

**BMZ** 

On behalf of



# ecosan Newsletter

#### Newsletter on sustainable sanitation and ecosan

By the GIZ program "Sustainable sanitation - ecosan"

Issue no. 43 May 2012

#### Dear Readers,



Last year we celebrated the 10-year anniversary of our ecosan newsletter. This year we have more sombre news: we will stop producing this newsletter – you are actually now reading the second last edition. The reason is that we have other news outlets these days (such as the SuSanA news mail, discussion forum and website) where we can serve you equally well but with fewer resources required – although they are only available in English so far and not yet in

French. So newsletter number 44 in October 2012 will finally be the last one unless we receive major objections from our readers.

In the meantime, we urge you to <u>subscribe to the SuSanA news</u>, which will replace this GIZ ecosan newsletter over time.

This newsletter is sent to approx. 4,200 subscribers for the English version and 390 subscribers for the <u>French version</u>. If you see this newsletter in a text-only format, please adjust your e-mail program to display e-mails in HTML-format.

Best wishes from Germany,

Dr. Elisabeth von Münch (<a href="mailto:ecosan@giz.de">ecosan@giz.de</a>) (Program leader "Sustainable sanitation - ecosan")

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# Breaking News

Breaking news: New SuSanA publication with foreword by Uschi Eid: "Compilation of 13 factsheets on key sustainable sanitation topics" now available as hardcopy. Contact us if you wish to receive a copy.

#### Links

All 14 presentations and feedback about the sessions from the recent 15th SuSanA meeting at the 4th Africa Water Week in Cairo are now available online. Video footage will be online by end of May.

New SuSanA posters available:
The Join SuSanA poster highlights the benefits and opportunities of being a SuSanA member. The SuSanA roll-up poster shows the 11 thematic working groups and the SuSanA partner logos. Please contact the SuSanA secretariat if you need them in a higher resolution for printing.

New updated SuSanA DVDs (April 2012 version) are now available. The SuSanA DVD contains all we could fit from the SuSanA website. Please order copies of the DVD here (free of charge). The DVDs are mainly meant for people in areas with slow internet access.

New post on Ecosan Network Kenya blog: Evaluation on good practices in Ecosan schools in Western Kenya.

A paper by Julie Fisher (<u>WEDC</u>) and Tracey Crofts is published in the Journal of Water, Sanitation and Hygiene for Development entitled "<u>Menstrual Hygiene</u> in

## News

China

## Update: A clean dirty business with apples – May 2012



To facilitate the full operation of 31 UDDTs donated by SOHO China Foundation, Mr. Chen (a consultant) transformed the ecosan project into a profitable business by growing apples with the urine in Tianshui City of Gansu province. In 2011 about 100 apple trees in a 1,200 m<sup>2</sup> orchard were cultivated, applying about 40,000 I of urine from the SOHO School

ecosan toilets. About 4,800 kg of apples were harvested and sold to middle class consumers in big cities. With the positive consumer response a profit margin of about 25% was made.

- SOHO China Foundation website
- 2-page description about this project
- More photos
- Contact: Scott Chen

# Second call for sanitation proposals for Zambian utilities -May 2012



The multi-donor basket fund in Zambia called "Devolution Trust Fund" issued a second call for sanitation proposals. This time, seven Zambian commercial utilities will be invited to develop sanitation projects for approximately 20,000 people preferably for peri-urban areas. The first call in 2008 resulted in four innovative sewer based sanitation projects for 15.600 people that will be commissioned in 2012 and demonstrate decentralised treatment options in Zambia. The first project has been operational since December 2011. It provides access to water and low flush toilets (including shower

facilities) for about 2,000 people and biogas cooking energy for 10 families in the city of Ndola. The innovative character is that these facilities use simplified sewer systems and intermediate biogas digesters to settle solids and produce biogas. Another project in Solwezi uses a complete DEWATS system (Biogos digesters, ABR and a Planted Gravel Filter) to pilot decentralised treatment systems in Zambia.

■ Devolution Trust Fund (DTF) website

- Article on Ndola biogas project
- Presentation on lessons learnt during SuSanA side event in Morocco, 2012 (PDF; 0.8 MB)
- More photos and overview of four DTF sanitation projects
- DTF facebook page
- Contact: <u>Jackson Mulenga</u> (DTF) and <u>Steffen Blume</u> (GIZ)

# Dry composting latrine and organic school garden project -April 2012



Community Development International and local partner Konpay constructed a dry composting latrine at a remote school in rural Haiti. The project also includes the first all organic school garden. Produce will be used in the school's kitchen serving over 300 students per day. Furthermore, the kitchen will receive highly efficient

Ugandan Schools: an Investigation of Low-cost Sanitary Pads". Discuss this paper and related issue on the discussion forum.

