





ecosan - newsletter - no. 7 - 02/2003 - 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. 7!

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:

Deutsch: <a href="http://www.gtz.de/ecosan/download/n17dt.pdf">http://www.gtz.de/ecosan/download/n17dt.pdf</a>
Spanisch: <a href="http://www.gtz.de/ecosan/download/n17esp.pdf">http://www.gtz.de/ecosan/download/n17esp.pdf</a>
Englisch: <a href="http://www.gtz.de/ecosan/download/n17eng.pdf">http://www.gtz.de/ecosan/download/n17eng.pdf</a>

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!

# In-house news

# 2nd International Symposium on Ecological Sanitation

including the IWA Specialist Group Conference on Sustainable Sanitation,

#### 7 - 11 April 2003, Lübeck, Germany

We are pleased to see that more than 170 interesting papers and posters by international experts, old and new, have been submitted for our symposium in Lübeck from 7-11 April! These will be presented in 9 thematic clusters and a poster exhibition. We are expecting between 350 and 400 participants from all over the world to attend the symposium, which will also include a technical exhibition, a day excursion in North Germany, a cultural and social programme and a one-week post-conference excursion to Denmark and Sweden. The conference will be held in English.

The 5-day symposium will be organized by GTZ on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ) in cooperation with the Specialist Group on Sustainable Sanitation of the International Water Association (IWA). Other sponsors are UNESCO, the Water Supply and Sanitation Collaborative Council (WSSCC), the World Bank Water and Sanitation Programme (WBWSP), the Swedish Sida (EcoSanRes) and MISTRA programmes (Urban Water), and various German organizations.

The symposium will begin with an **opening event** that will mainly take a closer look at the political side of the subject, with representatives of various ministries and specialist organizations, large international organizations such as the World Bank, UNDP, WHO etc. and major international NGOs, etc. in attendance. Following this, we shall then deal with diverse ecological sanitation approaches in **thematic clusters**:





- A: Progress, strategies and legislation
- B: Social and economic aspects
- C: Rural and periurban case studies
- D: Public health and ecological studies
- E: New technological developments and experiments
- F: Hygienic recycling in agriculture
- G: Feasibility studies
- H: Decision-making tools
- I: Urban case studies

One day of the symposium will be taken up with **excursions** to ecosan facilities in the Schleswig-Holstein and Hamburg area, during which small groups will inspect ecological housing schemes with compost toilets, greywater treatment plants, biogas facilities, vacuum sanitation plants and reed-bed sludge treatment plants.

Companies and projects will also have the opportunity to show exhibits in an **accompanying technical exhibition**. To do so, please contact the ecosan team at <a href="mailto:ecosan@gtz.de">ecosan@gtz.de</a>.

Depending on interest, there will also be a chance to deal with specific issues in more depth in **side events**. The **cultural-social programme** includes a reception with sparkling wine, guided sightseeing tours of the town and on Thursday 10 April 2003 a dinner for all symposium guests following a boat trip on the Trave.

Following the symposium we will embark on a **week-long excursion** to Denmark and southern Sweden from 12 to 19 April 2003, which will include operational innovative ecological sanitation schemes and ecosan elements as well as tourist highlights.

We would be very pleased to see you in Lübeck as well!

You can still register up until 28 Feb. 2003. If you register after this date, your participation will depend on the vacancies available.

You can find current information and booking forms as well as the detailed draft programme for the event at our homepage.

#### !!! For further information, please go to:

http://www.gtz.de/ecosan/english/symposium2.htm

# **EFTA 2003**

The Eschborn Sectoral Conferences (EFTA) 2003 will take place at GTZ Head Office in Eschborn, Germany on 24 and 25 June 2003.

The topic this year is 'Shaping the future: working with the young - visions, capabilities, social responsibility'. The ecosan project will contribute to this event with a paper entitled Introducing ecosan toilets for hygiene improvement and environmental education in schools.

The conference will be held in German.

