



ecosan – newsletter – no. 19 – 02/2006 – 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 issue no. 19!

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, English and Chinese versions as easy-to-read pdf files from our web-site.

!!! Downloads:

German: <http://www2.gtz.de/Dokumente/oe44/ecosan/de-ecosan-nl19-2005.pdf>

Spanish: <http://www2.gtz.de/Dokumente/oe44/ecosan/es-ecosan-nl19-2005.pdf>

French: <http://www2.gtz.de/Dokumente/oe44/ecosan/fr-ecosan-nl19-2005.pdf>

English: <http://www2.gtz.de/Dokumente/oe44/ecosan/en-ecosan-nl19-2005.pdf>

Chinese*: <http://www2.gtz.de/Dokumente/oe44/ecosan/cn-ecosan-nl19-2005.pdf>

[from March 2006]

* For organisational reasons, the Chinese version is published later than the others.

Your ecosan team hopes you enjoy the current issue!

Your contributions

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 in advance for any contribution!



Content

- In house News**
- Two comprehensive ecosan projects to begin soon within the framework of the EU-ACP Water Facility
 - New members in the GTZ ecosan-Team
- 4th World Water Forum**
- ecosan at the 4th World Water Forum in Mexico, 16-22 March 2006
- Conference Reports**
- Report from the ecosan conference in Mumbai, 25-26 Nov 2005
 - Proceedings from the Durban conference now available online
- News from EAWAG / SANDEC**
- New team member at Sandec
 - Household-Centred Environmental Sanitation - Call for Collaboration
- General News**
- 2nd call for the EU-ACP Water Facility
 - German Toilet Organization hosts awareness raising event in Berlin, Germany
 - Jordan aims at 100% wastewater reuse
- Job vacancies**
- Co-ordinator for the use of biomass, Thailand (Bangkok)
 - Junior Expert for energy efficiency, China (Zhejiang Province)
- Pilot projects - German cooperation**
- Philippines (1): Workshop series to prepare implementation of ecosan
 - Philippines (2): Including the ecosan approach to allotment gardens
 - China: Report from a Seminar on Biogas Technology for Poverty Reduction and Sustainable Development
- Pilot projects - other organisations**
- Jordan: Small community wastewater reuse
 - India: first ecosan sanitation mart in Kerala
 - Nepal: winner of productive uses of water case study award
 - Romania: ecosan in schools and households in Teleorman and Giurgiu County
 - Sri Lanka: Post-Tsunami Toilet rehabilitation project
 - USA: ecosan in Denver, Colorado
 - Senegal and Thailand: Enhancing expertise in faecal sludge (FS) treatment in Developing Countries
- Publications - books**
- Decentralised, ecological water and sanitation systems in cities – T. Schütze
 - Biological wastewater treatment in warm climate regions
- Info-Material**
- Educational figures from Jeff Vivant in the french ecosan book “Un petit coin pour soulager la planète” (Christophe Élaines; 2005) now available for download
- New on the web**
- UN-advisory board on water and sanitation goes on-line
- Trainings and Courses**
- 10-28/07/06 International Short Course in Decentralised Water Supply and Sanitation, Netherlands
 - 07-18/08/06 Sustainable Livelihood approaches to WATSAN, Nairobi, Kenya
 - 14-18/08/06 Short course “Appropriate sanitation for the developing world”, As, Norway
 - MSc Programme: Environmental Technology and Management, Norway
 - 14/08-09/06 Training programme “Ecological Alternatives in Sanitation”, Sweden, India/Latin America

Events

New upcoming

- 07–10/03/06 7th Specialised Conference on Small Water and Wastewater Systems and 2nd Conference of the IWA Specialist Group on Ecological Sanitation Mexico
- 29-31/03/06 39th Essen conference for water and waste management, Germany
- 26-29/04/06 Expo China 2006, China
- 21-25/05/06 WISA Biennial Conference and Exhibition 2006, South Africa
- 05-07/06/06 International Conference: Management of Water, Wastewater and Environment Challenges, Nepal
- 10-12/08/06 International Conference on "Decentralised Water and Wastewater Systems, Australia
- 05-12/08/06 Int. Conference on Sustainable ecoCity Development (ecoCity 6), India
- 20-26/09/06 SwedenWorld Water Week "Beyond the River – Sharing Benefits and Respon
- 11-13/09/06 The International Conference on Environmentally Sound Technology In Water Resources Management, Botswana
- 23-29/09/06 10th International Conference on Wetland Systems for Water Pollution Control, Portugal
- 30/10-1/11/06 Regional EM Water Project Conference on Efficient Management of Wastewater Treatment and Reuse Jordan
- 01-03/11/06 Water Resources in the Mediterranean Basin, Lebanon
- 13-17/11/06 Sustainable Development of Water Resources, Water Supply and Environmental Sanitation, Sri Lanka
- 16-18/11/06 World Toilet Expo & Forum 2006, Thailand

Events

Reminder

- 16-22/03/06 4th World Water Forum, Mexico
- 06-09/03/06 Water China 2006 -Exhibition/Trade-fair, China
- 02-07/04/06 Incorporation of 7th International Conference on Urban Drainage Modelling & 4th International Conference on Water Sensitive Urban Design, Australia
- 04-08/04/06 International Symposium on Water and Land Management for Sustainable Irrigated Agriculture, Turkey
- 23-25/05/06 Integrated Water Resources Management and Challenges of the Sustainable Development, Morocco
- 24-26/05/06 Researchers Conference for Young Water Professionals, Singapore
- 19-23/06/06 3rd World Urban Forum, Canada
- 27-30/06/96 IFAT China 2006 - 2nd International Trade Fair for Environmental Protection, China
- 16-19/08/96 Dry Toilet 2006: The Second International Dry Toilet Conf., Finland
- 10-14/09/06 World Water Congress and Exhibition, China

In house news

Two comprehensive ecosan projects to begin soon within the framework of the EU-ACP WF in Kenya and Burkina Faso

2 ecosan project proposals, in Kenya and Burkina Faso, proposed by the GTZ with various project partners are to be co-financed within the framework of the "European Union Water Facility for African, Caribbean and Pacific States" (EU-ACP WF).

Kenya: In the project "ecosan – an integrated approach for increased sanitation and market development", the project partners comprise the Kenyan Ministry of Agriculture, the Ministry of Health, the Ministry for Water, SIDA (Swedish International Development Cooperation Agency), the WWF (World, Wide Fund for Nature, Kenya) and the GTZ. This project aims to couple ecological sanitation systems with the reuse of agricultural waste. To do so, the project is structured into 4 major areas: (1) the implementation of ecosan pilot systems, (2) the establishment of financing instruments and mechanisms, (3) the marketing of end-products (4) the large-scale implementation of the developed concepts.

Burkina Faso: In the project "ecological sanitation in the peripheral districts of Ouagadougou" the GTZ will be working in partnership with CREPA (Centre Régional pour l'Eau Potable et l'Assainissement), ONEA (l'Office National de l'Eau et de l'Assainissement), local communities, and local authorities to develop appropriate ecological sanitation systems for the poor, with the local private sector eventually becoming the main provider of these systems.

The project implementation is currently planned as a series of ten major steps, based closely on the planning guide in the GTZ ecosan source book and the Household Centred Environmental Sanitation Approach, and will run over a three year period.

It is expected that personnel will eventually be sought for these projects. The GTZ ecosan Newsletter will keep you up to date on all developments.

!!! Contact: christine.werner@gtz.de or ecosan@gtz.de.

New members in the GTZ ecosan team

We are pleased to welcome new interns to the GTZ-ecosan team:

- **Dania Al Jaroudir** from Syria is a graduate engineer and scientific assistant at the Universität Rostock, and is currently writing her doctoral thesis in the field of "wastewater treatment in small wastewater treatment plants". She will carry out her internship with the GTZ team from the 1st February to the 31st July, 2006.
- **Nicolas Poltera**, from Switzerland, obtained his M.Sc. in Environmental Sciences from the École Polytechnique Fédérale de Lausanne (Switzerland). His internship at the GTZ ecosan office is from the 13th February 2006 until 12th May 2006
- **Lord Agyepong**, from Ghana, has an M.Sc. in Water Sciences from the University of Duisburg, Germany. He is one of the winners of the Huber Technology prize 2005 and will carry out his internship in the GTZ ecosan office from the 1st March 2006 until 31st May 2006

4th World Water Forum

ecosan at the 4th World Water Forum in Mexico, 16th – 22nd March 2006

The 4th World Water Forum will take place from the 16th to the 22nd of March in Mexico. The aim of the forum is to develop concrete measures and indicators that can be used to achieve the MDGs more rapidly.

