





ecosan - newsletter - no. 3 - 12/2001 - 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. 3!

Our idea to send just the English version of the previous issue directly by e-mail in globally readable text-only format met with a very positive response, and we have decided to continue with this procedure. In addition to the English version, you'll also find the German, French and Spanish versions of this newsletter in easy-to-use pdf-format on the ecosan website.

#### !!! Downloads:

http://www.gtz.de/ecosan/docs/nl3\_dt.pdf http://www.gtz.de/ecosan/docs/nl3\_esp.pdf http://www.gtz.de/ecosan/docs/nl3\_fr.pdf http://www.gtz.de/ecosan/docs/nl3\_eng.pdf

Your ecosan team hopes you enjoy reading the current issue and wishes all readers seasons greetings and a good start to 2002!

## Your contributions

We never tire of giving encouragement: to a great extent, this newsletter 'lives' from all the many contributions and feedback items we receive from our readers. We therefore wish to take this opportunity to express our heartfelt thanks to all contributors and encourage you to keep sending us your suggestions, requests, information and inquiries!

### In-house news

# ecosan side-event at the International Conference on Freshwater in Bonn, Germany

During the International Conference on Freshwater, which took place in Bonn from December 3 through 7, 2001 in preparation for the 2002 Rio+10 Conference in Johannesburg, South Africa, the GTZ ecosan project hosted a two-hour side-event entitled:

"ecological sanitation - closed-loop approaches in wastewater management and sanitation"

The well-attended event offered a number of interesting papers by six international experts, plus an exchange of views and experience in the area of sustainable wastewater management and sanitation. You can download the conference speeches from our homepage.

## **Contributions:**

**Christine Werner**, GTZ supra-regional R&D project ecosan, Germany: "ecosan – Activities and Pilot Demonstration Projects of German International Development Cooperation"

Roland Schertenleib. EAWAG/SANDEC. Switzerland:





Centered Environmental Sanitation Approach"

**Ingvar Andersson**, Senior Water Policy Advisor, UNDP, New York **Bengt Johansson**, Head of Division, Sida, Stockholm: "Outcome of the Ecological Sanitation Conference, Nanning, China and Future Priorities in the Development of ecosan"

Maimuna Nalubega, Makarere University, Uganda:

"ecosanet - Concept of a World-wide Network on Ecological Sanitation"

Jan-Olof Drangert, Linköping University, Sweden: "Highlights of Current ecosan Research in Sweden"

### !!! To download any of those papers, go to:

http://www.gtz.de/ecosan/docs/ecosan-presentation-Werner.pdf
http://www.gtz.de/ecosan/docs/gtz-ecosan-article.pdf
http://www.gtz.de/ecosan/docs/Bonn-presentation-Schertenleib.pdf
http://www.gtz.de/ecosan/docs/Nanning-Summary-Report.pdf
http://www.gtz.de/ecosan/docs/Bonn-presentation-Anderson.pdf
http://www.gtz.de/ecosan/docs/Bonn-presentation-Nalubega.pdf

## Research applications for ecosan pilot projects

Together with various national and international partners, the GTZ ecosan project has submitted 10 project sketches for pilot projects in 7 countries as its entry in the "Decentralized Water Supply and Sanitation Systems" competition sponsored by the German Federal Ministry of Education and Research. The cooperative implementation of a whole range of demonstration projects in different regions, with diverse terms of reference and boundary conditions, and embedded within supportive international and interdisciplinary research efforts, would be a milestone on the road to more sustainable forms of water supply and sanitation worldwide.

The decision on which of the very numerous sketches will win the competition is expected in spring 2002.

## Current publications

## Water and Wastewater Treatment - The Swedish Experience

Ministry for Foreign Affairs, Swedish Environmental Protection Agency and Swedish Trade Council (1998): Water and Wastewater Treatment - The Swedish Experience, 79 pages

This publication deals with the latest developments in Sweden's water and wastewater treatment sector. It includes a list of selected Swedish companies and institutions that are active in the water and wastewater sector and provides details of their respective areas of specialization and references.

#### !!! Order at:

http://www.utrikes.regeringen.se/inenglish/pressinfo/information/form.htm





## **Urine Separation – Closing the Nutrient Cycle**

Johansson, Mats: Urine Separation – Closing the Nutrient Cycle, VERNA Ecology, 40 pages

This report outlines the present state of knowledge on urine-separating toilets and systems and the recycling of urine as an agricultural fertilizer.

The results presented here are based on the R&D project "Source-separated Human Urine – A Future Source of Fertilizer for Agriculture in the Stockholm Region", which was conducted by the Stockholm Water Company in cooperation with the HSB National Federation and AB Stockholmshem, and the project "Recycling Source-separated Human Urine".

The report describes the advantages of urine separation, and outlines its technical implementation and the transport systems for recalculating urine from residential districts to farmland. It also contains concrete recommendations on the planning and implementation of various system components, presents the results of pertinent research, and answers frequently asked questions about urine separation.