!!! You can find the **latest information** on the Eschborn Sectoral Conferences in the coming weeks on the GTZ homepage at

http://www.gtz.de

#### Datasheets on ecosan - reference projects

In cooperation with SIDA's Swedish EcoSanRes programme, the technology working group in the GTZ ecosan project is currently starting to prepare a series of project datasheets on pilot or reference projects throughout the world. To compile an overall reference list, the key data on relevant ecosan projects by various organizations will be recorded in these project sheets.





To enable us collect and complete the requisite data, we would like all activists in ecosan to send us relevant information about projects they know about. If possible, the information should include the following data:

Country / project type / project title / name of planning institution / executing institution / supporting agency / technologies applied / type of reuse, use, recycling / costs / special know-how of planner / rated values / executing agency / contact persons / available documents / reports on experience / website / other publications. We would also be grateful if you could send us studies, reports, photographs or films on the project.

# !!! Please send this information by e-mail to ecosan@gtz.de

#### or by post to

Christine Werner, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH Postfach 5180, D-65726 Eschborn, Germany

#### New members of the ecosan team

We are happy to welcome four new members to the ecosan team.

Our new project assistant is the civil engineer **Susanne Kimmich** (specialized in water management). She succeeds the architect Jana Schlick, who has moved to Hamburg as a partner in Planco Consulting GmbH and is still assisting our project as a consultant, particularly in organizing the ecosan symposium. Susanne Kimmich worked for 6 years in a traditional engineering office for water management, planning and building sewage plants and leachate treatment plants. She then spent 3½ years at the Institut für Solare Energieversorgungstechnik at Kassel University researching into decentralized supply and disposal systems in the department for water and biomass.

The new junior staff members are **Papa Abdoulaye Fall**, Doctor of Biology (Technical University of Munich), who will assist in producing the newsletter, and **Patrick Bracken**, civil engineer in water management, and **Christiane Jung**, student of geo-ecology at the Technical University of Brunswick, who will both help to prepare the 2nd international symposium in Lübeck.

# Recent News

# EcoSan Club Vienna/Austria - platform for exchanging know-how on integral water management

The EcoSan Club was set up by people interested in ecosan and experts associated with the Institute for Soil Science at the University of Natural Resources and Applied Life Sciences (BOKU) in Vienna, Austria as a platform for information exchange and knowledge management relating to ecosan. Specific activities of the EcoSan Club include the commitment to spread ecosan principles, the international networking of actors (e.g. scientists, planners, legislative bodies, consumers), and collecting and compiling information on current developments in the sector and information management. One of the Club's founders is Andreas Knapp, who is currently working for the World Bank's Water and Sanitation Programme for Africa in ecological sanitation.

The first information event of the EcoSan Club took place in December 2002 under the title 'Shit happens' – more about this further on in this Newsletter.

!!! For further information, please go to: <a href="http://www.ecosan.at">http://www.ecosan.at</a>

# IRC "Water Stories" book – we are looking for water stories!

The IRC (International Water and Sanitation Centre, The Netherlands) is looking for personal stories or anecdotes of up to 750 words that have something or other to do with water. An international panel will select and publish the best texts. Anyone can submit a story!

Published in English, Water Stories is intended to be a readable, illustrated book of about 100 pages that shows what water means for different people in the world. If there is enough interest, Water Stories will also be published in French, Spanish and Dutch.





Stories must be submitted to IRC online or on paper by 15 April 2003.

!!! For further information, please go to: http://www.irc.nl/waterstories

!!! Contact: Sascha de Graaf, IRC: mailto:graaf@irc.nl

# Recent Publications

# **Ecosan classics**

Diverse

**SARAR Transformación, Mexico** is currently in charge of distributing additional copies of books on **ecological sanitation**. The publications are available in English, Spanish and French. The following publications can now be obtained from SARAR:

- S. Esrey, I. Andersson, A. Hillers, R. Sawyer (2001): Closing the Loop: Ecological sanitation for food security. UNDP/SIDA Swedish International Development Cooperation Agency, 90 pages, English
- S. Esrey, I. Andersson, A. Hillers, R. Sawyer (2001): **Cerrando el Ciclo: Saneamiento ecológico para la seguridad alimentaría.** (Spanish version of <u>Closing the Loop</u>), SIDA/UNDP 2001