The proposed local activities that have been proposed to date can all be seen online under: http://www.worldwaterforum4.org.mx/home/lista_actions.asp

Around 10 000 people are expected to attend the World Water Forum, with 13 parallel sessions planned. A list of all these sessions can be seen under: <http://www.worldwaterforum4.org.mx/home/session.asp?lan=>

To simplify your attendance at the ecosan relevant sessions at this huge event, we have drawn up an overview of the ecosan events. It includes a list of ecosan related Local Actions, a compilation of relevant sessions and announcements of a workshops etc.:
<http://www2.gtz.de/Dokumente/oe44/ecosan/nl/en-4wwfmexico-ecosansessions-2006.pdf>
<http://www2.gtz.de/Dokumente/oe44/ecosan/nl/en-4wwfmexico-ecosansessions-2006.xls>

Please let us know if you are planning any ecosan events that are not currently on the list. We will continue to update the list to ensure the best possible co-ordination of the ecosan activities at the Forum.

The meeting point for all ecosan interested people at the Forum will be the ecosan stand (booth numbers: 2622, 2620, 2719), organised by EcoSanRes, WASTE, GTZ, SARAR and others. Here you can obtain the most up-to-date ecosan info-material and you will receive daily information on the most interesting events related to ecosan. Please consult the information stand to stay informed of any possible last minute changes to the programme.

The location of the stand can be found under:

<http://www2.gtz.de/Dokumente/oe44/ecosan/nl/en-4wwf-fair-ecosanstand-map-2006.xls>

!!! Information: <http://www.worldwaterforum4.org.mx>

Conference reports

Report from the international ecosan conference in Mumbai (Bombay), India, 25- 26 November 2005

An international ecosan conference took place on the 25th and 26th of November 2005 in Mumbai (Bombay) India, organised by the Indian Water Works Association (IWWA) in co-operation with the Government of Maharashtra (GoM), the International Water Association (IWA), GTZ Germany and the All India Institute of Local Self Government (AIIILSG).

350 participants and a well thought out programme made the conference into a starting signal for ecosan across India.. Sunita Narain, representing the Stockholm Water Prize winning environmental NGO, CSE, gave the opening presentation, postulating that good wastewater management is not just one question facing a developing India, but is rather the central question to be addressed. She continued that failure to find a satisfactory answer to this issue will cause the entire country to stumble. The seriousness with which the Tamil-Nadu intends to implement ecosan on a large-scale was also presented by state secretary Shanta Seela Nair in the opening session. This was followed by 2 fully packed days of national and international information and discussions on ecosan.

The IWWA sees ecosan as 2 "the better choice" for the necessary extension of sanitary infrastructure in India, and along with the dissemination of know-how on ecosan, plans to support concrete pilot projects.

It is planned to soon make the conference presentations available on the conference web-site. The conference programme can already be seen under:

!!! Information: <http://www.iwwainternational.com/default.asp>

Papers and presentations from the 3rd international ecosan symposium, in Durban, South Africa, now available on-line

Around 250 participants attended the 3rd international ecosan symposium, from the 23rd to the 27th May, in Durban, South Africa. The conference highlighted the fact that the ecosan approach is no longer of marginal interest, but a serious alternative to conventional wastewater concepts.

All papers and presentations from the conference are now available on-line.

!!! Download papers: http://conference2005.ecosan.org/papers_presented.shtml

!!! Download presentations: <http://conference2005.ecosan.org/presentations.shtml>

!!! Information: <http://conference2005.ecosan.org/>

News from EAWAG / Sandec

New team member at Sandec

Christoph Lüthi has joined the Sandec team in November 2005 and reinforces the Strategic Environmental Sanitation Planning Unit (SESP). He is an urban development planner by profession and will mainly be working in the further development and application of the 'Household-Centred Environmental Sanitation Approach' (HCES). He will also be active in the Swiss-funded NCCR research programme in close collaboration with the EPFL in Lausanne, studying 'Innovations in decision-making processes for sustainable urban projects'.

Household-Centred Environmental Sanitation - Call for Collaboration

HCES, the new multi-sectoral strategic planning approach is now moving from theory to practice. Sandec's Strategic Environmental Sanitation Planning Unit is currently looking for interested partners for field-testing of HCES in selected pilot sites around the globe.

The Household-Centred Environmental Sanitation (HCES) Approach was developed by the Water Supply and Sanitation Collaborative Council Environmental Sanitation Working Group and supported by Eawag/Sandec based on a series of international workshops.

Preliminary guidelines were published in June 2005 targeting public officials and decision-makers and sector specialists. The guidelines are currently being translated and the French and Spanish version will shortly be available on the internet.

The planning approach is based on experience and research gathered over the past decades and has yet to be tested in real-life situations. Sandec is now spearheading this field-testing in a number of cities around the developing world. In a first step we are reviewing existing procedures which are compatible or show some line of similarity to the HCES approach (open planning of sanitation systems, community action planning, stakeholder planning approach etc). Secondly, we are currently identifying suitable sites and partners for field testing of the integrated HCES approach. Starting later this year, we will begin field-testing the HCES process in around 6-8 pilot sites.

We are therefore actively seeking appropriate test-sites in a variety of urban and peri-urban environments in Africa, Asia and Latin America and the Caribbean. The following environments and settings are of particular interest:

- densely populated urban formal or informal settlements;
- city-fringe peri-urban settlement patterns;
- small- and medium size towns with a lack of environmental sanitation services and systems;

Sandec will adopt a careful approach to the field-testing of HCES. Most importantly, we will want to make sure that an *enabling environment* will facilitate the planning process. With enabling environment we understand favorable government support, a legal framework that does not hinder the participatory planning approach, financial and institutional arrangements that permit rapid implementation, and, last but not least, the human resources and skills needed to carry out such a multi-stakeholder exercise.

Your suggestions are welcome!

If you would like to suggest a specific area or neighbourhood to be included in the initial field-testing of the HCES planning approach, or are interested in collaborating with us in this exercise, we are open to your suggestions, provided they meet the above mentioned criteria. Please get in touch with us with a short description of your suggested town/city.

!!! Contact: christoph.luthi@eawag.ch and roland.schertenleib@eawag.ch

News - general

Second Call for Proposals from the "EU-ACP Water Facility"

The aim of the "EU-ACP Water Facility" is to help provide the poor population of African, Caribbean and Pacific (ACP) nations with water supply and wastewater services, or to contribute to the improvement of the current situation.

As a result of the first call for proposals in 2004, at least two ecosan projects are to be financed through this facility, with a considerable participation of the GTZ. (see in-house news).

The second call for proposals will be made in mid-March 2006. For all the latest news and information on the Water Facility a monthly newsletter is available under:

http://europa.eu.int/comm/europeaid/projects/water/newsletter_en.htm

We hope that the ecosan approach will once again be given particular support by the facility, as was the case in the first call for proposals. In so doing the facility has made a significant contribution to the development and introduction of integrated, demand driven proposals for the water and wastewater MDGs.

We would call on all practitioners and projects in the ACP region to seriously consider submitting a proposal to the EU-ACP-Water Facility! We would be pleased to offer our support in this in whatever we can.

!!! Contact: esther.geiss@gtz.de

!!! Information on the "Water Facility" appears under:

http://europa.eu.int/comm/europeaid/projects/water/index_en.htm

“Sanitation is Dignity” - German Toilet Organization hosts awareness raising event in Berlin, Germany

From the 7th to the 12th of March 2006, Berlin will be the site of an unusual exhibition. At Potsdamer Platz, in the heart of the city, the German Toilet Organization (GTO) is displaying 35 life-size figures defecating in public as they attempt to hide behind objects ranging from umbrellas to trashcans. “Sanitation is Dignity” is the name of the campaign, intended to open the eyes of persons in industrialized countries to the fact that 42% of the world’s population do not have access to adequate sanitation. GTO – as a member of the World Toilet Organization, based in Singapore – applies unconventional approaches to break the taboo associated with toilets and sanitation, thereby aiming to facilitate the work of all organizations working to improve sanitation at home or abroad. An information stand at the event will educate interested visitors about a wide range of sustainable and ecological sanitation options, as well as inform about GTO’s own projects in Zambia, Sri Lanka and Germany.

Volunteers, who wish to assist GTO at the event’s information stand or Organizations interested in bringing this event to their city are encouraged to establish contact.

