internet.

Yet the program is restricted to conventional sanitation systems, but ecosan solutions might be included in a later version. Feedback is appreciated by Thomas Loetscher.

!!! download: [www.awmc.uq.edu.au/download/sanex/](http://www.awmc.uq.edu.au/download/sanex/) If this should not work:

!!! please contact: [tlotscher@decisionscape.com.au](mailto:tlotscher@decisionscape.com.au)

### Recent publications

#### ...reports, articles

### Short project report: ecosan in Mali

Beginning in September 2000 a GTZ ecosan pilot project was launched in Koulikoro, a small town near Bamako, Mali. In this project ecosan principles are used to solve the sanitation and water problem of the city. Along with a fundamental analysis of the practicability and acceptance of ecosan in Mali, the economic viability of ecosan was considered, several pilot installations were constructed and their use optimised. A short report of this pilot project is now available for download in French and German.

!!! Download: <http://www.gtz.de/ecosan/download/Mali-Koulikoro-dt.pdf>  
<http://www.gtz.de/ecosan/download/Mali-Koulikoro-fr.pdf>

### Lambertsmühle: Sustainable wastewater management in rural areas

As one of the first projects in Germany with a separate urine collection, the Wupperverband, working in the framework of a research project, has been implementing a partial flow oriented wastewater system with different treatment steps since 1998 in co-operation with several partners. In the Lambertsmuehle, a historical water mill with museum and dwellings in the "Bergisches Land", the practicability of

such alternative technologies and treatment processes has been successfully tested and proven. The project report can be downloaded as PDF document from the Wupperverband web-site.

!!! Download: <http://www.wupperverband.de/forschung/lambert/index.htm>

!!! For further information contact: [wey@wupperverband.de](mailto:wey@wupperverband.de)

### Report of 2nd International Symposium on ecological sanitation in Lübeck

The ATV-DVWK has published a comprising report on the Lübeck Symposium in its magazin "Korrespondenz Abwasser" , edition August 2003, which is available for download now.

!!! Download: <http://www.gtz.de/ecosan/download/ecosan-Symposium-KAreport.pdf>

### BGR-report on groundwater pollution in Francistown (Botswana)

**B. Mafa (2003): "Environmental Hydrogeology of Francistown", editor Dr. B. Vogel, BGR / GS Lobatse, Botswana / Germany, 81 pages, English.**

The German Federal Institute for Geosciences and Natural Resources (BGR) and the Department of Geological Survey (DGS) in Lobatse, Botswana carried out this study showing the vulnerability of geological areas through economic growth and the connected environmental hazards by the example of the village of Ramotswa, which experienced one of Botswana's worst cases of groundwater pollution by domestic wastewater during the 1990s. It contains environmental data sets for regional and urban planners, environmental hydrogeology, hazards, groundwater flow and quality maps.

!!! download: <http://www.gtz.de/ecosan/download/bgr-francistown.pdf>

### CSE India: The crucial role of rain in urban water management

Sunita Narain, director of the Center for Science and Environment (CSE) India has published an interesting article about this topic called " Why is rain such a tragedy for cities?" in the latest CSE newsletter. For those interested in the pure text we provide a downloadable copy:

!!! download: <http://www.gtz.de/ecosan/download/rainwater-narain.pdf>

!! All readers interested in the work of CSE India and its Down to Earth newsletter, please go to [www.cseindia.org](http://www.cseindia.org) or [cse@cseindia.org](mailto:cse@cseindia.org)

### IRC fact sheet: "Participation of SSIP and CBOs in human waste issues"

The new fact sheet on IRC's (International Water and Sanitation Centre, Netherlands) present main focus in Environmental Sanitation, the "participation of SSIP and CBOs in human waste issues" shows experience and approaches of IRC in involving the private sector in sanitation issues. Planned activities and outputs of the IRC activities are described and cooperation is welcome.

