

# sustainable sanitation alliance

## SuSanA factsheet

# Capacity development for sustainable sanitation

April 2012

## 1 Summary

This factsheet provides an overview on basic principles of capacity development and addresses current challenges and gaps in capacity development for sustainable sanitation, as well as possible strategies and instruments to address those. Furthermore it contains a list of examples and contact details of capacity development initiatives from the sector. The factsheet is intended for individuals who require or are engaged with capacity development for sustainable sanitation.

The key messages are:

- Capacity is knowledge, information, and attitude.
- Capacity development is the process of unleashing, strengthening, creating, adapting and maintaining capacity over time. It takes place on three levels: individual, organisational and enabling environment. An enabling environment encourages sustainable sanitation thinking and action at local and national levels, which is necessary for policy development.
- Capacity development for sustainable sanitation requires cross-sectoral cooperation with individuals and within organisations from health, infrastructure, water, environment, agriculture, education, economic development etc.
- It considers the complexity of sanitation systems along the sanitation chain (from the user interface, collection, treatment, reuse and safe disposal of sanitation products), considering all technical, financial, social and institutional aspects.
- It is an internal process of change led by communities and nations.
- It insists on knowledge sharing and management and involves development, transfer and use of both explicit and tacit (undocumented) knowledge.
- It includes a variety of methods: education, professional training, support for documentation of appropriate local infrastructure and sharing knowledge in print, online and multi-media.

## 2 Background

The Millennium Development Goals (MDGs) aim to achieve poverty reduction and sustainable development. The target for water supply and sanitation services is to halve the proportion of people without access to safe drinking water and basic sanitation by 2015. Although extending safe sanitation facilities is neither prohibitively expensive nor technologically unattainable, progress on sanitation actually

slowed according to the 2010 report of the Joint Monitoring Programme of UNICEF and WHO.

Sanitation protects and promotes human health by maintaining a clean environment and breaking the cycle of diseases. Sustainable sanitation is far more than toilet availability. Toilets are part of a system that should be economically viable, socially acceptable, and technically and institutionally appropriate. Moreover, sustainable sanitation should also protect the environment and natural resources. This definition results in five key criteria for sustainable sanitation (SuSanA, 2008): a) protection of human health; b) protection of the environment and natural resources (including water resources, ecosystems, fuel wood, etc.); c) viable technologies and operations; d) financial and economic sustainability; and e) socio-cultural acceptability and institutional appropriateness.

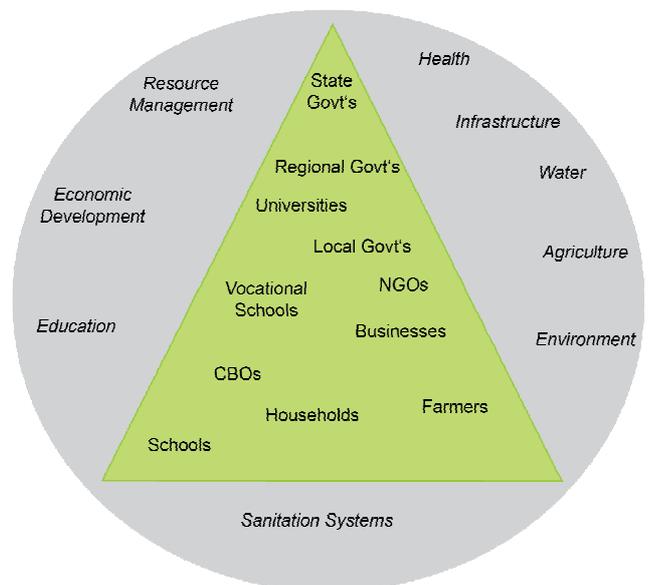


Figure 1: Capacity building takes place at individual, organisational and at the level of an enabling environment. It requires a trans-sectoral approach to health, infrastructure and water, environment, agriculture, and education (source: seecon GmbH).