!!! Download “Sanitation is Dignity”-Event brochure:

http://www.germantoilet.org/images/gto_sanitation_is_dignity_broschuere_lq.pdf

!!! Visit: <http://www.germantoilet.org>

!!! Contact: thilo.panzerbieter@germantoilet.org

Jordan aims at 100% wastewater reuse

Landscaping (RIAL) Project, Jordan, has made significant strides towards achieving its goal of 100% reuse of reclaimed water in order to save freshwater resources. Around 90% of the 73 million cubic metres of reclaimed water from Jordan’s 19 Wastewater Treatment Plants is reused, both directly and indirectly, in industry, landscaping, and agriculture. A Water Reuse and Environment Unit (WREU) within the Ministry of Water and Irrigation has been established to monitor and regulate wastewater reuse activities and has adopted clear standards regarding the use of reclaimed water for agriculture. The Reuse for Industry, Agriculture and Landscaping (RIAL) Project, funded by the US Agency for International Development (USAID), aims to build on this success and its experience working toward sustainable use of reclaimed water resources, providing economic benefit, and supporting community development.

Demonstration sites and landscaping projects in Amman, Aqaba, and Wadi Musa focus on implementation of direct water reuse for agriculture and landscaping. Projects targeting industry seek to encourage conservation, reduce pollution, and promote an Environmental Management System framework approach. RIAL also engages in institutional strengthening and public participation activities, including support to the WREU and public awareness and training events to improve acceptance of water reuse.

!!! Information: Water Authority of Jordan - Water Reuse and Environment Unit (WREU)

<http://www.mwi.gov.jo/Reuse/reuse/index.html>

See also: Sanicon - Wastewater reuse

<http://www.sanicon.net/titles/topicintro.php3?topicId=3>

!!! Contact: RIAL office, Jordan, CDM-RIALProject@cdm.jo

Source: Pat Bakir bakirp@gmail.com, RIAL Project, Jordan, 3 Jan 2006;
IRC News Weekly 51-52

Job vacancies

Jobs for Integrated Experts (CIM): Thailand, China

The German Centre for International Migration and Development (CIM), is a joint venture of the GTZ and the German employment agency. The Integrated Experts programme provides a wage "top-up" subsidy for qualified European specialists who obtain a contract with local institutions in developing countries.

Who can apply?

Applicants must hold German or European citizenship with many years relevant work experience, (except for applicants to junior positions), be articulate in German, and not be based on a long-term basis outside of the EU.

Co-ordinator for the use of biomass, Thailand (Bangkok)

Support for the market competitiveness of small and medium industrial companies through the promotion of eco-efficiency is becoming increasingly important in Thailand. The Joint Graduate School of Energy and Environment (JGSEE) at King Mongkut's University of Technology in Bangkok has requested support from an expert to co-ordinate the different research contributions from a range of national and international research groups and to develop the interface with (agro) industry.

In this position, your activities would include (a) co-ordinating German research contributions (b) supporting the development of a network of local and international expert groups (c) collaborating on the development of a concept for the use of biomass in Thailand and (d) co-ordinating and exchanging with Thai (agro) industry regarding the use of biomass and/or bio-fuels

Duration: 2 years (prolongation possible)

CIM- Reference number: 60062576

!!! Complete job descriptions under → Regionen → Asia in:
http://www.cimonline.de/deutsch/frames/ind_stellen.htm

!!! Information and contact: Frau Beck susanne.beck@gtz.de

Junior Expert for energy efficiency, China (Zhejiang Province)

The dark side of the Chinese economic boom of recent years is coming increasingly under public scrutiny: an enormous energy demand and considerable environmental problems. Within China this has led to the question of ecological and energy efficiency becoming an issue of relevance to many different actors, including the Cleaner Production Centre of Zhejiang Province (ZJCPC). The centre has now requested a junior expert for energy efficiency to support its programme for eco-efficient production.

In this position for energy efficiency and energy saving technology you would be responsible for the following: (a) supporting the Cleaner-Production (CP) project, particularly concentrating on energy efficient solutions (b) looking for energy saving technologies and providers of technologies in Germany / Europe (c) technical and intercultural improvement of the work of the institute and (d) contributing to the international CP information platform.

Duration: 2 years (prolongation possible)

CIM- Reference number: 60058303

!!! Complete job description under → Regionen → Asia in:
http://www.cimonline.de/deutsch/frames/ind_stellen.htm

!!! Information and contact: Frau Beck susanne.beck@gtz.de

News from the projects ...

... German co-operation

Philippines (1): Peri-urban Vegetable Project (PUVeP) and GTZ hold series of Ecological Sanitation Workshops

A workshop series on Ecological Sanitation was successfully conducted by the Xavier University's Peri-urban Vegetable Project (PUVeP) and GTZ from 4-8 October, 2005, in different barangays of Cagayan de Oro City. This activity was part of the social preparation for the establishment of ecological sanitation toilets in the allotment gardens of Carmen, Gusa, Kauswagan and Macasandig with the financial assistance of the German Embassy, Manila. The objectives of the workshop were: (1) to understand and explain the ecosan concept, (2) to prepare a social map which analyses the current water and sanitation systems of the area, (3) to develop an action plan of the construction and maintenance of the ecosan toilets, and (4) to learn how to safely treat and apply ecosan products to different crops. The workshop series was attended by the all allotment garden families as well as representatives from the barangays and different city government agencies. Resource persons for the workshop were Mrs. Imelda Balbuena (GTZ Community Organizer), Ms. Glenda Y. Sol (Assistant Agronomist), Ms. Yvette B. Guanzon (Agronomist) and Ms. Janice Y. Caseria (YOS volunteer) from PUVeP.

!!! Source: http://www.puvep.com/news/2005_10_04_Ecosan_Workshop.htm
http://www.xu.edu.ph/searsolin/module9_detailed.htm

!!! Information: <http://www.puvep.com/ecosan.htm>
<http://groups.yahoo.com/group/ecosan-philippines/>

Philippines (2): Ecological Sanitation concept introduced to allotment gardens of the Periurban Vegetable Project (PUVeP)

The Periurban Vegetable Project with the financial support of the German Embassy and in co-operation with the city government of Cagayan de Oro, the barangay of Macasandig, the local community of sitio Tambo and the GTZ Water & Sanitation Program was able to launch the first "ecosan Toilet" of Mindanao at the Beatrice-Niehoff-Allotment Garden in barangay Macasandig on November 24, 2005. The overall objective is to improve the environmental and hygienic situation of urban poor groups in Cagayan de Oro by introducing the Ecological Sanitation concept to the allotment gardens of the Periurban Vegetable Project (PUVeP)

The project was commended by Mr. Kanzler as a successful example of a multi-sectoral approach with the German Embassy allocating the funds for the materials, GTZ facilitating the technical advisory, the local government being in-charge for the necessary permits and community organizing, the local community providing the labour for constructing the toilets, and PUVeP spearheading the activity and ensuring the safe reuse of ecosan products for crop production.

Further ecosan toilets have since been established in Xavier University's Manresa Farm as well as in the allotment gardens of Kauswagan, Gusa, and Carmen.

!!! Sources: http://www.puvep.com/news/ecosan_toilet.htm
http://www.puvep.com/news/2006_01_04_Ecosan_St_Ignatius.htm
<http://www.pia.gov.ph/news.asp?fi=p051208.htm&no=17>

!!! Download: <http://www.ruaf.org/node/783>

!!! Contact: Andreas Kanzler andreas.kanzler@gtz.de
Robert J. Holmer rjholmer@yahoo.de

China: Report from a Seminar on Biogas Technology for Poverty Reduction and Sustainable Development

A seminar on "biogas technology for poverty reduction and sustainable development" was held from Tuesday 18 October to Thursday 20 October 2005 in Beijing, organised by the Center for Energy And Environmental Protection Technology Development, the Ministry of Agriculture, and the Asia and Pacific Center for Agriculture Engineering and Machinery.

At the seminar case studies and papers were presented on recent developments in biogas technology at household as well as large scale and commercial level. Ecosan and Dewats systems were regarded as integral parts of the technology. The seminar formulated an outline for a follow up programme for increased investment and assistance from national, bilateral and multilateral development agencies in order to contribute to poverty reduction and the Kyoto Protocol. The seminar also exchanged information and lay the groundwork for networking at national, regional and international level.

Among the about 150 participants were experts from NGOs, representatives from private companies, and government officials involved in biogas and rural energy development programmes.