!!! more information: <http://www.gtz.de/ecosan/download/irc-factsheet.pdf> or

!!! contact: Jo Smet, IRC, [smet@irc.nl](mailto:smet@irc.nl)

### New WSSCC paper: "Kyoto: The agenda has changed"

This new WSSCC publication is "a ten-minute briefing prepared for decision-makers and others attending the Third World Water Forum in Kyoto". It describes the failures in hygiene, sanitation and water supply during the last 50 years as a largely hidden scandal that causes diseases and deaths, environmental damage and hinders the development of people and nations. The WSSCC believes that services are more successful when people feel they are responsible for, and benefit from, them and especially when the low-level private sector plays a substantial role. The WSSCC statement and strategy concerning the subject can be viewed under

!!! download: <http://www.gtz.de/ecosan/download/kyoto-agenda-changed.pdf>

!!! More about WSSCC and the Global WASH campaign: [www.wsscc.org](http://www.wsscc.org)

### Recent publications

#### ...books to order

### Two New IWA publications

**Peter A. Wilderer, J. Zhu, N. Schwarzenbeck (ed.) (07/2003): "Water in China", IWA Publishing, 264 pages, ISBN: 1843395010, IWA members / non members price: US\$/€ 78.00 / US\$/€ 104.00, English.**

Rapid growth of cities and industries in China are having dramatic impacts on the environment. The articles compiled in the book describe the current situation in China with respect to surface water quality and wastewater treatment, and provide results of specific research projects, leading the way to a China-specific up-to-date water treatment technology.

!!! info and order: <http://www.iwapublishing.com/template.cfm?name=isbn1843395010>

**Joan Stephenson (06/2003) "Our World of Water", IWA publishing, 36pages, ISBN: 1843390507, IWA members / non members price: US\$/€ 16,20 / US\$/€ 18.00, English.**

This children's book is full of useful information on water and children's contributions are included in the form of drawings, paintings, poems and stories. Readers will learn about the scientific origins of water and how the water cycle works, as well as the importance of a clean, healthy water supply to people in the developing world.

!!! info and order: <http://www.iwapublishing.com/template.cfm?name=isbn1843390507>

### IPPR: "Clean water, safe sanitation : an agenda for the Kyoto World Water Forum and beyond"

**Mepham, D. (2003): "Clean water, safe sanitation : an agenda for the Kyoto World Water Forum and beyond", IPPR, UK, ISBN 1860302157, £ 8.95, English.**

International targets to reduce poverty and improve health cannot be met without substantial additional resources for clean water and safe sanitation, according to a report published by the Institute for Public Policy Research (IPPR). "Six months after the World Summit for Sustainable Development in Johannesburg precious little has happened to deliver on the pledges made there and investment in water and sanitation continues to fall dismally short of what is required", says IPPR researcher David Mepham. With contributions from leading sector specialists including WSSCC former chairman Richard Jolly, the report's key policy recommendations include a broad array of political and private measures to be taken.

!!! more information: <http://www.ippr.org/home/index.php?table=pubs&id=339>

!!! Contact: David Mepham, Senior Research Fellow International Development 020 7470 0021 / 07951 043 672 / [d.mepham@ippr.org](mailto:d.mepham@ippr.org)

### Recent publications

#### ...in the web

### Thematic overview papers of IRC

The International Water and Sanitation Centre (IRC) provides TOPs (Thematic Overview Papers), which combine a concise digest of recent experiences, expert opinions and foreseeable trends with links to the most informative publications, websites and research information. Each TOP contains immediate information to give a grounding in the topic concerned, with direct access to more detailed coverage of your own special interests, plus contact details of resource centres or individuals who can give local help. TOPs are reviewed by recognised experts and updated continually. They also provide a chance to submit your own experiences or to ask questions via the Web.

At present TOPs are available on: hygiene promotion; advocacy; and HIV/AIDS and water. Under preparation are papers on: cost recovery; sanitation policies; WATSAN and livelihoods; integrated water resources management; school sanitation and hygiene education; and environmental sanitation.