Uno Winblad, Steven Esrey et al. (1998): **Saneamiento Ecológico** (Spanish version of 'Ecological Sanitation'), SIDA - Swedish International Development Cooporation Agency, 101 pages

Uno Winblad, Steven Esrey et al. (1998): **Assainissement Écologique** (French version of 'Ecological Sanitation'), SIDA, 100 pages

!!! Order from: Sarar Transformación, AP 8, Tepoztlán, Morelos 62520 Mexico, fax:

+(52-739) 395-0364

or by e-mail: sarar@laneta.apc.org

# International reference book on low-pollution wastewater and rainwater management

UNEP-IETC Pub. (2002): Environmentally Sound Technology for Wastewater and Stormwater Management: An International Source Book; 640 pages, ISBN 1843390086. English. IWA member price: US\$ 102.00/€ 102.00, otherwise US\$ 136.00/€ 136.00

This English-language book provides information on the essentials of wastewater and rainwater management for economic, ecological and social sustainability. It describes a number of low-pollution technologies for wastewater and rainwater collection, treatment and disposal, and above all in nutrient and water reuse.

!!! Order from: http://www.iwapublishing.com/template.cfm?name=iwaphome

# Agricultural use of marginal-quality water

Abbott, CL and Hasnip (1997): The Safe Use of Marginal Quality Water in Agriculture - A Guide for the Water Resource Planner, UK. Report No. OD140, HR Wallingford and DFID (Pub.), 92 pages, English

This guide published by the Department for International Development (DIFD) is intended as an aid for experts in planning projects for using low-quality water in agricultural production. The English-language guide can also be used as a training tool in rural development, environmental protection and agricultural training.

### !!! Summary and download:

http://www.dfid-kar-water.net/w5outputs/output summary sheets/marginal qual water.html

CD-ROM or copy: w5outputs@hrwallingford.co.uk





# Manual of natural wastewater management methods

N. Grant, M. Moodie and Ch. Weedon (2000): Sewage Solutions: Answering the call of nature, CAT publications, 192 pages, ISBN 1898049165, English, £12.00

This English-language book documents and explains different treatment methods such as plant beds, wastewater pits, stabilizing ponds, sedimentation basins and compost toilets and also describes the collection and recycling of wastewater.

!!! Order from: http://www.cat.org.uk/catpubs/book.tmpl?cart=323339186634378&sku=ss

# Manual - compost toilets and greywater recycling plants

ECO DESIGN Sustainable Housing (Pub.): The Compost Toilet & Greywater Recycling Systems Manual, 130 pages, English, US\$ 50.00

The ECO DESIGN manual on sustainable house building details (in English) on 41 pages of graphics and 68 pages of text everything you need to know to build your own efficient, low-maintenance and safe compost toilets and greywater recycling systems.

!!! Order from: http://homepage.powerup.com.au/~edesign/to-order.html

# School sanitation and hygiene education (SSHE) in India

M. Snel et al. (2002): School sanitation and hygiene education India. Handbook for teachers, 45 pages, ISBN 90 6687 034 6, and Resource Book, 268 pages, ISBN 90 6687 033 8, IRC Technical paper series No. 39, English, € 30.00

This English-language book along with its teaching manual contains practical guidance for managers, instructors and teachers of the SSHE programme. Key topics are behavioural change, education and training, strategic planning, and school/community activities. Both parts contain many activity lists that can help in implementing similar projects.

!!! Order online from: <a href="http://www.irc.nl/products/publications/title.php?id=148">http://www.irc.nl/products/publications/title.php?id=148</a>
or mailto:publications@irc.nl,

#### Recent publications

# Studies, reports, etc.

# New publication by CSIR on urine diversion in South Africa

A. Austin and L. Duncker (2002): Urine-diversion Ecological Sanitation Systems in South Africa, CSIR, 81 pages, ISBN 0-7988-5539-8, English, approx. US\$ 15

The English-language study by CSIR (technology and research organization for innovation, promoting sustainable development and economic growth in Africa) contains draft guidelines for implementing ecological sanitation technology already in successful use in South Africa and many other countries. It largely describes technologies for urine diversion and proposes guidelines for their application in South Africa.