WASH United, Quicksand, IDEO, HatteryLabs, Südfeuer and WSP announce the SOAP it UP! Design challenge. The aim of the challenge is to design a handwashing station for a rural Indian household that is attractive, acceptable and marketable.

Videos and photos

Videos of presentations at a SuSanA side event entitled "Rethinking sanitation from a sustainability perspective: SuSanA products and outcomes" in Marrakech, Morocco on 22 February 2012 are now online. The presentations are from Rahul Ingle (GIZ, Germany), Magalie Bassa (Eawag/Sandec, Switzerland), Günter Langergraber (BOKU, Austria) and **Doulaye Koné** (Bill and Melinda Gates Foundation, USA).

This video shows an innovative toilet-to-garden process which is turning waste into resources in Haiti's camps for the internallydisplaced after the earthquake in 2010. The organisation behind this system is **SOIL** (Sustainable Organic Integrated Livelihoods).

The video "It's in Your Hands" by tippytap.org is a short clip on the "tippy tap", a low cost, low tech, low water, hands-free device to promote hand washing with soap.

The video "Ecological-dry-toilet in Ecuador" gives a good overview about the construction of a urinediverting dry toilet (UDDT) in a rural area in the Andes. The project was conducted in 2010 together with a Peaces Corps volunteer and an Ecuadorian expert in dry toilets (Chris Canaday).

The short video clip "Dirt? Money" portrays the interventions

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clean cook stove installations using alternative (biomass) charcoal briquettes, thereby improving human and environmental health and reducing costs associated with firewood.

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- CDi website
- Project progress report (PDF; 0.3 MB)
- Contact: Matthias Resch (CDi)

India, Sierra Leone, UK

#### 50,000 people to use UDDTs (ecosan toilets) in India and Sierra Leone – April 2012

Preliminary results from data collection by "Wherever the Need" relating to UDDTs built and used indicates that 1,220 family UDDTs have been built by WTN in India (this should reach 1,400 by year end). Together with the mobile units, school and community units, over 32,000 people have access to UDDTs in India. Furthermore, 17,000 people will have access to UDDTs by the completion of the first phase community UDDTs in Sierra Leone meaning that by the end of this year about 50,000 people will be using UDDTs built by "Wherever the Need". Major training programmes are currently in progress to ensure correct usage of the facilities. For family toilets, usually 5 people share one toilet. Usage figures in India are about 85% of all toilets built.

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- Website of WTN
- Short project update in Sierra Leone (PDF; 2.2 MB)
- Photos of UDDTs in India
- Photos of UDDTs in Sierra Leone
- Contact: Richard Napper (WTN)

Worldwide

### **Ecosan topics in the SuSanA Discussion Forum**

From the large number of postings on the open SuSanA discussion forum since our last newsletter we have selected the following six which we want to highlight to you in this newsletter. These are topics on UDDTs and on reuse issues. Please have your say and join in the debate by clicking the "reply" button below a posting on the forum.

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- Review of the new "Technology review of UDDTs" (Views: 347, replies: 9)
- Ethiopia Adama University UDDT project seems O&M to blame again! (Views: 140, replies: 1)
- <u>UDDTs for sale at hardware store in Germany</u> (Views: 33, replies: 0)
- Examples of ecological sanitation at scale (Views: 230, replies: 12)
- <u>Use excreta compost only for non-edible plants (preferably)?</u> (Views: 468, replies: 22)
- Benefit of Dry Faecal Matter Reuse is it worth the cost/effort of processing? (Views: 1402, replies: 38)

**EVENTS AND COURSES** 

France

# Two-day course on greywater reuse in gardens – June 2012



In connection with the visit of Laura Allen to France (founder of Greywater Action, USA), TDM is organising a 2 days practical course on greywater reuse with mulch beds from 18 to 19 June 2012 in Nyons, France. This course is targeted at designers, landscape gardeners, associations and others involved in on-site sewage treatment and landscape water management. Participants will acquire knowledge on simple technologies on how to design and construct different types of greywater reuse systems. The technology

undertaken by GIZ and partners in improving the sanitation situation through sanitation entrepreneurship in Kampala, Uganda.

Photos from school sanitation and communities in <u>South Sudan</u>.

Photos of the <u>Ruai treatment plant</u> (ponds) and <u>Dandora dumping site</u> in Kenya.

Photos of the <u>15th SuSanA</u> <u>meeting</u> within Africa Water Week, Egypt.

Manual pit emptying compared to use of Gulper to empty pit latrines in Kibera, Kenya.