!!! Download: <http://www.irc.nl/page.php/15>

Especially recommendable is the TOP "Advocacy for Water, Environmental Sanitation and Hygiene".

!!! Download: <http://www.irc.nl/page.php/68>

### World bank goes internet with WSP newsletter

The Worldbank Water and Sanitation Programme WSP now publishes its upgraded newsletter, delivered every six weeks. This so called "sector information resource" with more than 10.000 subscribers presents WSP and sector news, learning resources and publications, events, partner news, best practises and more.

!!! more information about the WSP: <http://www.wsp.org/english/index.html>

!!! subscription for the newsletter: [www.smartbrief.com/access](http://www.smartbrief.com/access)

### New Elsevier virtual „Journal of Environmental Sustainability“

The new virtual „Journal of Environmental Sustainability“ on the Website of Elsevier, a well known publisher of scientific, technical and health information, lists articles with an environmental sustainability component recently published in a wide range of Elsevier journals. They are personally edited by the Editors [Dr Naoyuki Funamizu](#) and [Professor Toshimasa Oh-hara](#).

!!! download: <http://www.elsevier.com/vj/sustainability>

### HTN - Network for cost effective Technologies in water supply online

HTN, the Network for cost effective Technologies in water supply is managed by the Skat Foundation in Switzerland. It aims to facilitate the provision of safe water and sanitation to the poor and deprived through the promotion of sustainable and affordable technologies – primarily hand-pump technology. On their website lots of information and sources are provided e.g. on low cost drilling, supply chains, small communities and household solutions as well as standardisation.

!!! more information: [www.htnweb.com](http://www.htnweb.com)

### Renewed Rainwater harvesting website of CSE India

The Indian Centre for Science and Environment (CSE) has renewed it's website on rainwater harvesting highlighting traditional and contemporary systems and identifying projects in different Indian regions or cities by a search facility. A FAQ (frequently asked questions) section for queries on techniques, implementation, costs, space requirements and efficacy gives precious information.

!!! more info: <http://www.rainwaterharvesting.org>

### Global Water Intelligence (GWI)

This monthly, 32-page newsletter published by Media Analytics Ltd., a privately owned publishing and information services group, provides analysis and strategic data on the international water market. It boasts a network of specialist water and financial journalists many based in country and with access to exclusive regional data.

!!! more information: <http://globalwaterintel.com>

## Recent publications

### ...conference papers

## Final version of “10 Recommendations for action from the Lübeck Symposium on ecological sanitation, April 2003” available now

350 experts from 60 countries met in Lübeck from April 7 to 11, 2003 at the 2<sup>nd</sup> International Symposium on ecological sanitation organised by GTZ and IWA. One of the objectives of the event was to formulate priority actions for the further promotion of ecosan and for bringing ecosan to scale. The participants agreed on 10 recommendations dealing with the following concerns:

1. Promote ecosan-systems as preferred solutions in rural and peri-urban areas
2. Accelerate large scale applications of ecosan principles in urban areas
3. Promote agricultural use
4. Raise awareness and create demand
5. Ensure participation of all stakeholders in the planning, design, implementation and monitoring processes
6. Provide for decisions on an informed basis
7. Promote education and training for ecosan
8. Adapt the regulatory framework where appropriate
9. Finance ecosan
10. Apply ecosan principles to international and national Action Plans and Guidelines

**!!! Download the complete text in four languages (1,1 MB each):**

<http://www.gtz.de/ecosan/download/ecosan-symposium-Luebeck-Recommendations-for-action-eng.pdf>

<http://www.gtz.de/ecosan/download/ecosan-symposium-Luebeck-Recommendations-for-action-fr.pdf>

<http://www.gtz.de/ecosan/download/ecosan-symposium-Luebeck-Recommendations-for-action-dt.pdf>

<http://www.gtz.de/ecosan/download/ecosan-symposium-Luebeck-Recommendations-for-action-esp.pdf>

## Minutes of the 1<sup>st</sup> IWA specialist group conference on Sustainable Sanitation, Lübeck, April 2003

As part of the the “2<sup>nd</sup> International Symposium on ecological sanitation” in Lübeck from April 7-11, 2003 the IWA specialist group conference named above was held. In the minutes the participants agreed on the future action, PR and organisational concerns of the group. A list of participants is added.