!!! Order on the Internet

http://www.csir.co.za/plsql/ptl0002/PTL0002 PGE015 PRODUCT?PRODUCT NO=7051119

!!! For further information, please go to: http://www.csir.co.za

# Recent study on reed-bed sludge treatment in Egypt

GTZ – IPP-Consult (7/2002): Klärschlammvererdung in Ägypten, 56 pages, German

The final report from this GTZ-assisted PPP project by IPP-Consult describes a large-scale trial for the reed-bed treatment of sludge for agricultural reuse in Egypt. It details the processes, results and advantages of the technology but also deficiencies and technological gaps, and analyzes prospects and marketing opportunities in the country.

!!! Download: http://www.gtz.de/ecosan/download/IPP-Aegypten.pdf





# Paper on wastewater use in small communities in the southern Mediterranean region

A. Bahri, National Institute for Research on Agricultural Engineering, Water and Forestry, Tunis (2000): Strategies for Increasing Wastewater Reuse Opportunities in Small Communities in the Southern Mediterranean Region Countries, 10 pages, English

Small communities in southern Mediterranean countries are rapidly using more water and producing more wastewater in an arid region. So they need appropriate wastewater systems, for example, to treat and recycle wastewater for various purposes. Suitable wastewater schemes do not just depend on the locality and community; above all they need proper planning. The paper deals with these aspects, also taking account of technical, economic, institutional, legal, social and ecological parameters.

!!! Download: http://www.gtz.de/ecosan/download/Bahri2000.pdf

# PhD thesis on nutrient recycling through urine diversion

B. Vinneras (2002): Possibilities for Sustainable Nutrient Recycling by Faecal Separation Combined with Urine Diversion. PhD thesis, Department of Agricultural Engineering, Swedish University of Agricultural Sciences, Uppsala, Sweden, 88 pages, ISBN 91-576-6167-7, English.

This doctoral thesis, which also includes 5 papers, provides new findings on treating faeces and urine before use as fertilizer with a special focus on energy use, emissions, nutrient recycling and hygienic safety.

!!! To obtain information and order online: bjorn.vinneras@lt.slu.se

# Documentation: companies and ecosan products in South Africa

M. Köttner, H.-P. Mang (2002): Ecosan Study Tour in South Africa, companies and ecosan-related products, 7 pages, English.

In September 2002, the authors conducted an ecosan study tour to South Africa on behalf of the ecosan project. In the course of this trip a small set of documentation was prepared containing a list of ecosan companies operating in South Africa along with their products, services and contact persons. The pilot project, eco village Kimberly, is also described briefly.

!!! Download: http://www.gtz.de/ecosan/download/documentation-ecosan-SA.pdf

# Irrigation and fertilizer application with wastewater on willow plantations

Report on EU project No. CT97-3947 - FAIR Programme of the European Commission (1/2003): Short-rotation Willow Biomass Plantations Irrigated and Fertilised with Wastewaters, 48 pages, English

This recently published English-language report on high-rotation willow biomass plantations irrigated and fertilized with wastewater summarizes findings and experience in recycling pretreated wastewater, urine diversion and sludge use on willow plantations for biomass production. In a 4-year project, trial plots were laid out in Sweden (Roma), France (Orchies), Northern Ireland (Culmore) and Greece (Larissa).

!!! For further information, please go to: http://www.sweco.se/upload/bwcwslut.pdf

# IWA: new publications

LH Moss, E Epstein, T Logan, SD Frank, K Scott (2002): Evaluating Risks and Benefits of Soil Amendments used in Agriculture. WERF Report (99-PUM-1), 250 pages, ISBN 1843396513, English, US\$+€ 124/165 (IWA members/non-members)





The Water Environment Research Foundation (WERF) commissioned this multi-year study to compare the application, benefits and risks of soil ameliorators and fertilizers. The findings of an evaluation of over 500 largely scientific documents are presented in compact and easily readable form addressed particularly to practitioners in agriculture.