The Sustainable Sanitation Alliance (SuSanA) is a network of organisations that share a common vision on sustainable sanitation. Since 2007, SuSanA has served as a platform for exchange, coordination and policy dialogue and a catalyst for sustainable sanitation. SuSanA Working Group 1 concentrates on capacity development, which is widely recognised as a prerequisite for the achievement of the MDGs (Bos, 2006; Morgan, 2005).

In the field of sustainable sanitation, capacity development is particularly important due to system complexity and the various sectors and authority levels involved. Governments and decision makers need to be aware of the importance of sanitation and the benefits of sustainable sanitation in order to show leadership and allocate the resources necessary. Leadership involves coordinating different governmental and non-governmental institutions to create an enabling environment across sectors - health, infrastructure, water, environment, agriculture, and education. Institutions and organisations, local governments, planners and the private sector need technical and managerial capacities in order to implement sustainable sanitation within allocated resources. At the same time, the civil society needs to show a demand for sustainable sanitation to ensure that sanitation is put on the local political agenda and to activate the private sector to respond to this demand.

### 3 What is capacity development?

Although capacity building is promoted as central to development, people everywhere struggle to explain exactly what it is (Bos, 2006; Morgan, 2005). The past decade has witnessed a resurgence of interest in capacity development and with it the redefinition of the concept. Whilst the traditional view of capacity development was based on technical training and foreign expertise, today's approach captures the concept in its complexity and entirety.

For the SuSanA Working Group 1, capacity is the collective actions of groups of individuals, organisations and societies that possess as a whole a collection of specific abilities, which enable them to manage their affairs successfully (Bos, 2006; OECD, 2006).

In a more practical sense, capacities can also be described as knowledge, information, and attitudes (Bos, 2006). Capacity development is the process in which these groups unleash, strengthen, create, adapt and maintain their capacity over time (OECD, 2006). This implies that (Morgan, 2005):

- Individuals have personal abilities, attributes, or competencies that contribute to the performance of an organisation or a system;
- Organisations or broader entities have capabilities to do something (the building blocks of an organisation's overall capacity to perform);
- Organisations or entities try to connect these competencies and capabilities into a coherent combination or system that allows them to perform.

Inside the boundaries of an organisation or a network of organisations, capacity is shaped and influenced by the context: capacity development takes place in a broader, dynamic institutional and socio-economic context. Both planning and implementation of capacity building interventions need to take account of external influences on the context within which organisations operate. Capacity obviously depends not only on the individuals and the organisations in which people work but also on the broader environment of these organisations including the institutional framework and the structures of power and influence (OECD, 2006).

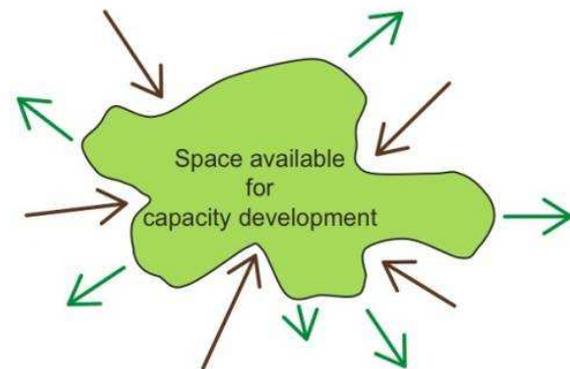


Figure 2: It is important to identify factors that enable capacity development (green outward arrows) and factors which block it (black inward arrows).

According to the above described spheres of capacity development, there are three levels on which to pursue capacity development objectives (OECD, 2006):

- 1) The individual level: people having abilities and competencies.
- 2) Organisational or institutional level: individuals make up organisations and institutions; the sharing of skills, knowledge, experience and values amongst the individuals will translate into the organisation's capacity, consisting of procedures, systems, policies and culture.
- 3) The enabling environment: incentives, policies and governance influence the behaviour of organisations or institutions and individuals.