### !!! Download at:

http://www.stockholmvatten.se/pdf\_arkiv/english/Urinsep\_eng.pdf

Waste Composting for Urban and Peri-Urban Agriculture: Closing the Rural-Urban Nutrient Cycle in Sub-Saharan Africa

Drechsel, Pay (|WMI|), and Kunze, Dagmar (FAO) [ed.], 2001, 256 pages, ISBN: 0851995489, US\$ 80

Rapid urbanization has created a major challenge with regard to waste management and environmental protection. However, the problem can be ameliorated by turning organic waste into compost for use as an agricultural fertilizer in peri-urban areas. This is especially significant in less-developed countries, where food security is also a key issue. This book addresses these subjects and is based on papers presented at a workshop held in Ghana by the International Board for Soil Research and Management (IBSRAM, now part of the "International Water Management Institute") and FAO. Contributors from Africa and Europe report on their experience in sub-Saharan Africa and other parts of the world.

## !!! Order at:

http://www.amazon.com/exec/obidos/ASIN/0851995489/qid%3D1003413084/ref%3 Dsr%5F11%5F0%5F1/103-1947771-0488620





# Large-scale Dry Sanitation Programs – Preliminary Observations and Recommendations from Urban Experiences in Mexico

Cordova, Ana (2000): Large-scale Dry Sanitation Programs - Preliminary Observations and Recommendations from Urban Experiences in Mexico, Human Dimensions Research Unit, Department of Natural Resources, Cornell University, 18 pages

This study focuses on the characterization of program implementation, barriers and opportunities in selected large-scale dry sanitation program sites throughout Mexico. The report outlines the status of research and presents interim results of fieldwork prior to completion of the systematic data analysis.

The document has three main purposes:

- 1. to provide a general overview of the status of research
- 2. to supply communities, practitioners and decision-makers with concise information of practical relevance prior to the publication of final results, and
- 3. to spread the word about further materials based on this research.

!!! Download at: http://www.dnr.cornell.edu/hdru/PUBS/HDRUReport01-6.pdf

## Swedish Study on Potential Health Risks from Recycled Urine

Höglund, Caroline (2001): Evaluation of Microbial Health Risks Associated with the Reuse of Source-separated Human Urine, Royal Institute of Technology Library, Sweden, 87 pages, ISBN: 91-7283-039-5

With a view to determining the microbial health risks associated with the reuse of human urine as fertilizer, samples were obtained from various urine-separating facilities and tested for bacterial content. The study investigates the contamination of pure urine, the risks resulting from cross-contamination of urine with faeces, and the options for minimizing such risks.

#### !!! Download (summary) at:

http://media.lib.kth.se:8080/dissengrefhit.asp?dissnr=3090

## !!! Download (full text) at:

http://www.lib.kth.se/Sammanfattningar/hoglund010223.pdf

# Market Survey of Water-conserving Toilets, Separating Toilets and Urinals for Use in Collecting Brown and Yellow Water

SwedEnviro (2001): Market Survey – Extremely Low Flush Toilets, 54 pages

This publication describes in detail diverse toilets and urinals from various manufacturers and investigates their respective merits and drawbacks.

### !!! Download at:

http://www.swedenviro.com/svenska/pdf-filer/engmarknadsoversikt.PDF

## Proceedings of "Rainwater International 2001"

This event attracted more than 500 attendees to Mannheim, Germany, last September. The two-volume proceedings are now available:

Volume 1, available in German only (translation to follow), documents the German





fbr (Fachvereinigung Betriebs- und Regenwassernutzung), Tel. ++49-6151-339257, Fax –339258, e-mail: <a href="mailto:fbrev@t-online.de">fbrev@t-online.de</a>

**Volume 2**, which reviews the international part of the event, is available from: Margraf Verlag, Laudenbacher Straße, D-97990 Weikersheim, Germany, e-mail: <a href="mailto:hangstein@margraf-verlag.de">hangstein@margraf-verlag.de</a>

This volume is expected to be available as download from the UNEP website in the near future.

# New EcoEng Newsletter and proceedings of the EcoEng Conference in New Zealand now available

The latest edition of the International Ecological Engineering Society Newsletter contains interviews, various scientific and non-scientific contributions, and four articles from Sweden and Switzerland which provide up-to-date information on urine separation.

!!! Download at: www.iees.ch

The proceedings of the "International Conference Ecological Engineering" from November 2001 in New Zealand can be downloaded from:

!!! Infos at: http://www.ias.unu.edu/proceedings/icibs/iees-nz

# Recent events

# First International Conference on Ecological Sanitation, Nov. 5 – 8, 2001, Nanning, China

This conference, sponsored by the Jiu San Society in cooperation with the Swedish International Development Cooperation Agency (Sida) and UNICEF, along with UNDP, the World Bank, GTZ, the Ecological Society of China and the Chinese Society for Agricultural Engineering, drew an audience of some 300 and yielded very fertile results.