There were case studies from China, India, Vietnam, Nepal and Germany, as well as selected country papers from India, Indonesia, Nepal, Lesotho, Sri Lanka and Viet Nam, presented on the seminar. The seminar proceedings including all the interesting papers will be published later

!!! Information and contact: Xu Zhe: ceeptd@china.com

News from the projects ...
... other organisations

Jordan: Small community wastewater reuse

The Water Authority of Jordan is extending coverage of wastewater treatment beyond the major cities and towns, to smaller and previously unserved communities. The US Agency for International Development (USAID) is supporting an innovative project which promotes local-level management of wastewater treatment and reuse facilities in North Shuneh and Shobak. The Small Communities Project, will design, supervise construction and provide support for initial management of wastewater treatment plants (WWTPs), receiving wastewater from cesspits (septage) brought in by tanker trucks. Trucking wastewater to central treatment plants eliminates the need for costly collection infrastructure, can serve several neighbouring communities at once and is seen as the most practical and viable short-term solution to many rural communities without sewer networks. The project also will develop local capacity for operation and maintenance and provide treated wastewater produced by the plant for reuse in a safe and sustainable manner for agricultural purposes, generating income for local communities. The project aims to serve as a model to be replicated by other small communities in Jordan.

!!! Contact: Osama Abu Rayyan, Small Communities Project, ECODIT, oaburayyan@ecodit.com

Source: Pat Bakir bakirp@gmail.com, RIAL Project, Jordan, 3 Jan 2006; IRC News Weekly 51-52

India: Kerala's first ecosan sanitation mart

Eco-solutions opened Kerala's first Ecological Sanitaryware Mart in Trivandrum District, Kerala on 28 November 2005. The mart aims to be a focal point for ecological sanitation work in the area, offering advice and construction services to the community and selling the ecopan, a urine-diverting toilet pan. Eco-solutions, an initiative of Paul Calvert, introduced urine-diverting toilets in India in 1994. The Eco-solutions website states that Unicef has endorsed the ecosan approach and encouraged the Madhya Pradesh government to visit ecosan projects in Kerala. A delegation from Madhya Pradesh was present at the inauguration of the eco-sanitary mart.

!!! Information: Sanicon - Ecological Sanitation

<http://www.sanicon.net/titles/topicintro.php3?topicId=17>

!!! Contact: Paul Calvert, eco-solutions, India/UK, paulc@vsnl.com

Sources: Eco-solutions <http://www.eco-solutions.org/linkfiles/esm.htm>

Newindpress

<http://www.newindpress.com/NewsItems.asp?ID=IER20051129004645&Topic=0&Title=Kerala&Page=R>

(registration required), 29 Nov 2005

IRC News Weekly 49-50

Nepal: winner of productive uses of water case study award

Laba Hari Budhathoki of NEWAH in Nepal is the winner of a 1000 EUR prize for the best case study on productive uses of water 2005, selected by the thematic group on Productive Uses of Water. "One development opportunity leads to another, Nepal [<http://www.prodwat.watsan.net/page/554>]" describes the broad benefits of an integrated water, sanitation and hygiene project, which also included promotion of kitchen gardening, in a case study from three villages in Nepal. The author has been invited to submit a full case study that will also be published on the site in the near future.

The PRODWAT thematic group was established in 2003 to contribute to the reduction of poverty and increased gender equity through an increased recognition of productive uses of domestic water supplies, and the improved delivery of multiple use water services at the household level. The group is a collaborative partnership between international and national organisations

Source: Productive Uses of Water web site <http://www.prodwat.watsan.net/page/571>, 17 Dec 2005; IRC

Romania ecosan in schools and households in Teleorman and Giurgiu County

In January 2005, Teleorman County Council, Giurgiu County Council (Romania) and the Provinces of Overijssel and Gelderland from The Netherlands signed a co-operation agreement that has as the aims of (1) contributing to meeting the demands for the European integration by initiating co-operation between regions from EU member states, (2) exchanging experience and experts, (3) co-operating in the field of water management, and also in other fields, and (4) establishing a joint activity program.

The first project that started immediately on signing the agreement is called "Teleorman Water Project", and is subsidised by The Association of Municipalities from The Netherlands – VNG.

After an awareness raising workshop on ecosan, now, in March 2006, a Romanian delegation of mayors, representatives of the County School Inspectorate, school principals, contractors, and representatives of Teleorman County Council, plans to visit the WECF-Garla Mare ecosan project, as an example of good practices.

The Dutch Province of Overijssel plans to finance the implementation of ecosan projects in 1 or 2 schools in the rural area of Teleorman and in 10-20 households in rural areas. Mr. Nicolae Mohanu, mayor of Turnu Magurele municipality, expressed his willingness of implementing this project in two peripheral districts of the municipality.

!!! Information: http://www.wecf.de/cms/articles/2005/12/rum_nether.php

Sri Lanka Toilet rehabilitation project in Sri Lanka

The World Toilet Organization (WTO), a non-profit organization based in Singapore, promotes affordable, sustainable and ecological sanitation concepts. WTO works in country-teams comprised of engineers and social scientists to ensure a holistic approach. Since the summer of 2005, Elisabeth-Maria Huba and Thilo Panzerbieter have been working intensively in Sri Lanka to assess the problems of tsunami reconstruction efforts with regard to sanitation.

Many NGOs working within the country lack sanitation experts. As a result, many implemented sanitation systems are a danger to the environment and humans; in other cases, the construction of toilets is neglected altogether. Financed through the Lien Foundation in Singapore, WTO assisted Habitat for Humanity to incorporate sustainable sanitation concepts into their projects.

The WTO Sri Lanka Team is also currently developing a composite sanitation document for in-field selection of appropriate sanitation solutions for World Vision Lanka.

The newly founded World Toilet College intends to carry out local sustainable sanitation courses later in 2006.

!!! Download WTO Sri Lanka Mission report 1:

<http://www2.gtz.de/Dokumente/oe44/ecosan/en-srilanka-mission-report-1-2005.pdf>

!!! Download WTO Sri Lanka Mission report 2:

<http://www2.gtz.de/Dokumente/oe44/ecosan/en-srilanka-mission-report-2-2005.pdf>

!!! Contact:

Elisabeth-Maria Huba: elisabeth@worldtoilet.org

Thilo Panzerbieter: thilo@worldtoilet.org

USA Water reuse for irrigation and industrial use at Denver Water Recycling Plant, Colorado

"We set this plant up for tours because educating our public on water reuse is our mission," explains Russell Plakke, manager of the new Denver Water Recycling Plant. "We live up to our slogan of The Right Water for the Right Use." As a utility, Denver Water supplies water for the city and county of Denver, Colorado and 70 suburban water districts.

As the largest water recycling facility in Colorado, the plant, which came online last year, treats the effluent coming from the neighbouring Metro Wastewater Reclamation District Plant to standards that allow for use in irrigation and industrial applications. Then pumps push the water through 18 miles of purple pipes to Xcel Energy, the Denver Zoo, Denver parks, golf courses, school systems, and other users. This helps stretch the use of water in the arid prairie region just east of the Rocky Mountains.

Read the full article from Carol Carder posted to the "Progressive Engineers" website, at the link below.

!!! Source: <http://www.progressiveengineer.com/features/denverWater.htm>

For more information on the Denver Water Recycling Plant, visit:

!!! Information: http://www.denverwater.org/recycle/project_overview.html

Senegal and Thailand: Enhancing expertise in faecal sludge (FS) treatment in Developing Countries

A new project to increase the dissemination of knowledge on faecal sludge management (FSM) in developing countries and to support research of local scientists started in November 2005 at Eawag/Sandec and is supported by the Velux foundation. The programme includes a project in Bangkok, Thailand, where a PhD thesis on Nitrogen transformation in constructed wetland will be conducted at the Asian Institute of Technology (AIT).

A second project is being implemented in Dakar, Senegal, where training of trainers and of professionals will be conducted and where a pilot station for the treatment of FS will be constructed. The research in Bangkok is in continuation of a long-standing collaboration between the AIT and Sandec on developing the use of constructed wetlands for FS treatment ("sludge humification").

The aim of the training events in Dakar, organised in collaboration with ONAS, the national sanitation agency of Senegal, is to promote the comprehension and acceptance of available FSM tools by professionals such as managers, planners and technical personal. The pilot station will encompass several FS treatment options to serve as a place of investigation for researchers and to constitute a demonstration site for the training. The collaboration will also include Dakar's Cheikh Anta Diop University (UCAD) to enable the conducting of MSc and PhD theses in the field of FS treatment and management.