## **Upcoming events**

13 – 15 June 2012

Emergency Sanitation Workshop

Delft, The Netherlands

25 – 27 June 2012

<u>EcoTechnologies for Wastewater</u>

<u>Treatment</u>

Santiago de Compostela, Spain

26 – 29 June 2012

<u>Training on Decentralised Solid</u>

<u>Waste Management</u>

Kengeri, Bangalore

6 – 11 August 2012 SARAR Methodology Course Tepoztlan, Mexico

22 – 25 August 2012
4th International Dry Toilet
Conference
Tampere, Finland

26 – 31 August 2012

World Water Week 2012: Water
and Food Security

Stockholm, Sweden
(16th SuSanA meeting in
Stockholm is planned for Saturday,
1 Sept. 2012 – please check for



is relevant for both developed countries in

Europe as well as for developing countries.

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- Toilettes Du Monde (TDM) website
- Workshop brochure (in English) (PDF; 0.3 MB)
- Information in French (PDF; 0.7 MB)
- Website of Laura Allen's organisation
- Website of San Francisco City: Greywater design manual for outdoor irrigation
- Contact: <u>Benjamin Berne</u> (TDM)

Haiti

#### **SOIL** and **UNICEF** co-host National Sustainable Sanitation Conference – June 2012



SOIL with support from UNICEF will organise the first National Sustainable Sanitation Conference to bring together organisations, community members and government representatives interested in sustainable sanitation initiatives in Haiti. The agenda will include an overview of the National Sanitation Strategy by DINEPA's sanitation office, lessons learned from previous and ongoing sustainable sanitation projects in Haiti, workshops focused on

different components of sustainable sanitation, stakeholder feedback and an open forum to discuss National Standards for Composting Toilets and Biogas. Presentations will be in English, Haitian Creole and French. This conference will take place in Port-au-Prince, from 12 to 13 June 2012.

To register for the conference or submit an abstract, please email: info@oursoil.org.

- SOIL website
- Conference announcement (in English)
- Conference announcement (in Haitian Creole)

Sweden

#### Learning Event "From field to fork to field" – June 2012

SIANI, SLU (Dept. Natural Resource Management and Livelihoods in International Development) and Sida are hosting a learning event entitled "From Field to Fork to Field: Nutritious food and nutrient cycling to enhance health, wealth and resilience". This event will be held on the Agriculture and Rural Development Day, 18 June 2012.

SIANI website

- Details of the Learning Event (PDF; 0.4 MB)
- Other learning events on this particular day
- Contact: Madeleine Fogde (SEI)

**Philippines** 

#### SSWM training course on emergency response and preparation - Aug. 2012

The Xavier University Sustainable Sanitation (SuSan) Center in collaboration with seecon International GmbH and the Southeast Asia Rural Social Leadership Institute (SEARSOLIN) is offering a 1-week Sustainable Sanitation and Water Management Course (SSWM): Emergency Response and Preparation. The course is now open for registration.

Dates:

Module I Basic Course: 13 to 16 August 2012

Module II Expert Course: 16 to 19 August 2012 (requires attendance of module

5 – 7 September 2012

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4th IASTED African Conference on Water Resource Management Gaborone, Botswana

16 - 21 September 2012 IWA World Water Congress and **Exhibition** 

Busan, South Korea

29 - 31 October 2012 International Conference: Developments in faecal sludge management Durban, South Africa

29 October – 2 November 2012 2012 Water and Health Conference: Science, Policy and Innovation Chapel Hill, North Carolina, USA

4 – 7 November 2012 2nd ECOSANLAC: Resource Oriented Sanitation in Latin **America** Vitoria ES, Brazil

6 - 7 November 2012 Conference on NASS (new alternative sanitation systems) and final conference on SANIRESCH project (conference in German:

Wasserinfrastrukturkonzepte in der Stadtplanung) Eschborn, Germany

12 - 23 November 2012 SARAR- VII Curso Regional en Saneamiento Sostenible (in Spanish)

Tepoztlan, Mexico

13 - 15 November 2012 Water Safety Conference 2012: Improving service delivery and protecting public health Kampala, Uganda

Intensive Training-of-Trainers: 20 August 2012 (requires attendance of module I and II)

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- Further information on the training course (PDF; 1.2 MB)
- Contact: <u>Analiza Miso</u> (SuSan Centre)

The Netherlands, worldwide

#### Online course in ecological sanitation – Sept. 2012

The UNESCO-IHE Institute for Water Education in Delft, The Netherlands, has been offering an annual online course on ecological sanitation since 2007. This popular course targets mid-career professionals in developing countries involved in ecological sanitation like professionals working in engineering, architecture, planning, financing, and even in medical professions. This year the course starts on 1 September and runs for 18 weeks with a study load of 8 hours per week. Both technical (storage, collection and treatment of urine, faeces and greywater; anaerobic digestion; reuse in agriculture) as well as nontechnical issues (social and economic, gender, marketing, sanitation as a business) will be taught and discussed. Some scholarships are available.