**!!! Download:**

<http://www.gtz.de/ecosan/download/ecosan-Symposium-Luebeck-IWA-Meeting.pdf>

## Minutes of the side event “awareness and participation”, 2<sup>nd</sup> International ecosan Symposium, Lübeck, April 2003

During the Lübeck Symposium several side events were held. The one on awareness and participation aimed at embracing the experience of an international range of ecosan-experts in discussing these aspects and to begin to develop conjointly guidelines and tools for the implementation of ecosan-projects. Results of a literature study concerning available sources dealing with that subject in an ecosan context were presented and the participants pointed out a wide range of open questions. As a result of this side-event, the participants decided to found an international working group working via Internet to address the issues of awareness, participation and acceptance in ecosan-projects and to exchange as much knowledge as possible.

**!!! Download:**

<http://www.gtz.de/ecosan/download/ecosan-symposium-Luebeck-awareness.pdf>

## The EU between Johannesburg follow-up and Cancun politics

The conference report of the public hearing: “The EU between Johannesburg follow-up and Cancun politics: How to set the right framework for investment rules” is available for download. It summarizes the presentations, key statements and arguments

delivered at the hearing that was held on March 6th in the European Parliament in Brussels.

!!! Info: [http://www.boell.be/download/Joburg\\_Cancun\\_Report.pdf](http://www.boell.be/download/Joburg_Cancun_Report.pdf)

!!! Or: <http://www.boell.de>

## Events

You will find an extensive list of upcoming events on our homepage at:

<http://www.gtz.de/ecosan/english/events.htm>

## ...coming soon

### The Netherlands: 6<sup>th</sup> Water an Information Summit September 9-12, 2003, Delft

**Organiser:** International Water and Sanitation Center (IRC)

The summit will be held in Europe for the first time in September 2003. It will focus on strategies to overcome the "digital divide" between North and South and within the South and to share knowledge and information in support of the management of the water and sanitation sectors.

WIS-6 brings together communication specialists, information managers, web site managers, academics, scientists, policy-makers, and other water information users and providers. WIS-6 will provide a forum to discuss the state of the art and trends in knowledge management, the application of web-based technologies and the formation of partnerships. One focus for the Summit will be the future of water portals - web based interactive sites which make it easy to search water related web sites.

Small working groups will deal with topics, such as e-learning, water portal development, adoption of metadata standards, and water information assistance services (help desks). The Summit will be followed by a three and a half day knowledge management workshop.

!!! Contact: <http://www.irc.nl/news/wis6.html>

### South Africa: IWA symposium on health-related water microbiology; 5th IWA biofilm congress

September 14-17, 2003, Cape Town

**Organiser:** International Water Association (IWA)

**The Symposium** forms part of a number of events in a Conference entitled "Water as the Key to Sustainable Development in Africa". Special attention will be given to challenges related to the control of waterborne diseases in Africa and other developing parts of the world. This includes amongst others a session on strategies for control of the quality of domestic water supplies stored in homes without piped supplies, a situation typical of many developing communities worldwide.

The programme has been compiled from some 170 submissions for paper or poster presentation from 36 countries worldwide, reflecting the international interest. It is the largest symposium on waterborne diseases yet to be held on the continent of Africa.

**The fifth IWA-Biofilm Systems conference** aims to review the current trends and developments in biofilm research and application related to the water field. Fundamental, Process Engineering and Applied aspects will be treated.

Topics to be covered at the conference:

- Application of biofilm systems in drinking water and wastewater treatment
- Engineering aspects of Biofilm processes
- Basic Biofilm Studies
- Biofilm Modelling

!!! Info: <http://www.iwaconferences.co.za/Pages/Home.html>

**Vietnam: Water and Wastewater Asia, conference and exhibition**  
**September 23-25, 2003, Ho Chi Minh City**

**Organiser:** Penn Well Corporation

This event will confront important issues within this dynamic industry. It will bring together over 2000 key decision making industry professionals for networking and strengthening their present contacts.