!!! Visit the ONAS page: <http://www.onas.sn>

!!! Contact: Alexandra.Baumeyer@eawag.ch Tel. +41 (0) 44 823 54 20
Martin.Strauss@eawag.ch Tel. +41 (0) 823 50 20
at Sandec/Eawag, <http://www.sandec.ch/FaecalSludge/>

!!! Source: Sandec News Nr 6 April 2006
http://www.sandec.ch/Publications/files/sandecnews_6.pdf

Publications

... books

Decentralised, ecological water and sanitation systems in cities – T. Schütze

Schuetze, T. 2005: „Dezentrale Wassersysteme im Wohnungsbau internationaler Großstädte am Beispiel der Städte Hamburg in Deutschland und Seoul in Süd-Korea“, A4, 496 Pages with 330 mainly colour images and tables, ISBN 3-8334-3671-9, Books on Demand, 119,95 € [in German]

In this doctoral dissertation the author examines the degree to which the introduction of decentralised water and sanitation systems can contribute to the sustainable management of wastewater and the security of drinking water resources in cities around the world. Along with architectural, town planning and technical feasibility in the context of renovation works on buildings, the cultural, financial and institutional boundary conditions were considered. The results are exemplary for European and east Asian metropolitan area and are evaluated using sustainability criteria. The results of this work form an interdisciplinary planning and decision making support for the realisation of ecological water and sanitation systems. The systematic structure, the logic and easy to follow language, along with a comprehensive glossary offers newcomers to this theme an excellent orientation and makes the work understandable to anyone who is interested in it.

!!! Download publication in Korean:

<http://www2.gtz.de/Dokumente/oe44/ecosan/kr-dezentrale-wassersysteme-in-grossstaedten-2005.pdf>

!!! Download table of contents and abstract in German and English:

<http://www2.gtz.de/Dokumente/oe44/ecosan/de-en-dezentrale-wassersysteme-in-grossstaedten-2005.pdf>

Biological wastewater treatment in warm climate regions

Marcos von Sperling and Carlos Chernicharo (2005) "Biological wastewater treatment in warm climate regions." - London: IWA Publishing, 2005. xix, 1460p. Set in 2-Vol. ISBN: 1-84339-002-7. Price: 225 EUR (IWA members 169 EUR)

Biological Wastewater Treatment in Warm Climate Regions gives a state-of-the-art presentation of the science and technology of biological wastewater treatment, particularly domestic sewage. The book covers the main treatment processes used world-wide with wastewater treatment in warm climate regions given a particular emphasis where simple, affordable and sustainable solutions are required.

The 55 chapters are divided into 7 parts over two volumes: Volume One: (1) Introduction to wastewater characteristics, treatment and disposal; (2) Basic principles of wastewater treatment; (3) Stabilisation ponds; (4) Anaerobic reactors; Volume Two: (5) Activated sludge; (6) Aerobic biofilm reactors; (7) Sludge treatment and disposal.

!!! Information: <http://www.iwapublishing.com/template.cfm?name=isbn1843390027>

Info-Material

Excellent French awareness raising graphics from Jeff Vivant now available for download

Several figures from C. Elain French ecosan book "Un petit coin pour soulager la planète"(ISBN 2-212-07216-3) are now available for download from our website. The figures have been made available to us following the "open source concept" for capacity building and education, provided proper reference is made. Therefore please mention the book and the Artist Jeff Vivant, when making use of the below material.

!!! Download:

<http://www2.gtz.de/Dokumente/oe44/ecosan/fr-illustration-ecosan-2005.zip>

Content:

Ecological approach - Approche écologique fr-illustration : [fr-illustration-ecosan-2005.jpg](#)

Conventional management system - Système de gestion classique :

[fr-illustration-gestion-classique-2005.jpg](#)

The cycle of contamination - Le cycle de contamination:

[fr-illustration-cycle-contamination-2005.jpg](#)

A well fertilized tomato - Une tomate bien fertilisée: [fr-illustration-tomate-2005.jpg](#)

Sawdust - La sciure : [fr-illustration-sciure-2005.jpg](#)

Separation of urine and fecal matter - Séparation des urines et des matières fécales:

[fr-illustration-separation-2005.jpg](#)

Models of dry toilets – Modèles de toilettes seches:

[fr-illustration-modeles-toilettes-seches-2005.jpg](#)

News on the web

UN advisory board on water and sanitation goes online

At the opening of the 3rd meeting of the United Nations Secretary General's Advisory Board on Water and Sanitation on November 3rd in Italy, the website of the Board was officially launched. The Board decided to make the reports and documents which are used as bases of its discussions available to the public in order to secure transparency of the discussions. The UNSGAB's Biblioteca is a small library of documents recommended by the Board members. The Biblioteca is drawn from several resources such as documents of UN, governments, international organizations, NGO and individuals.

!!! Visit: <http://www.unsgab.org>

Source: IRC News Weekly, 47-48

Trainings and Courses

Netherlands **International Short Course in Decentralised Water Supply and Sanitation,** **10th – 28th July 2006, Delft**

Organiser: Department of Municipal Infrastructure, UNESCO-IHE Institute for Water Education

The aim of the International Short Course in Decentralised Water Supply and Sanitation (DWSS) is to provide theoretical background and practical expertise for low-cost decentralised water supply and sanitation options specifically suitable for small towns, peri-urban areas and urban slums, and also for small island communities, tourist resorts and similar sensitive environments.

It covers different approaches and technologies for water supply (water sources, wells and pumps, rainwater harvesting) and sanitation (ecological sanitation concepts, ecosan link with agriculture, greywater treatment and reuse, health aspects of excreta disposal, faecal sludge management and low-cost drainage and sewerage). Management aspects including subjects like participatory planning and evaluation, financing, cost recovery, institutional arrangement and operation and maintenance of DWSS system will be also covered.

Deadlines: Deadline for the submission of a "Netherlands Fellowship Program application" to the Dutch embassy in your country is on 1 March 2006.

!!! For details see Nuffic website: <http://www.nuffic.nl>

Prior to application for a fellowship to your Dutch embassy, you must submit an application form to UNESCO-IHE (for academic admission) prior to 15 February 2006.

For applicants with their own funding, the deadline for application for the course is 1 June 2006.

!!! Information: <http://www.ihe.nl/vmp/articles/Short-Courses/SHO-DWSS.html>

!!! Contact: S. Sharma, s.sharma@unesco-ihe.org

Kenya **Sustainable Livelihood approaches to Water and Sanitation Programmes: tackling poverty through multiple uses of water.** **07th – 18th Aug 06, Nairobi**

Organiser: NETWAS International

Target group: Managers and staff in development work, development workers, leaders of NGOs

The course seeks to introduce the concept of water and livelihoods and advocate for a greater attention to the role of water within wider household livelihood strategies – and livelihood impacts. The combination of the domestic and productive benefits can add up to an appreciable impact on livelihoods and poverty eradication. Costs: US \$1480 (EUR 1223) per participant. This will cover tuition, course file, books and field trip. Application

!!! Deadline: 7 July 2006

!!! Contact: Course Coordinator, NETWAS International, <mailto:training@netwas.org>

!!! Information: <http://www.netwas.org/courses/courses/2006/6>

Norway **Short course: "Appropriate sanitation for the developing world",**
14th – 18th August, 2006
Norwegian University of Life Sciences

Organiser: Norwegian University of Life Sciences, Ås Norway

The focus of this one week course is to explore ecological sanitation solutions for developing countries. Solutions for crisis situations are also discussed. The course is designed for both professionals and students. Participants include consulting engineers, NGO-personnel (field and administrative), public officials (e.g. health and foreign service), research scientists, and students from various disciplines. A limited number of scholarships are available. Further course info will be updated shortly. The course fees are for Individuals: NOK 5200; for NGOs: NOK 1800; and for Students: NOK 750. The course fee does not include accommodation and meals.

!!! Deadline: 7 July 2006

!!! Contact: petter.jenssen@umb.no and arve.heistad@umb.no

!!! Information: <http://www.ecosan.no>

!!! Course content: from 2005 (main topics unchanged for 2006)

<http://www.umb.no/research/ecosan/vedlegg/ecosan-norway-1-2005.pdf>

Norway **MSc Programme: Environmental Technology and Management, Norwegian University of Life Sciences**

Organiser: Norwegian University of Life Sciences, Ås, Norway

This master's programme meets the demand for competence arising from the Millennium goals for water and sanitation. The programme gives a broad introduction to sanitation engineering, water and waste management. In the engineering part, emphasis is placed on the ecological engineering approach. The programme also deals with the institutional and social settings, constraints and potentials of waste treatment systems, risk assessment and the effects on sustainability and economy.