!!! For further information, please go to:

http://www.iwapublishing.com/template.cfm?name=isbn1843396513

R Brashear, C Vitasovic, C Johnson, R Clinger, J Rife, D Lafitte, O Nadi (2002): Best Practices for the Treatment of Wet Weather Wastewater Flows. WERF Report Collection and Treatment (Project 00-CTS-6, pp. 100, ISBN 184339653X, English, US\$+€ 124/165 (IWA members/non-members)

The WERF project 00-CTS-6, Best Practices for the Treatment of Wet Weather Wastewater Flows, investigated both currently available technologies for more efficient treatment of wastewater flows in wet weather periods and promising new developments in this sector.

# !!! For further information, please go to:

http://www.iwapublishing.com/template.cfm?name=isbn184339653x

# Recent publications

#### Conferences

Documentation on the symposium: Recycling phosphorus in agriculture and from wastewater and solid waste

6.2.2003, Berlin - Germany

Organizers: Research Institute for Water and Waste Management (ISA) at Aachen University (RWTH), German Federal Environmental Office

With a view to the shortage of phosphate resources, future phosphorus needs and the requirements of applying phosphorus fertilizer in Germany, this conference in Berlin presented and discussed processing techniques for phosphorus recovery. Available in German only, the conference documentation provides an in-depth overview of the subject.

Unfortunately, the phosphorus recovery options presented are confined solely to technical methods of extracting phosphorus from sludge or sludge ashes. Not dealt with are aspects of the process as a whole, ways of locating phosphorus at source as far as possible through specific materials management or the connection with recycling other nutrients, trace elements or organic substances.

Nevertheless, the conference documentation provides interesting information on the resource situation, regional phosphorus demand - though focused on the FR Germany as well as current technical end-of-pipe approaches in phosphorus recovery

# !!! Order from:

Research Institute for Water and Waste Management RWTH, D - 52056 Aachen, Tel.: +49(0)241 / 80 - 2 52 07, Fax: +49(0)241 / 80 - 2 22 85

e-mail: isa@isa.rwth-aachen.de

Conference: SHIT HAPPENS - WHAT HAPPENS THEN?

11.12.2002. Vienna - Austria

Organizers: Development Policy Division at the University of Natural Resources and Applied Life Sciences and the Institute for Water Provision, Water Ecology and Waste Management, EcoSan Club Vienna, Austria

The papers presented at this evening information event (German-language):

- Ecosan in German development cooperation, by Christine Werner, GTZ
- Ecosan in planning office practice, by Erich Kaschka, Posch & Partner GmbH Ingenieurgemeinschaft and





 National strategy for the development and dissemination of Ecosan in Uganda, by Andreas Knapp/World Bank

provide a picture of current developments in ecosan projects in Germany, Central and Southern Europe and Uganda.

!!! Download executive summaries of papers: http://www.gtz.de/ecosan/download/Shit-happens.pdf

# Report on the international training course - Ecological Alternatives in Sanitation

# 11 - 22 November 2002, Kimberly - South Africa

**Organizers:** Department of Water and Environmental Studies, Linköping University/Sweden, Department of Water Affairs and Forestry, Pretoria/South Africa, Swedish International Development Cooperation Agency (SIDA)

The basic aim of the course was to impart to the participants from 26 countries such as South Africa, Zambia, Malawi and Botswana information and practical ecosan options for minimizing health risks and improving food security and resource conservation in the wastewater sector. A report on the course is available as a download.

!!! Download: http://www.gtz.de/ecosan/download/course-kimberly.pdf

Papers of the 5th IWA sectoral conference on small water and wastewater treatment systems

# 24 - 26 September 2002, Istanbul - Turkey

**Organizer:** International Water Association

# R. Otterpohl, U. Braun and M. Oldenburg: Innovative technologies for decentralised wastewater management in urban and periurban areas, 10 pages, English

Thinking on wastewater technologies is currently changing. The trend is towards intelligent, synergetic and decentralized setups. Firsthand experience has been gained with these technologies. At the same time, several years of experience with the first pilot applications is now available as well as know-how on operating technical components.

Some of these developments and projects are described in this paper.