**!!! For any further information:** [http://wwa2003.events.pennnet.com/request\\_info.cfm](http://wwa2003.events.pennnet.com/request_info.cfm)

**!!! Info:** <http://wwa2003.events.pennnet.com>

**USA: 12<sup>th</sup> Northwest On-Site Wastewater Treatment Short Course and Equipment Exhibition**  
**September 22-23, 2003, Seattle, Washington**

**Organiser:** Washington Onsite Sewage Association (WOSSA)

This is the premier meeting of its kind in the West. Previous short courses have attracted 400 participants and 40 exhibitors.

Participants will hear national experts discuss the latest information on small-scale systems. They will interact with on-site wastewater professionals from around the country, compare notes and learn practical tips to take back to their job.

Topics will be:

- New tools to make your job more efficient
- Performance issues that affect human health and environment
- Methods to develop practical and affordable standards in water quality
- New concepts in small scale decentralized sewer and wastewater treatment systems

The conference will be held in English.

**!!! More Infos:** <http://www.engr.washington.edu/epp/Wwt/>

**Germany: Entsorga, The Global Environmental Fair**  
**September 23-27, 2003, Köln**

**Organisers:** Kölnmesse GmbH

This biennial event will serve as a most comprehensive and international presentation platform of the global environment sector. ENTSORGA Fair aims to cover a wide spectrum of topics concerning water and wastewater, waste and recycling, air and noise, research and organisation, technology and logistics. A wide range of lectures in thematical blocks and a number of interesting guided tours will be offered. Hundreds of exhibitors will present their products and services.

**!!! Info:** <http://www.koelnmesse.de/wEnglisch/entsorga/index.htm>

**Germany: 5th Conference on sanitary and process engineering**  
**September 30 –October 1, 2003, Aachen**

**Organisers:** Institute for sanitary engineering, Institute for process engineering

The conference motto is: "Membrane technics in drinking water and wasetwater treatement - perspectives, new developments, experiences in Germany and abroad

The main topics of the conference will be research and development, retention of micro pollutants, planning and calculation of installations, membrane and installation technology, operation technology, operational experiences and operating costs, legal, water-management and hygienic aspects.

Conference language will be German.

!!! Info: [http://www.isa.rwth-aachen.de/content\\_templates/ctpl\\_list/ctpl\\_calendar.asp](http://www.isa.rwth-aachen.de/content_templates/ctpl_list/ctpl_calendar.asp)

!!! Contact: Dr. Michael Krumm, [krumm@isa.rwth-aachen.de](mailto:krumm@isa.rwth-aachen.de)

**Thailand: International exhibition and conference on water technology and water management**

**October 2-4, 2003, Bangkok**

**Organisers:** Aquatech Business Media, Bangkok RAI

The Aquatech Asia will be a showcase of international water technology, water management, new technologies and innovations, making it a recognised meeting place for buyers and sellers, professionals of the governmental and private sector active in the Asian water market.

Thematical sectors of the conference and the trade fair will be:

- Treatment of drinking, process and waste water
- Infrastructure, transport/distribution and storage
- Process control technology, data processing
- Research and consultancy
- Utilities and more

!!! Info: <http://www.aquatechtrade.com/asia>

**Bahrain: Water Middle East 2003**

**October 6-8, Manama**

**Organisers:** Shaikh Abdulla Bin Salman Al Khalifa, Minister of Electricity and Water

The topics of the exhibition and conference stretch from access to and utilisation of resources up to efficient distribution and water management systems.