These three levels of capacity development are equally important and interdependent. This implies that capacity development interventions at one level are likely to have an impact on other levels as well. Successful efforts to promote capacity development lead to:

- Increases in the knowledge and skills of individuals - the "micro" perspective (Baser and Morgan 2008);
- Enhancement of the quality of the organisations in which they work (organisational procedures);
- Creation of an enabling environment (e.g. the incentives, policies and governance influencing the behaviour of the organisations – the "macro" perspective).

### 4 Principles of capacity development in sustainable sanitation

Without developed capacity there is limited exchange and transfer of knowledge; inefficient use of available resources; poor service delivery, second-rate performance; inadequate infrastructure, that is poorly adapted to the local context and insufficient maintenance.

There are five key requirements for capacity development for sustainable sanitation:

- A multi-disciplinary approach with attention to the various social, political and institutional, environmental, technical and financial dimensions.
- A trans-sectoral approach.

- Attention along the entire sanitation chain – from the user interface, collection, treatment, reuse and safe disposal of sanitation products.
- Action at all three analytical levels: individual, organisational and enabling environment.
- Inclusion of local and national actors from civil society, the private sector and the government.

#### a) Capacity development at individual and the institutional levels

Local governments need capable sanitation engineers, health extension workers, policy makers, managers, and operators to plan and manage technical infrastructure and to adapt projects and programmes to the local context. A sound understanding of the whole sanitation system is crucial so that collaborating experts in health, infrastructure, resource management, agriculture and economic development can work effectively together.

Professionals form most of their ideas during their training. Education and training programmes in universities, technical schools and research institutes need to include sustainable sanitation in their curricula, develop appropriate materials, and serve as regional resource centres. Similarly NGOs, CBOs and local, regional and national governments can compile information on sustainable sanitation, share it with staff and organise workshops for professionals.

At the same time, understanding of local perceptions, needs and preferences facilitates efficient social marketing and demand creation. Information of end-users together with the practical training and access to financing opportunities for small businesses can activate the local private sector. User demand also helps integrate sustainable sanitation in local agendas.

#### b) Creating an enabling environment

Sanitation often lacks an “institutional home” because of its multi-disciplinary and trans-sectoral character. Governments commonly deal with different aspects of sanitation systems in several ministries; this hampers coordination, strategic planning and financing of capacity development.

Sustainable sanitation has to be integrated in key national policies, technical guidelines, sub-national guidelines and thematic strategies to stimulate good governance and political leadership. This will lead to ownership, participation and allocation of financial means. Thereby, the preparation of strategies and guidelines has to be part of an internal process of change (OECD, 2006). Furthermore, incentives for regional governments and private sector organisations can help to create an enabling environment. Information of the benefits of sustainable sanitation in the local language fosters the process of creating an enabling environment and supports the national government to do a good job. Thus busy government officials working with tight budgets can be provided with key arguments for sustainable sanitation. Local drivers for sustainable sanitation such as health or food security can be identified and included in the information.

## 5 Strategies and Approaches

Capacity building is neither an output nor project but a continuous process (Bos, 2006). It is important to develop strategies according to the specific level (individual, organisational, enabling environment) and the domain (knowledge and information, skills, and attitudes) of the capacity being built.

Organisations may have the following strategies and approaches:

- Assess gaps in capacity within a country and support planning, implementation and monitoring of performance for capacity development within the country.
- Consider a country-led approach and build on internal processes by identifying local drivers for sustainable sanitation (e.g. groundwater pollution, food security, etc).
- Adapt language and means of communication to the local context.
- Create strategic partnerships between different actors e.g. businesses, local governments and institutions that are actually implementing capacity development such as knowledge sharing and training.
- Focus on relationships between the enabling environment and other levels to align training and development of individual skills with organisational reforms and institutional changes.
- Increase awareness of sustainable sanitation through the media and special events, such as the World Toilet Day on 19 November each year.

## 6 Instruments

**Education:** Educational institutions need to acknowledge the importance of sustainable sanitation and incorporate this interdisciplinary topic into teaching curricula.