!!! Download: http://www.gtz.de/ecosan/download/iwa-otterpohl.pdf

# P.M. Kunz: Treatment requirements - rural areas/hotel complexes and touristic resorts: production of fertilizer water, 4 pages, English

This paper describes the outcome of a project carried out in cooperation with the Ministry of Science , Research and the Arts of the State of Baden-Württemberg. With two-stage anaerobic and aerobic treatment, fertilizer water that meets the requirements of the European Union law on bathing water quality was produced from utility water and wastewater.

!!! Download: http://www.gtz.de/ecosan/download/iwa-kunz.pdf





N.V. Anh, T.D. Ha, T.H. Nhue, U. Heinss, A. Morel, M. Moura, R. Schertenleib: Decentralized wastewater treatment - new concept and technologies for Vietnamese conditions, 10 pages, English

The author describes the results of wastewater treatment tests using a special settling basin with or without an anaerobic filter for the effective treatment of blackwater under Vietnamese conditions.

!!! Download: http://www.gtz.de/ecosan/download/iwa-vietnam.pdf

# Recent publications

# World Development Report 2004 (Draft):

#### Online

Making Services Work For Poor People

An English-language draft of the World Development Report for 2004 is available online. The report looks at ways in which many countries could speed up progress in attaining the millennium development goals (MDGs) or in services for the poor. In 10 chapters it demonstrates how success does not just depend on faster economic growth and flows of financial resources but also on using these to provide basic services, particularly in health, education, water and wastewater.

Ecological sanitation has largely been ignored in this report so far. Until 10 November you can make comments online, giving you the opportunity to propose that the report pay more attention to ecosan issues!

#### !!! For further information, please go to:

http://econ.worldbank.org/wdr/wdr2004/text-18786/

#### Events, very soon...

USA: Water Week 2003 - Water & Development

4 - 6 March 2003, Washington, D.C.

Organizer: World Bank

This 3-day event will bring the Water Group of the World Bank together with other international organizations such as foundations, NGOs, etc. and representatives of the private sector concerned with water supply, sanitation technology, irrigation and water/environmental resource management.

# Priorities will be:

- Exchange of experience amongst all stakeholders on current issues in the water sector, specialized, multisectoral and country water issues
- Current challenges on many fronts from the standpoint of the World Bank and with a view to the global water debate, including the millennium development goals

The conference will be held in English.

!!! For further information, please go to: http://www.worldbank.org/waterweek/

!!! Registration by e-mail: kmoss@worldbank.org

Japan: Third Global Water Forum, 3 ecosan side events

16 - 23 March, Kyoto

Organizer: World Water Council

The forum will deal with the following topics: water and climate, water supply, wastewater, hygiene and water pollution, water and energy and much more

Three ecosan side events will be held with top participants. Here is the draft programme:

#### **Session 1**

**Ecological Sanitation - Progress Being Made Around the World March 17 at 08.45-11.30** (organized by SEI, JTA, City of Kyoto)

Chair: Bengt Johansson (Sida) - The Sida global ecosan programme





Keynote speaker: Swedish Minister of Environment - Lena Sommestad (proposed)

#### Panellists:

- 1. Saburo Matsui (Japan). The science behind ecosan
- 2. Arno Rosemarin (SEI/EcoSanRes). What is ecosan in practice and what role can it play in reaching the goal of the Millennium Johannesburg Sanitation Declaration?

#### Activity profiles from the following organizations:

- 3. Christine Werner (GTZ) The GTZ global ecosan programme
- 4. Vanessa Tobin (UNICEF) title to follow
- Ingvar Andersson (UNDP) Ingvar Andersson (UNDP) Ecological Sanitation for Sustainable Development and Poverty Eradication
- 6. Walter Strottmann (WSP) Contribution to the Sanitation Challenge
- 7. **Panel Discussion:** What can ecosan do to help reach the Johannesburg millennium goal on sanitation?