Preliminary conference and exhibition topics are:

challenges of water resources management in the Middle East, new water production technologies, costs, life-span and limitations of desalination plants, environmental protection and prevention of water pollution, water recovery, water treatment and water recycling technologies, quality of drinking water, waste water management, rehabilitation of plants and pipelines, water catchments, storage, pipelines and distribution systems, agricultural irrigation equipment, chemical supplies, technical consultants, services and support

The conference will be held in English.

!!! More information: <http://www.bahrainexhibitions.com/wme2003/index.html>

**Singapore: Plumbing and Restroom Asia**

**October 8-10, 2003, Singapore Expo**

**Organisers:** CEMS, SIA, Singapore Contractors Association, Singapore Institute of Architects Building Centre

The exhibition takes place in the context of "Build.AsiaPac - the international exhibitions for building services and construction technologies for Asia Pacific". Amongst several events concerning diverse construction sectors this one offers the following exhibition profile: Sanitary Ware, Fittings & Plumbing Technology, Accessories, Services & Maintenance Technology

Visitor profile: architects, building contractors, developers, managers, plumbers, plumbing engineers, cleaning contractors, interior designers, environmental officers, estate managers, maintenance professionals, sanitaryware traders & professionals.

!!! More information: <http://www.buildasiapac.com/>



**Germany: „2. Regenwassertage“**  
**October 15-16, 2003, Landau**

**Organiser:** ATV-DVWK

The event will demonstrate the recent national trends in rainwater infiltration, - harvesting and -treatment by lectures and a thematical exhibition.

The conference will be held in German.

**!!! information:** <http://www.atv-dvwk.de>

**!!! registration:** [kirstein@atv.de](mailto:kirstein@atv.de)

**Germany: Wastewater hygienisation in constructed wetlands, ponds and related systems**  
**November, 6-7, 2003, Leipzig**

**Organiser:** Umweltforschungszentrum Leipzig and Bildungs- und Demonstrationszentrum für dezentrale Abwasser-behandlung BDZ e.V.

This International conference aims to summarise the present knowledge and to work on the optimisation of the processes leading to a provision of hygienically safe water through nature oriented treatment processes.

Topics will be:

- Main mechanisms of parasite and pathogene removal
- Engineering and design optimisation of treatment systems
- Legislation for wastewater reuse
- Wastewater reuse and hygienic risks
- Case studies

**!!! information:** <http://www.ufz.de/spb/phyto/Flyer-Hyg.pdf>

**!!! confrence secretariat:** [hygienisation@rz.ufz.de](mailto:hygienisation@rz.ufz.de)

**China: 5<sup>th</sup> Fair “Water China”**  
**March 10-13, 2004, Guangzhou**

**Organiser:** China Foreign Trade Centre Group, Ministry of Foreign Trade and Economic Cooperation of China.

Since its inception in 2000, Water China has become the largest trade fair for the water industry in China. In 2003 267 exhibitors and 11,700 participants from 16 nations attended. In 2004 more than 300 exhibitors are expected. The fair will be divided into the topics of water, wastewater and water treatment, pumps, valves and pipes. European businesses have possibility to participate as part of a European Pavilion at the fair.

**!!! Interested businesses should contact:** MEREBO Messe Marketing, Jakobikirchhof 9, D-20095 Hamburg, Projektleitung: Frank Bode, Telefon +49-40-6087 6926, Fax +49-40-6087 6927, E-Mail [bode@merebo.de](mailto:bode@merebo.de)

**!!! more information:** <http://www.waterchina.merebo.com>

**Senegal: Global WASH Forum – postponed!**  
**March 18-22, 2003, Dakar**  
**E-conference start: September 2003**

**Organisers:** Water and Sanitation Collaborative Council (WSSCC)

The objectives of the Forum are: (a) to draw lessons on how successful water, sanitation and hygiene programs, sector reforms and development partnerships are in leading to the eradication of poverty, and (b) to strengthen regional and national partnership

initiatives aimed at attaining the goals of the World Summit on Sustainable Development.