**Training:** Professional engineers, policy makers, managers and operators working in the field can be trained in special courses, workshops, seminars, and on the job training.

**Research and documentation:** It is important to document research, pilot projects and examples of scaling-up in the ongoing process of capacity development.

**Knowledge and information management and sharing:** The transfer and exchange of knowledge is a precondition of capacity development. Different users respond to different types of information and channels. New media on the internet make it possible to share and exchange knowledge much more easily. Academic books and journal articles require purchase but usually information is more carefully reviewed than that freely available online. Compiling and making relevant information accessible fosters capacity development. Universities and schools should be equipped with the skills to enable them to share and manage knowledge. Institutions that manage knowledge consistently are better poised to meet the ever-changing management and development challenges. Networks and learning alliances play a major role in improving knowledge sharing and management.

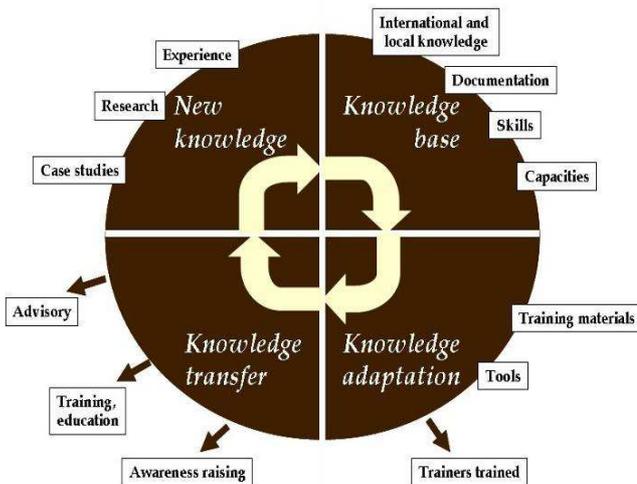


Figure 3: Knowledge management is the continuous process of generating new knowledge or repackaging old knowledge; of creating a knowledge base; of knowledge adaptation; and of knowledge transfer (source: Cap-Net, 2004).

#### Box 1: Knowledge management nodes funded by SEI

In 2006 the Swedish Development Cooperation (SIDA) and the Stockholm Environment Institute (SEI) launched Phase 2 of their EcoSanRes Programme (2006-2011). The main intention of the initiative was to promote pro-poor sustainable sanitation through capacity building and knowledge management. The programme therefore facilitated the establishment and development of “nodes of expertise” (“knowledge nodes”) that have conducted regional projects dealing with awareness raising, training, policy and regulation reform, R&D, testing and development, demonstration and social marketing. The programme has established eight knowledge nodes; one in the Philippines, China, Nepal, Southern Africa, Uganda, Burkina Faso, Central America and Bolivia. The nodes have been hosted by renowned research and knowledge management institutions and set the programme content and priorities for their respective regions individually. The knowledge dissemination and capacity development activities in the knowledge nodes have so far resulted in national policy changes in the Philippines, Honduras, El Salvador, Bolivia and Uganda and at a regional policy level the Manila Declaration was initiated. Although the funding for the nodes only lasted for about two years and stopped in mid 2011, SEI is still collaborating with all nodes and is planning to continue to support the node structure. Also, the nodes have brought and continue to bring financing and capacity to their hosts.

Further information: [www.ecosanres.org](http://www.ecosanres.org)

## 7 SuSanA partners in capacity building

Conventional capacity building and North-South knowledge transfer have proven inadequate for scaling up sanitation innovation. A number of SuSanA partners, however, have acted strategically and pioneered a variety of promising approaches. The list of examples that follows is not

complete. A similar list, which is continuously updated, is available on the SuSanA website: [www.susana.org](http://www.susana.org). The SuSanA secretariat welcomes corrections or additions to this list ([info@susana.org](mailto:info@susana.org) or [susana@giz.de](mailto:susana@giz.de)).