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- Course description
- Contact: Mariska Ronteltap (UNESCO-IHE)

20 – 23 November 2012

<u>Conference on Decentralised</u>

<u>Wastewater Management in Asia:</u>

<u>Meeting Urban Sanitation</u>

<u>Challenges at Scale</u>

Nagpur, India

3 – 6 December 2012

World Toilet Summit 2012 - African

Sanitation: Scaling Up

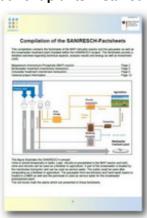
Durban, South Africa

20 – 23 January 2013 <u>2nd Water Research Conference</u> Expo Singapore

# Publications on ecosan and sustainable sanitation

GIZ, Germany

Factsheets about the urine, greywater and brownwater treatment plants installed at the GIZ headquarters



The SANIRESCH project team has written three 4-page factsheets about the MAP (struvite) reactor for urine and about the greywater and brownwater treatment plants (MBRs) installed as part of the SANIRESCH project. These factsheets in English and German provide a detailed and succinct overview of the technical aspects, results of analysis, energy and investment costs. This project is financed by the Federal Ministry of Education and Research.

#### Jobs

We continuously publish job openings from SuSanA partners on the <u>SuSanA website job section</u> and on the <u>discussion forum</u>.

Applications are invited from international MSc students currently studying in Germany who are interested in a 3-months internship with the GIZ Ecosan team in Eschborn, Germany.

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- Download factsheets (PDF; 1.0 MB) <u>English version</u> and <u>German version</u>
- Photos of the project
- Website of the SANIRESCH-project
- Contact: Martina Winker (GIZ)

EcoSan Club, Austria

# Sustainable Sanitation Practice (SSP) journal: Issues 10 and 11



The Sustainable Sanitation Practice journal Issue 10 on "10 Years EcoSan Club" and Issue 11 on "Water reuse" are available online. Issue 11 shows three examples for the use of treated wastewater for irrigation in agriculture:

- 1. Results from a long-term study carried out in Sicily, Italy
- 2. Activities on water management in the Oasis of Figuig, Morocco
- 3. Practical experiences from a feasibility study on technology selection for



wastewater treatment and effluent reuse schemes in Anza village, Palestine

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- SSP journal website
- Contact: <u>Guenter Langergraber</u> (BOKU)

#### CAPS, Philippines

## **Ecological Sanitation during the Sendong Emergency**



The third edition of Volume 1 of the Philippines Sanitation Series on "Ecological Sanitation during the Sendong Emergency" by the Centre for Advanced Philippines Studies (CAPS) is now available. This series is about the tropical storm "Sendong" which struck the two cities Cagayan de Oro and Iligan on 17 December 2011. It explains the evacuation process, the application of social networks and most importantly the introduction of ecosan toilets as a sanitation solution in the disaster areas.

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- Website of CAPS
- Link to the document

Rotaria del Peru SAC, Peru

# Construction manual for bench style double vault urine diversion dry toilets and alternatives (in English and Spanish)



A new publication from Rotaria del Peru SAC has been published in English and Spanish: "Construction of bench style double vault urine diversion toilet and alternatives". This is an excellent construction manual with many photos for bench style UDDTs. When using the bench design the user sits directly on the vault. This has the advantage of reducing the

required number of stairs.

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- Construction of bench style double vault urine diversion toilet and alternatives in <u>English</u> and in <u>Spanish</u>.
- Rotaria del Peru SAC website

#### DWA, Germany

# Do we need New Alternative Sanitation Systems?



The English version of the DWA publication "Do we need New Alternative Sanitation Systems?" is now available. New alternative sanitation systems (NASS) are based on the separate collection, discharge, treatment and reuse of source separated flows. The aim of implementing NASS is the reuse of water and the utilisation of useful substances extracted from wastewater (especially nutrients and organic matter). DWA is the German Association for Water,

Wastewater and Waste.

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#### University of Freiburg, Germany

# Sanitation study: Evaluation of dry sanitation systems in Namibia



This report provides detailed information on a study conducted to identify factors contributing to the success and/or failure of dry sanitation systems in Namibia. The evaluation was conducted by observing already implemented dry toilets (mainly Otji-Toilets), carrying out standardised interviews with users of dry sanitation systems as well as expert interviews with stakeholders. Implemented on individual household level, dry toilets work quite well in Namibia. For an increasing provision of dry sanitation on a larger scale in Namibia, new instruments for financing and subsidisation have to be developed and a higher political

support is needed.

■ Sanitation study: Evaluation of dry sanitation systems in Namibia

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# partner of

# sustainable sanitation alliance

GIZ is a partner of the Sustainable Sanitation Alliance (SuSanA) - a loose network of 180 organisations active in the field of sustainable sanitation.

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