The Forum will be divided into three parts as follows:

Part I: Creating an enabling environment to fight poverty and promote sanitation and hygiene

Part II: Strengthening regional and national initiatives in water supply, sanitation and hygiene

Part III: Meeting the goals of the World Summit on Sustainable Development

**In September 2003 a preparatory E-conference will start!**

**!!! Subscription for E-conference: [gcostantini@gruppocerfe.org](mailto:gcostantini@gruppocerfe.org)**

**!!! More information: [http://www.wsscc.org/load.cfm?edit\\_id=332](http://www.wsscc.org/load.cfm?edit_id=332)**

**Korea: International Specialized Conference on Water Environment-Membrane Technology (WEMT 2004)**  
**June 7-10,2004, Seoul**

**Organiser:** International Water Association (IWA)

This conference will provide an excellent environment for promoting the dissemination of modern thinking and good practice in the sector, with the opportunity to quickly review the latest developments in membrane technology for water environment.

Topics of interest include:

- Membrane hybrid technologies for water environment
- Biofouling and molecular biology in membrane bioreactor
- Physicochemical approaches to anti-fouling in aqua membrane processes
- Process modelling and simulation in membrane separation
- Case studies: membrane processes for drinking water and wastewater treatment
- Novel membrane materials/applications
- Novel membrane hybrid systems for toxic chemical removal from water environment
- Other related topics

Important Dates to Remember

Extended abstracts (2 pages) deadline: November 30 , 2003

Deadline for receipt of final manuscript: April 1, 2004

**!!! More information: <http://www.wemt2004.org>**

**France: 9th International Conference on Wetland Systems for Water Pollution Control & 6th International Conference on Waste Stabilisation Ponds**  
**September 27-30, 2004, Avignon**

**Organiser:** International Water Association (IWA)

Constructed wetlands and stabilisation ponds are both extensive techniques which are used worldwide for treating wastewaters. They offer similar advantages: low energy consumption, low operation and maintenance costs and skills required, while providing high treatment efficiency. In addition, there is a growing interest for the possibilities offered by combinations of stabilisation ponds and constructed wetlands.

Therefore IWA Use of Macrophytes in Water Pollution Control and Waste Stabilisation Ponds specialist groups have decided to hold their International conferences at the same venue, in order to discuss issues of common interest. Joint sessions are planned.

Deadlines:

26 Sept 2003 - Submission of extended abstracts for oral and poster presentations

19 Dec 2003 - Author notification

01 May 2004 - Submission of full manuscripts

!!! information: [wetlands@lyon.cemagref.fr](mailto:wetlands@lyon.cemagref.fr)

or [http://www.iwahq.org.uk/template.cfm?name=wetland\\_systems](http://www.iwahq.org.uk/template.cfm?name=wetland_systems)

## Workshops

## training courses

### El Salvador: Taller Regional de entrenamiento saneamiento ecologico October 22-29, 2003

**Organiser:** WASTE Holland, OIKOS Salvador in Koop. mit GTZ ecosan

The one-week Spanish language ecosan Workshop for practitioners and scientists should serve to present and disseminate the ecosan idea in El Salvador. The seminar will consist of lectures, discussions and a field visit to an existing ecosan project. Those interested in participating should use contact address below.

!!! For further information: [gdebruijne@waste.nl](mailto:gdebruijne@waste.nl); [isbelmachado@hotmail.com](mailto:isbelmachado@hotmail.com)

### India: 2-week training course on "Ecological Alternatives in Sanitation" October 19-31, 2003, Bangalore

**Organiser:** EcoSanRes-programme, Sweden

The course includes all aspects on ecosan ranging from hygiene/microbiology, nutrient reuse/food production, greywater treatment, groundwater protection, technical options for urban areas, socio-cultural conditions, economic and strategic issues.

Professionals from public, NGO and private sector who are engaged in urban sanitation and water management are eligible as well as PhD and Master students involved in ecosan studies.