### a) Reference centres and knowledge nodes

**Water Research Commission (WRC)**, ([www.wrc.org.za/Pages/KnowledgeHub.aspx](http://www.wrc.org.za/Pages/KnowledgeHub.aspx)): South African knowledge hub offers research reports, technical and policy briefs, and magazine articles on water resource management, including agricultural water use, drinking water, wastewater, and water for mining, and sanitation. Formerly hosted the SADC Node for Sustainable Sanitation (SAKNSS) ([www.afrisan.org](http://www.afrisan.org)); which offered learning events and study visits, a stakeholder database, case studies and publishes regional *Sanitation Matters* magazine.  
Contact: Ditshego Magoro ([ditshegom@win-sa.org.za](mailto:ditshegom@win-sa.org.za))

**African Regional Centre for Water and Sanitation (CREPA)**, ([www.reseaucrepa.org](http://www.reseaucrepa.org)): Intergovernmental organisation with 18 member states in West and Central Africa; training courses and practical experience in various technologies and reuse.  
Contact: [reseaucrepa@reseaucrepa.org](mailto:reseaucrepa@reseaucrepa.org)

**NETWAS**, ([www.netwas.org](http://www.netwas.org)): Hosts former Ugandan knowledge node; organises training and field demonstration of ecological sanitation (ecosan) installations; has influenced national sanitation strategy.  
Contact: Cate Nimanya ([netwasuganda@gmail.com](mailto:netwasuganda@gmail.com))

**ENPHO (Environment and Public Health Organization)** ([www.enpho.org/resource-center.html](http://www.enpho.org/resource-center.html)): Resource centre in Nepal; collects, stores and disseminates information for education and advocacy on the environment and public health; offers consultancy services.  
Contact: Bushan Tuladhar ([bushan.tuladhar@gmail.com](mailto:bushan.tuladhar@gmail.com))

**Centre for Advanced Philippines Studies (CAPS)**, ([www.caps.ph](http://www.caps.ph)): Knowledge node of SIDA-funded EcoSanRes programme; secretariat of the Academic Consortium for Sustainable Sanitation (ACSuSan); offers formal and non-formal courses; has physical library and web database.  
Contact: Dan Lapid ([danlapid@caps.ph](mailto:danlapid@caps.ph))

**Asociación Centro Ejecutor de Proyectos Económicos y de Salud (ACEPESA)**, ([www.acepesa.org](http://www.acepesa.org)): One of the first established knowledge nodes for Central America; based in Costa Rica; supports implementation of integral solid waste management systems based on models of communal micro-enterprises; offers online courses.  
Contact: Victoria Rudin ([vrudin@acepesa.org](mailto:vrudin@acepesa.org))

**Regional Water and Sanitation Network of Central America (RRASCA)** and the National Water and Sanitation Networks of El Salvador, Guatemala, Honduras and Nicaragua; have contributed to national guidelines for sustainable sanitation and to streamlining of gender equity in projects; helped introduce sustainability criteria in water and sanitation development plans in Honduras and Nicaragua.  
Contact: Gloria de Avila ([gavila.rases@gmail.com](mailto:gavila.rases@gmail.com))

**Netherlands Development Organization (SNV):** La Paz office hosts Bolivia knowledge node directed by the national sanitation collaboration platform for local, regional, and national government entities ([DINESBVI, sites.google.com/site/dinesvbivolivia/](http://DINESBVI.sites.google.com/site/dinesvbivolivia/)); recently contributed to national guidelines on ecological sanitation and gender equality in water and sanitation; introduced ecological sanitation into the university curriculum; supports eight demonstration projects.