This specialisation requires an engineering or natural sciences bachelor (BSc) degree. Studies in Norway are tuition free. Required financing for living costs, books etc. is about 1100 USD/month. A TOEFL certificate or equivalent is required for admission.

!!!Deadline: March 1 2006

!!! Contact: petter.jenssen@umb.no and arve.heistad@umb.no

!!! Information: <http://www.umb.no/?viewID=755>

Sweden **Training programme "Ecological Alternatives in Sanitation**
14th August to 1st September 2006,
Sweden and India/Latin America

Organiser: Stockholm Environment Institute, sponsored by SIDA

The objective is to acquire information and knowledge about new options in sanitation in order to support urban dwellers in reducing environmental health risks, improving their nutritional status and protecting their water sources.

Duration: 3+2 weeks: 14 Aug to 01 Sep 2006, and a 2-week follow-up early 2007

Location: First part in Sweden and second part in India/Latin America

Participants: 30 in total, 15 from Asia and 15 from Latin America

Target group: Professionals engaged in town planning and building, water supply, waste management, and socio-economic development; researchers and teachers/trainers in fields related to environmental sanitation and; key persons engaged in NGOs with projects related to improved sanitation and water supply.

Closing date for application: 01 Apr 2006

!!! Information: <http://www.ecosanres.org/ESR%20course%202005.htm>

!!! Download: Course announcement

<http://www2.gtz.de/Dokumente/oe44/ecosan/nl/en-ecosan-training-course-sida-2006.pdf>

!!! Contact: Solveig Nilsson, solveig.nilsson@sei.se
Jan-Olof Drangert, jandr@tema.liu.se

New upcoming events

Mexico **7th Specialised Conference on Small Water and Wastewater Systems, and 2nd Conference of the IWA Specialist Group on Ecological Sanitation**

07th – 10th March 2006, National University of Mexico (UNAM), Mexico City

Organiser: Institute of Engineering, Universidad Nacional Autonoma de Mexico (UNAM), International Water Association IWA

The conference series “**Small Water and Wastewater Systems**” focuses on decentralised systems for water supply and wastewater treatment and their association with receiving bodies and industrial wastewater systems.

Topics are Decentralised wastewater collection and treatment systems, Industrial wastewater treatment, Anaerobic treatment systems, Upgrading wastewater treatment systems, Environmental management systems, Environmental microbiology and population dynamics, Operation and monitoring wastewater treatment systems, Wastewater reclamation and reuse, Low tech/appropriate systems, Sludge management, Bio film reactors, Sequencing batch reactors, Nutrient removal and recovery, Wetland systems and stabilisation ponds.

The GTZ ecosan Team will be participating at the event with 4 poster presentations.

!!! Download the poster abstracts:

<http://www2.gtz.de/Dokumente/oe44/ecosan/en-projects-in-india-iwa-abstract-2006.pdf>

<http://www2.gtz.de/Dokumente/oe44/ecosan/en-sustainability-criteria-iwa-abstract-2006.pdf>

<http://www2.gtz.de/Dokumente/oe44/ecosan/en-technical-data-sheet-urine-diversion-iwa-abstract-2006.pdf>

<http://www2.gtz.de/Dokumente/oe44/ecosan/en-ud-in-main-gtz-building-iwa-abstract-2006.pdf>

Before the above conference, on 7th March 2006, a workshop on ecosan is planned jointly organised by the IWA Specialist Group on Ecological Sanitation and the IWA Specialist Group on Small Systems, to give an overview on current knowledge and practice of ecological sanitation and to focus in particular on possibilities and limitations for the application in Mexico.

The workshop will discuss recent ecosan developments and dissemination strategies, and look at international case studies. A particular emphasis will be placed on possibilities and risks for ecosan dissemination in Mexico. The GTZ Team will present an overview on case studies from around the world.

Venue of the workshop will be the National Autonomous University of Mexico (UNAM), Main Campus (Ciudad Universitaria), Mexico City, Mexico.

A preliminary program for this workshop is now available for download!

!!! Preliminary Program:

<http://www2.gtz.de/Dokumente/oe44/ecosan/nl/en-preliminary-program-ecosanworkshop-iwa-2006.pdf>

Further information is available on the conference homepage:

!!! Information: <http://pumas.iingen.unam.mx/small2006/>

!!! Kontakt: small2006@pumas.iingen.unam.mx

**Germany 39th Essen conference for water and waste management
29th – 31st March 2006**

Organisation: RWTH Aachen, Umweltministerium NRW

Around 900 participants are expected at the conference this year, providing once again an interesting forum for national and international experts in water and waste management.

The thematic foci of the more than 70 presentations and discussions include:

- Wastewater treatment – Future technologies
- Water problem in developing countries and emerging market economies
- Decentral Wastewater management
- Sewage sludge treatment and disposal
- Maintenance / Logistics
- Economic questions

The presentations will be accompanied by an excursion and a thematic exhibition.

!!! Deadline : 13th March 2006

!!! Information: <http://www.essenertagung.de/>

!!! Download Conference Programme :
<http://www.essenertagung.de/images/stories/dateien/Programm.pdf>

!!! Contact: Dr. Verena Kölling, RWTH Aachen, et@isa.rwth-aachen.de

**China Water Expo China 2006,
26th – 29th April 2006, Beijing**

Organiser: China Water Resources Society

From 26-29, April 2006, the Water Expo China 2006 will be held in the Agricultural Convention Center in Beijing, China with support of the Chinese Ministry of Water Resources. The Expo will cover the latest products and technologies in several categories including: City Water Consumption, Daily Water Usage, Sewage Treatment, Anti-flood and Disaster Minimization, Water and Earth Maintenance, and Hydro-Electricity. Furthermore, the Expo will organize a series of seminars.

!!! Information: <http://www.expocomm.cn/waterexpo/>

!!! Contact: ejk@public3.bta.net.cn

**South Africa WISA Biennial Conference and Exhibition 2006
21st – 25th May 2006, Durban**

Organiser: Water Institute for Southern Africa (WISA)

The WISA Conference covers all aspects related to the production, use and reclamation of water, including Management and Environmental aspects and provide the premier forum for all practitioners to network and exchange information.

Sessions topics range from agriculture and analytical methods, to water supply, wastewater treatment and river basin management.

The Exhibition component of the event will provide an extensive showcase for all water, sanitation and environmentally orientated companies and organisations to promote their services, products and technologies at the premier water conference in Southern Africa.

More detailed information can be seen on the WISA website.

!!! Download Final Announcement :

<http://www.wisa.org.za/anntemp/20060521/FINALAnnouncement.pdf>

Nepal **International Conference: Management of Water, Wastewater and Environment Challenge**
05th – 07th June 2006, Kathmandu

Organiser: Nepal Engineers' Association (NEA), Society of Public Health Engineers Nepal (SOPHEN), the Ministry of Physical Planning and Works (MPP&W) and the Ministry of Environment, Science and Technology (MOEST)

"Management of Water, Wastewater and Environment: Challenges for the Developing Countries". This theme has been selected in view of the importance of the subject matter for overall development and improvement of quality of life in the developing countries.

!!! Abstract deadline: 15 April 2006.

!!! Contact: Conference Secretariat NEA: nea24@mail.com.np

Australia **International Conference on "Decentralised Water and Wastewater Systems" 2006,**
10th -12th July 2006, Fremantle

Organiser: Environmental Technology Centre, Murdoch University

The conference will focus on design, operation, maintenance and management of small treatment units and the uptake of decentralised systems. Innovations in the field, case studies on safe and reliable systems, removal of nutrients, water reuse, and methods for unattended operation will be discussed at the conference. Water supply and the treatment of wastewater for single houses or housing complexes will also be discussed.

The conference topic will include:

- Decentralised Wastewater Management Systems
- Rain Water Harvesting
- Economics and Decentralisation
- Urban Decentralisation: advantageous change
- Soils and Land application systems
- Alternate types of toilets
- Management of onsite services

!!! Information: <http://www.etc.murdoch.edu.au/conferences/decent.html>

!!! Contact: Dr. Kuruvilla Mathew, K.Mathew@murdoch.edu.au

!!! Updates: <http://www.etc.murdoch.edu.au/conferences>

!!! Deadline for Early bird Registration : 30 April 2006

India **International Conference on Sustainable ecoCity Development (ecoCity 6),**
5th – 12th August 2006, Bangalore, India

Organiser: Ecocity Builders, Project Agastya and 25/Bangalore

International Conference on Sustainable ecoCity Development (ecoCity 6) as a part of the International Convention of the Cities of the Future in Bangalore during July/August 2006.