!!! More information: Jan-Olof Drangert, Linköping University, Sweden  
[jandr@tema.liu.se](mailto:jandr@tema.liu.se) and S.S. Wilson, ACTS, Bangalore [gnanakan@vsnl.com](mailto:gnanakan@vsnl.com)

## Links and tips

### Links on GTZ ecosan homepage

You'll find an extensive list of interesting links on our homepage at:

<http://www.gtz.de/ecosan/links.html>

We would greatly appreciate your calling our attention to additional links of interest:

[ecosan@gtz.de](mailto:ecosan@gtz.de)

### New links (in alphabetical order)

#### IWA specialist group on ecological sanitation

[www.ecosan.org](http://www.ecosan.org)

Homepage of the renamed IWA specialist group on ecological sanitation

#### NEWater Sustainable Water Supply

[www.pub.gov.sg/NEWater.html](http://www.pub.gov.sg/NEWater.html)

Website of Singapore Water Reclamation Study. Technical and practical news around NEWater (wastewater purified by advanced dual membrane and ultraviolet technologies)

#### Updated WHO Water and Sanitation website

[www.who.int/water\\_sanitation\\_health/en/](http://www.who.int/water_sanitation_health/en/)

Revised site with all WHO relevant thematic information and an extended publication section.

#### Dezent-eG

[www.dezent-eg.de](http://www.dezent-eg.de)

„Genossenschaft zur Entwicklung dezentraler Regionalstrukturen im Umwelt- und Gewässerschutz“. PR, planning, studies, R+D, plant construction etc.

### **BOATA Mali**

[http://www.boata.de/EcoSan\\_Environnement/ecosan\\_environnement.html](http://www.boata.de/EcoSan_Environnement/ecosan_environnement.html)

Ecosan- site fo the «Bureau Ouest-Africain d'Appui Organisationnel et de Technologies Appropriées» (BOATA)

### **Homepage**

Would you like to know more about GTZ's sectoral project ecosan or about the subject in general?

If so, visit our homepage (expansion and update in progress):

<http://www.gtz.de/ecosan>

### **Newsletter**

If you would like to contact the administrators of this newsletter please send an e-mail to:

[owner-ecosan@mailserv.gtz.de](mailto:owner-ecosan@mailserv.gtz.de)

Your proposals for contributions to the newsletter, and any inquiries and comments you may have are always welcome.

### **Contact**

#### **The GTZ ecosan team:**

Christine Werner, Heinz-Peter Mang  
GTZ

Div. 44: Infrastructure and Environment  
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[heinz-peter.mang@gtz.de](mailto:heinz-peter.mang@gtz.de)

### **Mailing list / Newsletter - user information**

#### **How to use the ecosan mailing list**

You can interact with the Majordomo software of our mailing list server by e-mailing commands to:

[majordomo@mailserv.gtz.de](mailto:majordomo@mailserv.gtz.de)

Commands must be the only text in the e-mail, and not as part of the subject line! You can send several commands in one and the same e-mail message. Just be sure to start a new line for each command.

If you attach a signature block to the end of your e-mailed messages, the Majordomo software could perhaps mistake it for another command, so please enter the word "end" by itself in the line below the last command.

#### **Useful mailing-list commands:**

##### **subscribe ecosan**

Use this command to subscribe to the ecosan mailing list

##### **subscribe ecosan your.name@xy.org**

Use this command to receive the newsletter at an address other than that listed in your registration (e.g., if you send the e-mail from your workplace account, but wish to have the newsletter sent to your private e-mail address).

**unsubscribe ecosan**

Use this command to cancel your subscription.

**unsubscribe ecosan your.name@xy.org**

Use this command to de-register your receiving address, if this differs from the one from which you are currently using to send the request.

**info ecosan**

Use this command to request general introductory information about the ecosan mailing list.

**index ecosan**

Use this command to obtain a list of files sent so far via the mailing list.

**get ecosan <filename>**

Use this command to obtain a specific file sent via the mailing list (e.g., an archived newsletter).

**help**

Use this command to obtain information on how to use the Majordomo software.

**end**

Use this command to terminate a list of commands, e.g., especially if your mailer attaches an automatic signature.