#### **Session 2**

Affordable & Ecologically Sound Community Sanitation - New Solutions to Old Problems

March 20 at 0845-11.30 (organized by IWA)

Chair: Ralf Otterpohl (IWA) and Saburo Matsui (IWA)

- 1. Ralf Otterpohl: Solving Problems with Ecological Sanitation: background, basic engineering aspects, from high-tech to low-tech, from rural to periurban areas, application
- 2. Uno Winblad and Saburo Matsui (Sweden/Japan): Experience from developing ecosan projects around the world
- 3. Ned Breslin: Water Aid. Practical Experience with ecosan in Southern Africa
- 4. Paul Calvert (India/Sri Lanka): Bringing ecosan to South Asia
- 5. Lin Jiang (China): Development of large-scale ecosan projects in Chinese villages
- 6. Christine Werner (GTZ): Challenges in applying ecological sanitation around the world
- **7. Panel Discussion** with Steve Halls, UNEP IETC. Unserved and underserved people around the world: Where can ecological sanitation help solve severe problems?

# **Session 3**

**Ecological Sanitation - Closing the Nutrient Loop Through Ecosan in Rural and Urban Areas** 

March 21 at 12.30-15.15 (organized by SEI, JTA, City of Kyoto)

Chair: Saburo Matsui (Japan)

#### Panelists:

- 1. Peter Morgan (Zimbabwe): Experiments in Zimbabwe using urine as the sole nutrient in growing crops
- 2. Håkan Jönsson (Sweden): Successful experience from Sweden in recycling urine and fecal material
- 3. Ralf Otterpohl (Germany): Experiments in closing the loop on sanitation in Germany
- 4. Mayling Simpson-Hebert (USA): Ecostations and ecotowns: new policies in the making
- 5. Ron Sawyer (Sarar Transformacion SC, Mexico): Periurban ecological sanitation in large numbers in Mexico
- 6. Maimuna Nalubega (Uganda): Setting up ecosan in periurban Kampala
- **7. Panel Discussion:** The positive implications for communities, regions and countries of closing the nutrient loop

The conference will be held in English.

We can only accept registrations made before 7 March 2003.

!!! Online registration: https://regi.water-forum3.com/wforum3/form\_new/index.html

!!! For further information, please go to: http://regi.water-forum3.com





# Events, coming soon

Egypt: 7th International Water Technology Conference

28 - 30 March 2003, Cairo

**Organizers:** The National Organization of Potable Water and Sanitary Drainage (NOPWASD), the American Society of Civil Engineers (ASCE), Center for Future Studies, Assiut University.

This conference has been held in Cairo every year since 1996 for over 300 experts, professors, decision-makers from various ministries and representatives of the private sector.

Topics: water treatment, water resources and desalination technologies.

!!! For information on the conference e-mail: <a href="mrayan@usa.com">mrayan@usa.com</a>, or <a href="mrayan@usa.edu.eg">mrayan@usa.com</a>, or

Prof. Magdy Abou Rayan, Conference Secretary General, Mansoura University, Faculty of Engineering, El-Mansoura 35516, Egypt, or P.O. Box 415, 21321 Ibrahimia, Alexandria, Egypt; Tel & Fax: 203-5920641

# Finland: Dry Toilet 2003, August 20 – 23, 2003, Tampere

**Organizers:** Global Sanitation Club of Finland – Käymäläseura Huussi ry and the Association of Ecological Information – Ekoinfo ry

The aim of the conference is to provide a platform for an exchange of views and information on worldwide wastewater issues and present dry toilets as a practicable solution, particularly for arid areas or regions with inadequate sewage systems. The main topics will be: controlled rural and urban environmental management, using human faeces as fertilizer, technical development of dry toilets and toilet culture.

The conference will be held in English.

**!!! New:** Detailed information is now available online with the **Scientific Program** and the **2nd Announcement**.

The registration deadline for the <u>Call for Papers</u> has been extended to 28 Feb. 2003.

!!! For further information, please go to: <a href="http://www.drytoilet.org">http://www.drytoilet.org</a> or e-mail to: secretary@drytoilet.org

Mexico: 11th International Conference on Rainwater Catchment Systems

25 to 29 August 2003, Mexico City

Organizer: International Rainwater Catchment Systems Association (IRCSA)

This conference is addressed to planners, decision-makers, etc. concerned with the direct collection and storage of rainwater for household and agricultural use. Some 800 participants are expected to attend from all over the world to discuss efficient rainwater use. The programme will also include technical and tourist excursions.