Topics of the conference comprise:

- Symposium 1: Planning and Implementation
- Symposium 2: Urban settlements and ecological environments
- Symposium 3: Urban climate and Climate Change
- Symposium 4: Efficient and Sustainable Urban Utilities Management
- Symposium 5: Urban Stakeholders
- Symposium 6: Cultural and Social Environment

Ecological sanitation is discussed in Symposium 4. Other topics of Symposium 4 are: Integrated Sustainable Water & Resources Management; Integrated Sustainable Waste Management; Health & Sanitation; Power & Energy; Urban Transport Management; Air & Soil Pollution; Public Safety & Security; Eco-Tourism, Leisure & Entertainment ; Urban Poverty & unemployment..

!!! Information: <http://www.tciconferences.com/ecocity2006/ecocity2006.htm>

!!! Contact: Mr. Rajeev Kumar, project.agastya@gmail.com

Sweden **World Water Week “Beyond the River – Sharing Benefits and Responsibilities”**
20th - 26th August 2006, Stockholm

Organiser: Stockholm International Water Institute (SIWI), Sweden

The World Water Week in Stockholm is the leading annual global meeting place for capacity-building, partnership-building and follow-up on the implementation of international processes and programmes in water and development. It includes topical plenary sessions and panel debates, scientific workshops, independently organised seminars and side events, exhibitions and festive prize ceremonies honouring excellence in the water field. Stockholm is the meeting place for experts from businesses, governments, the water management and science sectors, inter-governmental organisations, NGOs, research and training institutions and United Nations agencies.

!!! Information: <http://www.worldwaterweek.org/>

!!! Download 1st Announcement and Call for Abstracts :
[http://www.worldwaterweek.org/Downloads/2006_1st_Announcement\(web\).pdf](http://www.worldwaterweek.org/Downloads/2006_1st_Announcement(web).pdf)

!!! 2nd Announcement and Call for Registration: April 2006

!!! Contact: sympos@siwi.org

Botswana **The International Conference on Environmentally Sound Technology In Water Resources Management**
11th – 13th September 2006, Gaborone

Organiser: The International Association of Science and Technology for Development (IASTED)

Topics of the conference comprise :

- Water Supply and Sustainable Use
- Wastewater and Stormwater Management

- Integrated Watershed Management
- Pollution Prevention and Reduction in Industry
- Issues in Implementing Environmentally Sound Technologies

!!! Submission Deadline : 15 March 2006

!!! Registration Deadline : 15 June 2006

!!! Information: <http://www.iasted.org/conferences/2006/Botswana/c515.htm>

!!! Contact: calgary@iasted.org

Portugal **10th International Conference on Wetland Systems for Water Pollution Control**
23rd – 29th September 2006, Lisbon

Organiser: International Water Association (IWA) Specialist Group on the Use of Macrophytes in Water Pollution Control

Constructed wetlands are considered low-cost alternatives for treating municipal, industrial and agricultural effluents. A vast amount of literature has been published on various topics including potential use of these systems to remove biochemical oxygen demand, nutrients and to a limited extent metals and toxic organic compounds; engineering assessment and design criteria; and optimization and cost-effectiveness.

The following technical and scientific topics may be addressed in oral presentations and posters:

- Global issues
- Critical Process Dynamics
- Design criteria
- Economics
- Treatment Performance of Wetlands in Water Pollution Control
- Case studies

!!! Contact: Veríssimo Dias (Conference Organizer), verdis@gaiagreen.pt

!!! Information:

http://www.wetconf10.adp.pt/10th%20Conference%20Web%20Page_Eng.htm#Overview

Jordan **Regional EMWater Project Conference on Efficient Management of Wastewater Treatment and Reuse**
30th October – 1st November 2006, Amman

Organiser: organised in the framework of EMWater Project, funded by the European Union – the MEDA Water Program Initiative

All MEDA countries are currently facing serious problems regarding the supply of sufficient water resources to cover their increasing water supply demands. In the year 2025, countries like Jordan, Israel and Palestine will have less than 150 cubic meters per capita and year. Other countries like Syria and Lebanon, at present classified as "water rich", will also face similar water stress problems during the next two decades. Therefore, these countries need water strategies that have to take into account alternative measures to cope with this situation. Wastewater reuse is one of the essential options MEDA countries have to consider for the development of their national water policies and strategies.

Conference Themes

- Appropriate and non-conventional wastewater treatment technologies
- Operation and maintenance of wastewater treatment system
- Health and environmental aspects of WWT
- Wastewater treatment

- Socioeconomic aspects of wastewater treatment and reuse
- Policy guidelines, regulations and standards of wastewater treatment and reuse
- Sustainable urban drainage systems (SUDS)
- Capacity building

!!! **Contact** : Dr. Ismail Al Baz, Fax: +962 6 5686184, ismailalbaz@nets.com.jo

!!! **Information**: <http://www.emwater-conference.org/>

!!! **Deadline for Papers to be considered as Presentation** : 15th March 2006

!!! **Deadline for Full Manuscript submission** : 15th June 2006

Lebanon **Water Resources in the Mediterranean Basin**
1st –3rd November 2006, Tripoli

Organiser: Lebanese University in co-operation with the Lebanese Committee for Environment & Sustainable Development

The conference themes comprise:

- Integrated water resources management
- Global change: effects on water resources
- Optimisation of water use in terrestrial ecosystems
- Mediterranean aquatic systems functioning
- Domestic and industrial wastewater : treatment and reuse
- Water quality, pollution and health
- Hydrology - Hydrogeology
- Water Resources Policy

!!! **Information**: <http://www.watmed.com/English/Conference/Page.aspx?PageID=9>

!!! **Deadline for Abstract submission** : 30 March 2006

!!! **For more information**: info@watmed.com

Sri Lanka **Sustainable Development of Water Resources, Water Supply and Environmental Sanitation**
13th – 17th November 2006, Colombo

Organiser: Institution of Engineers, Sri Lanka and Water, Engineering and Development Centre (WEDC), U.K.

Papers are invited under the following themes:

Water resources, Water supply, **Environmental sanitation**, Institutional issues, Cross-cutting issues.

!!! **Information**: <http://wedc.lboro.ac.uk/conferences/conference1.php?ID=7>

!!! **Deadline for Paper submission** : 5th March 2006

!!! **For more information**: wedc.conf@lboro.ac.uk

Thailand **World Toilet Expo & Forum 2006,**
16th –18th November 2006, Bangkok

Organiser: Ministry of Public Health, World Toilet Organization (WTO) and Meeting Planners International (MP) Asia Pte Ltd

The World Toilet Expo & Forum (WTE&F) is a series of events created by the World Toilet Organization (WTO) to cater to the specific needs of mature cities. Each of the events addresses issues that will be of particular significance to the host city.

Bangkok will host the second World Toilet Forum. With the theme, Happy Toilet, Healthy Life, the event will facilitate Thailand towards the progressive development and standardisation of public toilet service. The programme will be built around the Development Strategy which emphasizes the three major aspects of public toilets in Thailand: Healthy, Accessibility and Safety (HAS). HAS sets out guidelines on the minimum hygiene standards that a public toilet must comply with.

!!! Deadline for Early Bird registration: 15th May 2006

!!! Information: <http://www.worldtoiletexpo.com/home>

!!! Information Brochure:

http://www.worldtoiletexpo.com/uploads/images/95/WTEF_2006_Brochure.pdf

!!! Press release from the 15th November 2005:

http://www.worldtoiletexpo.com/press_release_-_15_nov_2005

Events reminder

**Mexico: 4th World Water Forum
16th – 22nd March 2006, Mexico City**

Organiser: World Water Council

The 4th World Water Forum will take place from the 16th to the 22nd of March in Mexico. The aim of the forum is to develop concrete measures and indicators that can be used to achieve the MDGs more rapidly.