Contact: Eduardo Quiroz ([equiroz@snvbo.org](mailto:equiroz@snvbo.org))

#### b) Research institutions or degrees at universities

**Xavier University (XU) Sustainable Sanitation (SUSAN) Center;** in the Philippines, ([www.susancenter.xu.edu.ph](http://www.susancenter.xu.edu.ph)): Targets local governments, NGOs, practitioners and academia; research, training, and consultancy services for Southeast and South Asia. Sustainable sanitation is part of engineering curricula; research agendas and includes the use of urine as fertiliser, public health implications of dry sanitation and treatment methods including terra preta sanitation. Also offers training modules, based on the Sustainable Sanitation and Water Management (SSWM) Toolbox; courses in agricultural reuse of urine and faeces; low-cost dry toilet construction; development of urban sustainable sanitation plans; awareness raising and behaviour change strategies; and terra preta sanitation. Contact: Annaliza Miso ([annamiso1980@googlemail.com](mailto:annamiso1980@googlemail.com))

**University of Science and Technology in Beijing, China,** ([www.en.ustb.edu.cn](http://www.en.ustb.edu.cn)): Offers MSc in Environmental Sanitation; established the Centre for Sustainable and Ecological Sanitation ([www.susanchina.cn](http://www.susanchina.cn)) for PhD and Master students. Jointly hosts the China Node for Sustainable Sanitation (CNSS) together with the Clean Water Alliance.

Contact: Prof. Li Zifu ([zifulee@yahoo.com.cn](mailto:zifulee@yahoo.com.cn))

**National Agricultural University in Peru,** ([www.agricolaunalm.edu.pe](http://www.agricolaunalm.edu.pe)): Diploma course in "Department of Land Management and Sustainable Development" for sanitation and health professionals. Contact: Rosa Miglin ([rmigliio@lamolina.edu.pe](mailto:rmigliio@lamolina.edu.pe))

**CINARA:** Research and development institution based at the Faculty of Engineering at Universidad del Valle in Colombia, ([cinara.univalle.edu.co](http://cinara.univalle.edu.co)); recognized throughout Latin America in the water supply and environmental sanitation sector. Formerly hosted the Colombian knowledge management node.

Contact: ([cinarauv@correounivalle.edu.co](mailto:cinarauv@correounivalle.edu.co))

**UNESCO-IHE Institute for Water Education** (Delft, The Netherlands), ([www.unesco-ihe.org](http://www.unesco-ihe.org)): Annual online ecosan course for mid-career professionals from developing countries; addresses ecosan topics in engineering, architecture, planning, financing, and health; scholarships available through the Bill and Melinda Gates Foundation. An MSc degree in Sanitary Engineering and an additional online course in Faecal Sludge Management with the taught part completely carried out through online courses. An additional online course in Faecal Sludge Management are planned to be introduced in the near future.

Contact: Mariska Ronteltap, ([m.ronteltap@unesco-ihe.org](mailto:m.ronteltap@unesco-ihe.org))

**Sandec - the Department of Water and Sanitation in Developing Countries at Eawag:** Internationally recognised competence centre with 30 years research in low- and middle-income countries; develops concepts and technologies using Eawag's multidisciplinary knowledge; main activities are applied research, teaching and training, and knowledge management; conducts courses at universities in Europe and the global South (e.g. 2iE in Burkina Faso, Makerere University in Uganda and AIT in Thailand); offers downloadable training tools also available on CD-Rom: ([www.sandec.ch](http://www.sandec.ch)).

**The Norwegian University of Life Sciences (UMB)** is converting sanitary systems on the campus to source separating/recycling systems; offers a joint MSc programme in "Sustainable water and sanitation, health and development" together with the **Tribhuvan University** in Nepal and **COMSATS University** in Pakistan; prepares a web based course: "Introduction to sustainable water and sanitation" (ready in August 2012). To apply see: [www.umb.no/study-options](http://www.umb.no/study-options) for Norway; [www.ioe.edu.np](http://www.ioe.edu.np) for Nepal and [www.comsats.edu.pk](http://www.comsats.edu.pk) for Pakistan.

Contact UMB: Prof. Petter D. Jenssen, ([petter.jenssen@umb.no](mailto:petter.jenssen@umb.no))

**Tampere University of Technology (TUT),** ([www.tut.fi/en](http://www.tut.fi/en)): Organises International Dry Toilet Conference every three years with Tampere University of Applied Sciences, the University of Tampere and Global Dry Toilet Organisation of Finland; offers an annual online course about sustainable sanitation with selected lectures from pre-conference workshops.