A summary paper which was presented at the ecosan side-event in conjunction with the International Freshwater Conference, is available from:

## !!! Download at:

http://www.gtz.de/ecosan/docs/Nanning-Summary-Report.pdf

# Coming events

# Virtual Water Forum (VWF) now under way

In preparation for the World Water Forum Conference to be held in Kyoto in 2003, a virtual water forum has been launched. Discussion will be guided by professionals and interested parties from diverse technical and regional backgrounds and will cover a wide array of urgent water problems. This will then serve as the basis for a sector meeting at the conference.

!!! URL: http://www.worldwaterforum.org/for/en/flist





# Australia: 3<sup>rd</sup> IWA-World Water Congress, Melbourne, April 7 – 12, 2002

Sponsor: International Water Association, Alliance House, 12 Caxton Street, London SW1H 0QS, UK, in cooperation with AWA, WMAA, CASANZ and EBA.

This event combines the first World Water Congress to be held in the Southern Hemisphere with the Asia-Pacific's premier environmental convention and international trade exhibition, "Enviro 2002". It will welcome up to 5000 local and international representatives, chiefly from the environment technology area. The four main themes will be: water, waste, odor, and the environment business. The programme is augmented by technical tours. The latest developments in environmental management will be presented and discussed with reference to both developing economies - with particular focus on Asia - and industrialised countries

!!! Infos at: http://www.enviroaust.net

# China: 12<sup>th</sup> International Soil Conservation Organization Conference, May 26 – 31, 2002, Beijing

Theme: "Sustainable Utilization of Global Soil and Water Resources"

Organizer: ISCO - International Soil Conservation Organization

The conference agenda will center on the following key topics:

- soil and water conservation regional policies and activities
- process of soil erosion and its environmental impacts
- technology and methods of soil and water conservation
- dynamic monitoring, forecasting and evaluation of soil erosion

!!! For further information, go to: <a href="http://www.swcc.org.cn/isco2002">http://www.swcc.org.cn/isco2002</a>

## Infos, call for papers to the Stockholm Water Symposium 2002 online

The theme of next year's water symposium during World Water Week in Stockholm, Sweden, from the 11<sup>th</sup> through the 17<sup>th</sup> of August, will be

"Balancing Competing Water Uses - Present Status and New Prospects".

Please send suggestions for contributions to workshops, seminars and a poster exhibition

!!! For more symposium info, go to: http://www.siwi.org/sws2002.html

# Italy: 2<sup>nd</sup> International Conference on Water and Environment, June 24 – 28, 2002, Capri

Theme: "New Trends in Water and Environmental Engineering for Safety and Life: Eco-compatible Solutions for Aquatic Environments"

Organizer: TerrA, centro studi urbani, ICID-CIID, Associazione Iodrotecnica Italiana, IMUG Italia

Official patrons: IAHR (Int. Assoc. of Hydraulic Engineering and Research), IAHS (Int. Assoc. of Hydrological Sciences), IGS (Int. Geosynthetics Society)

This conference, the second in a series to be held at two-year intervals, will have the following multidisciplinary topics:

Session A - Water Resources Management





Session B - Protection from Water-related Threats

Session C – Urban Drainage

English will be the official language of the conference.

!!! Infos at: http://www.capri2002.com

# South Africa: The World Summit on Sustainable Development (Rio +10), September 2 – 11, 2002, Johannesburg

10 years after: Reviewing the UNCED Implementation Conference (Rio 1992)

Organizer: United Nations

Topics: Water-sector development, sustainable water management, strategies for the future, water supply and sanitation, rainwater management and irrigation, demand management, protection of ecosystems, health, agriculture, industry, implementation strategy for Agenda 21.

!!! Infos at: http://www.johannesburgsummit.org/index.html

# Reader inquiries

In response to a reader's inquiry about the use of urine as fertilizer (see last newsletter), our attention was called to a book entitled:

#### Pharmaceuticals in the Environment

by K.Kümmerer (ed.), Springer Verlag 2001, DM 169.

# Links and tips

## Links of interest

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

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

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

( christine.werner@gtz.de )

### Latest tips

EHP - Environmental Health Project (updated Website)

http://www.ehproject.org/live/Whtsnew.htm

AWWA - American Water Works Association

http://www.awwa.org/

# Homepage

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

If so, visit our homepage (currently being expanded and updated):





## http://www.gtz.de/ecosan

### Newsletter

If you would you 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 enquiries and comments you may have are always welcome.

### Contact

## The GTZ ecosan team:

Christine Werner and Jana Schlick

**GTZ** 

Div. 44, Water and Solid Waste Management

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

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH

Postfach 5180

D-65726 Eschborn, Germany Phone: ++49-6196-79-1740 Fax: ++49-6196-79-6105 http://www.gtz.de/ecosan christine.werner@gtz.de jana.schlick@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

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





### 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.