The proposed local activities that have been proposed to date can all be seen online under: http://www.worldwaterforum4.org.mx/home/lista_actions.asp

!!! Download: Liste der ecosan-relevanten vorgeschlagenen Sessions unter:

<http://www2.gtzt.de/Dokumente/oe44/ecosan/nl/en-4wwfmexico-ecosansessions-2006.pdf>

<http://www2.gtzt.de/Dokumente/oe44/ecosan/nl/en-4wwfmexico-ecosansessions-2006.xls>

The location of the stand can be found under:

<http://www2.gtzt.de/ecosan/download/en-4wwf-fair-ecosanstand-map-2006.xls>

!!! Information: <http://www.worldwaterforum4.org>

**China Water China 2006 - Exhibition/Trade-fair
6th - 9th March 2006, Guangzhou**

'Water China' has established itself as the biggest Chinese trade-fair in the field of environment with international and Chinese Exhibitors. Being held for the 7th time. The fair comprises the International Water, Wastewater & Water Treatment Trade Show (Water China) and the International Air & Waste Treatment Trade Show (AW China).

!!! Information: <http://www.waterchina.merebo.com/>

**Australia: Incorporation of 7th International Conference on Urban
Drainage Modelling & 4th International Conference on Water
Sensitive Urban Design
2nd – 7th April 2006, Melbourne**

Organiser: Institute for Sustainable Water Resources, Monash University, Melbourne, Australia

This conference will deal with two highly topical issues in management of Urban Water; modelling of urban drainage systems and the interfaces to other parts of urban water cycle. Current achievements and problems in Water Sensitive Urban Design (WSUD), also known as Low Impact Development Design.

It will follow on the six past international gatherings on Urban Drainage Modelling (UDM), and highly successful international WSUD conferences traditionally held in Australia.

!!! Information: <http://www.icms.com.au/UDMandWSUD/>

!!! Contact: UDMandWSUD@icms.com.au

Turkey **International Symposium on Water and Land Management
for Sustainable Irrigated Agriculture**
4th – 8th April 2006, Adana

Organiser: Irrigation and Agricultural Structures Department at Cukurova
University, Turkey

The symposium aims to identify best management practices that will harmonize the sustainable use of water for agricultural production and livelihoods with well-functioning ecosystems.

Some of the topics to be included in this symposium are as follows:

- Irrigation efficiency and associated economics
- Irrigation for poverty alleviation and food security improvement
- Water management in the irrigation sector
- Water valuation in the irrigation sector, cost coverage, tariff system and rate level: opportunities and constraints
- Water scarcity and water harvesting
- Virtual water and food security
- Policy options for saving water in irrigation
- Impacts of climate change on hydrological regimes and water resources
- Gender issues in water and land management

!!! Information: http://www.unesco.org/water/water_events/Detailed/1125.shtml

!!! Contact: Dr. Attila Yazar symp2006@cu.edu.tr

Marocco: **Integrated Water Resources Management and Challenges
of the Sustainable Development**
23rd - 25th May 2006, Marrakech

Organiser: The Moroccan Committee of the International Association of Hydro
geologists (IAH)

This congress will be a unique occasion for the different specialists in the field of water resources management (researchers, decision makers, planners, laboratorians, contractors, engineers and designers, etc.) to present and exchange information about the last developments in their works regarding integrated water resources management.

Topics of the conference:

- Tools and technologies applied to the integrated management of water resources
- Impact of climatic changes, new hydraulic structures and socio-economic development on water resources
- Quantitative and qualitative aspects of the integrated and sustainable water resources management

!!! Information:

http://webserver.lih.rwth-aachen.de/lih/content/e1864/e1865/index_ger.html

!!! Contact: gire3d@ucam.ac.ma

Singapore **Researchers Conference for Young Water Professionals**
24th - 26th May 2006, Nanyang Technological University

Organiser: International Water Association IWA

The **IWA Young Water Professionals Programme** provides professional development and networking opportunities to young professionals and students in the water and wastewater sector under the age of 35. As part of the programme, international events exclusively for young researchers are hosted every two years.

For this years conference submissions on all aspects of water, wastewater technology, engineering and management are invited. Only authors who are invited to present their work will be able to register for the conference.

!!! Information:

<http://www.ywp.iwahq.com/templates/dynamic/Conferences/Conference.aspx?ObjectId=310706>

!!! Contact: <mailto:YRC2006@iwahq.org.uk>

Canada **3rd World Urban Forum**
19th - 23rd June 2006, Vancouver

Organiser: United Nations Human Settlements Programme (UN- HABITAT)

The World Urban Forum was established by the United Nations to examine the impact of rapid urbanisation on communities, cities, economies and policies. The overall topic of this Forum is how to minimise burgeoning poverty in cities, improve the urban poor's access to basic facilities such as shelter, clean water and sanitation and achieve environment-friendly, sustainable urban growth and development.

!!! Information: <http://www.unhabitat.org/wuf/2006/>

!!! Contact: Mr. Lars Reutersward <mailto:lars.reutersward@unhabitat.org>

China **IFAT China 2006 - 2nd International Trade Fair for Environmental Protection**
27th - 30th June 2006, Shanghai

Organiser: Shanghai New international Expo Centre (SNIEC), Munich Trade Fairs International Group (MMI), Munich Trade Fairs (Shanghai) Co. Ltd and China Association of Resources Comprehensive Utilization (CARCU)

CHINA 2006 is the comprehensive exhibition in the Asian marketplace for practice-oriented solutions in the key sectors for environmental protection including water supply, sewage, waste disposal and recycling, air pollution, environmental technology and environmentally sound energy sources.

!!! Information: <http://www.ifat-china.com> (for exhibitors)
<http://www.dvgw.de> and <http://www.dwa.de> (for lectures)

!!! Contact: Mrs. J. Dettmann dettmann@messe-muenchen.de (for exhibitors)
Mrs. Gabriele Martens matens@dwa.de (for lectures)

Finland **Dry Toilet 2006: The Second International Dry Toilet Conf.**
16th – 19th August 2006, Tampere

Organiser: Global Dry Toilet Club of Finland, Tampere Polytechnic, and Tampere University of Technology

The objective of the conference is to offer a platform for discussion for the professionals and other interested parties. The conference will disseminate the latest information on various aspects of dry toilets. The popular Dry Toilet Exhibition will also be organised during the conference.

!!! **Information:** <http://www.drytoilet.org/dt06.html>

!!! **Contact:** secretary2006@drytoilet.org (for program)
drytoilet@tavicon.fi (for registration and accommodation)

China: **World Water Congress and Exhibition**
10th – 14th September 2006, Beijing

Organiser: IWA China

Auspices: Ministry of Construction, P.R. China

Over four thousand delegates are expected to gather in Beijing to address water issues from a holistic point of view. The congress themes cover most areas of the global water industry, such as water resource utilisation and protection, water treatment technology and facility operation and management, water safety and health, water recycling, and sustainable utilisation, with an emphasis on the needs of developing countries.

The delegates will discuss and communicate with thousands of Chinese colleagues from the academia, industry, and government. Leading researchers and professionals will present the latest innovations in water technologies and management in the Congress, and promote their transfer to China and other countries interested.

Meanwhile, the international exhibition area will demonstrate the state-of-the-art water treatment technologies, equipment and services.

!!! **Information:** <http://www.iwa2006beijing.com>

!!! **Contact:** The Ministry of Construction, Secretary iwa2006@mail.cin.gov.cn

Links and Tips

Links on the GTZ ecosan-Homepage

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

<http://www.gtz.de/en/themen/umwelt-infrastruktur/wasser/9837.htm> and

<http://www2.gtz.de/ecosan/english/links.htm>

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

ecosan@gtz.de

Virus information

Sometimes viruses steal our addresses from other computers and use them to distribute themselves. We know, that this problem is common for e-mail addresses that have been saved by many people, but unfortunately, we cannot prevent this from happening.

We would therefore recommend that you ensure all your mails are scanned by an up-to-date virus scanner and that you do not open any obscure attachments.

Our newsletter is sent simply as text, with no attachments of any sort, instead, documents are always offered as download-links from our website. **If you do receive a mail from us with an attachment claiming to be related to the newsletter, do not open the attachment.**

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> (new)

<http://www2.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, Florian Klingel, Esther Geiss, Carola Israel

GTZ, Division 44: Infrastructure and Environment
ecosan project – ecologically and economically sustainable wastewater management and sanitation systems

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH

P.O. box 5180

D-65726 Eschborn, Germany

Phone: ++49-6196-79-4220

Fax: ++49-6196-79-7458

christine.werner@gtz.de

florian.klingel@gtz.de

esther.geiss@gtz.de

carola.israel@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 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.

ecosan sector program

Deutsche Gesellschaft für Technische
Zusammenarbeit (GTZ) GmbH
P.O. Box 5180
65726 Eschborn, Germany
T +49 6196 794220
F +49 6196 797458
E ecosan@gtz.de
I <http://www.gtz.de/ecosan>