Contact: Tuula Tuhkanen ([tuula.tuhkanen@tut.fi](mailto:tuula.tuhkanen@tut.fi))

**Vienna University of Natural Resources and Life Sciences (BOKU), Centre of Development Research (CDR)** ([www.boku.ac.at](http://www.boku.ac.at)): Multidisciplinary network of scientists from various BOKU departments; conducts applied research and training in sustainable natural resource management; collaborates with partners in Africa, Asia and Latin America.

**Kristianstad University in Sweden,** ([www.hkr.se/templates/Programme\\_5898.aspx](http://www.hkr.se/templates/Programme_5898.aspx)): One year MSc in Sustainable Water Management; explores sustainable alternatives to flush-and-discharge approaches, decentralisation, nutrient recycling, and biogas production. Contact: Lena Vought ([lena.vought@hkr.se](mailto:lena.vought@hkr.se))

**Linköping University, Swedish Institute of Infectious Disease Control, and Swedish University of Agricultural Sciences** have developed the sourcebook "Sustainable Sanitation for the 21st Century" (<http://www.sustainablesanitation.info>): Intended for university training programmes for lecturers' use as well as for self-study; provides powerpoints commented in attached pdf files which can be combined with the trainer's own material.



Figure 4: Participants of SSWM Experts Training Course at the CHRDU Training Centre in Nagarkot, Bhaktapur, Nepal in 2010 interacting in group work (source: seecon GmbH).

### c) Training courses for professionals

**Sarar Transformación SC**, ([www.sarar-t.org](http://www.sarar-t.org)): Multi-disciplinary Mexico-based consulting group; supports organisations in the region in sustainable sanitation; influences policy dialogue through strategic alliances with governmental organisations; offers regular training courses in sustainable development and participatory approaches. Contact: Ron Sawyer ([rsawyer@sarar-t.org](mailto:rsawyer@sarar-t.org))

**Sustainable Sanitation and Water Management (SSWM) Toolbox**, ([www.sswm.info](http://www.sswm.info)): Open-source and quality-approved online capacity building tools that link up water management, sanitation and agriculture at the local level; can be used as teaching support as well as self-learning tool; designed as process and planning tool for planners; implementation tool for NGOs and practitioners; resource for leaders and decision makers; or learning tool for students; offers guided exercises to assess local problems, factsheets on hardware (technical solutions) and software (behavioural change), and project planning and implementation tools; includes supplementary readings, links, a library, glossary, ready-made PowerPoint and “train-the-trainers” materials; developed with support of SuSanA partners ([www.sswm.info/content/partners](http://www.sswm.info/content/partners)) under the aegis of seecon. Contact: ([sswm@seecon.ch](mailto:sswm@seecon.ch))

**seecon International**, ([www.seecon.ch](http://www.seecon.ch)): Offers courses and training in sustainable sanitation and water management based on the **SSWM Toolbox** ([www.sswm.info](http://www.sswm.info)) acts globally; the portfolio includes basic to expert courses, hands-on training and training of trainers; innovative participatory learning in partnership with international and regional organisations. Contact: ([sswm@seecon.ch](mailto:sswm@seecon.ch))

**Linköping University, Swedish Institute of Infectious Disease Control, and Swedish University of Agricultural Sciences** (see previous Section b.).

**Ecosan Services Foundation**, ([www.ecosanservices.org](http://www.ecosanservices.org)): Based in Pune, India; provides training activities based on the Sustainable Sanitation and Water Management (SSWM) Toolbox; open source knowledge provider that works with a pool of private sector experts, NGOs, and research organisations; immense experience in developing

urban sustainable sanitation plans; offers consulting services, including design of decentralised wastewater treatment systems.