!!! Call for papers: Deadline 15 May 2003

!!! For further information, please go to: http://www.colpos.mx/ircsa/old/english.html





South Africa: 3 IWA conferences

14 - 19 September, 2003, Cape Town

Organizer: IWA

The following events will be held jointly in Cape Town's Convention Center.

#### 12th IWA Conference - Water microbiology and health

The one-day seminar on the WHO water quality guidelines will deal for example with progress in HACCP-based (Hazard Assessment and Critical Control Points) strategy and methods for assessing water quality, including indicator methods (coliform bacteria and heterothropic plate count), pathogens (cryptosporidium, giardia, viruses, escherichia coli O157:H7, legionella) and low-cost methods such as the H<sub>2</sub>S test.

#### 5th IWA Conference - Biofilm systems

Biofilms play a major role in many water treatment methods. These range from water quality assurance (e.g. drinking water) to water treatment (drinking water, wastewater, utility water). The 5th IWA conference on biofilm systems will deal with current trends and developments in biofilm research and fundamentals, process management and application aspects.

# Water: key to sustainable development in Africa

Water is life, and rational management of this resource is an integral component of sustainable development for an ongoing improvement in quality of life without destroying the sensitive water balance. The aim of the Cape Town conference is to bring the world's leading experts to Africa to exchange experience and information on technologies with the developing countries.

#### !!! Deadlines:

Abstracts for papers: **15 February 2003**Abstracts for poster presentations: **1 May 2003**Manuscripts of contributions: **31 July 2003** 

Call for papers: http://www.iwaconferences.co.za/Pages/Reply\_W.html

or e-mail to: tecloete@postino.up.ac.za

!!! For further information, please go to:

http://www.iwaconferences.co.za/Pages/Home.html

!!! Online registration: Registration Form

# 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 )

#### **New links** (in alphabetical order)

#### **Community Partners' Forum**

http://www1.worldbank.org/rmcext/cp/CommunityPartners/Thematic home.asp

You can register in the Community Partners' Forum of the World Bank and take part in discussions on topics (environment, water, wastewater, etc.)..





# Composting of organic wastes

# http://journeytoforever.org/compost.html

Basic information on the history of biological degradation.

#### **EKO-PLANT**

#### http://www.eko-plant.de

Information on ecotechnical systems, such as reed-bed sludge treatment plants, biotreatment plants and nature bathing.

#### **Novaquatis**

# http://www.novaquatis.eawag.ch

Project descriptions and reports on innovative nutrient management in water management and agriculture.

# **SANIPLAN**

### www.saniplan.org

Periurban wastewater systems and water supply for developing countries

#### **SD Gateway**

# http://www.sdgateway.net/mailinglists/

The Sustainable Development Gateway presents information on sustainable development collected by members of the Sustainable Development Communications Network.

# **SWAMP**

### http://www.swamp-eu.org

Homepage of the EU project 'Sustainable Water Management and Wastewater Purification in Tourism Facilities' in 5 languages.

#### **Tripod**

#### http://jperret.tripod.com/listservs.html

Mailing lists of Dr. Johan Perret, Professor at the Sultan Qaboos University, Oman, relating to environment and sustainable development.

# Netherlands ecosan homepage

# www.ecosan.nl and www.waste.nl

New Dutch ecosan homepage, initiated by WASTE, Advisers on Urban Environment and Development

# **Water & Wastewater International**

# http://www.omeda.com/cgi-win/wwi.cgi?ADD

Free registration for the newsletter, Water & Wastewater International

# WATER KAR (Knowledge and Research)

# http://www.dfid-kar-water.net/home.shtml

Publications of DFID research projects (DFID = Department for International Development, United Kingdom) on water resources, water quality, water supply and wastewater disposal and water for food.





#### WaterWorld - water pollution and wastewater treatment

# http://ww.pennnet.com/home.cfm

Pennwell Corporation: You can register for several newsletters online; latest news on water and wastewater.

# **World of Composting Toilets**

#### http://www.compostingtoilet.org/

Information on installing and operating compost toilets and greywater systems

# 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

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, Jana Schlick and Susanne Kimmich GTZ

Div. 44, Water and Solid Waste Management

ecosan project – ecologically and economically sustainable wastewater management and sanitation systems

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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

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.