Contact: ([sreevidya.satish@ecosanservices.org](mailto:sreevidya.satish@ecosanservices.org))



Figure 5: Hands-on training in secondary composting at SIDA's International Training Programme in 2005 (source: SEI).

For further information on training courses see this SuSanA webpage ([www.susana.org](http://www.susana.org)). For course materials from various courses see: [www.susana.org/lang-en/conference-and-training-materials/materials-of-trainings](http://www.susana.org/lang-en/conference-and-training-materials/materials-of-trainings).

### d) Web-based libraries and Open Source Publications

**SuSanA Library**, (<http://www.susana.org/lang-en/library>): Has a large collection of materials on sustainable sanitation; SuSanA also provides a DVD with a large portion of library contents to those with slow internet connections. Contact: ([info@susana.org](mailto:info@susana.org) or [susana@giz.de](mailto:susana@giz.de))

The **Sustainable Sanitation and Water Management (SSWM) Toolbox**, ([www.sswm.info](http://www.sswm.info)): Gives an overview of approaches and technologies in the water management and sustainable sanitation sector including both planning and implementation. Contact: ([sswm@seecon.ch](mailto:sswm@seecon.ch))

**International Water and Sanitation Centre (IRC)**, ([www.irc.nl](http://www.irc.nl)): Independent non-profit organisation based in the Netherlands that conducts research in areas where existing information is insufficient; works collaboratively with partners on literature reviews, advocacy meetings, publications and information sharing workshops, documents 40 years of sector progress, analysis and tools; provides direct access to ever-increasing number of documents; the database also contains externally-produced documents on sanitation at ([www.irc.nl/page/116](http://www.irc.nl/page/116)). Sanitation searches at online library: ([www.washdoc.info/page/53887](http://www.washdoc.info/page/53887)).

**Water, Engineering and Development Centre (WEDC)**, ([www.wedc.lboro.ac.uk/knowledge/know.html](http://www.wedc.lboro.ac.uk/knowledge/know.html)): Knowledge base maintained by Loughborough University, United Kingdom. Database of WEDC's own and other selected publications; available for registered users to download free of charge are WEDC's own resources, including 150 books, over 1700 conference papers and other key documents in pdf format.

Other Online Resources:

- [www.giz.de/ecosan](http://www.giz.de/ecosan) (with quarterly electronic newsletter in English and French)
- [www.ecosanres.org](http://www.ecosanres.org)
- [www.sustainablesanitation.info/meny.html](http://www.sustainablesanitation.info/meny.html)
- [www.library.eawag-empa.ch](http://www.library.eawag-empa.ch) and [http://www.eawag.ch/forschung/sandec/training\\_tool/](http://www.eawag.ch/forschung/sandec/training_tool/)
- [www.akvo.org](http://www.akvo.org) and [www.akvopedia.org/](http://www.akvopedia.org/)
- [www.cap-net.org](http://www.cap-net.org)
- [www.gwptoolbox.org](http://www.gwptoolbox.org)
- [www.grassrootswiki.org](http://www.grassrootswiki.org)
- [www.iwawaterwiki.org](http://www.iwawaterwiki.org)
- [www.practicalaction.org/practicalanswers/](http://www.practicalaction.org/practicalanswers/)
- [www.genderandwater.org](http://www.genderandwater.org)
- [www.ecosan.at](http://www.ecosan.at)

e) E-mail discussion group, online forums, blogs, and newsletters

**SuSanA Forum** ([www.forum.susana.org](http://www.forum.susana.org)): Open discussion platform launched by the Sustainable Sanitation Alliance in July 2011; all postings are readable by everyone and searchable by search engines like Google; participants can create new topics, post queries, users may subscribe to receive email alerts.



Figure 6: Participants at the 13<sup>th</sup> SuSanA meeting in Kigali in July 2011 (source: SuSanA).

**EcoSanRes email discussion group:** Started by Stockholm Environment Institute (SEI) in 2001; registered members discuss technical questions, contacts, information on ongoing projects, funding opportunities and more ([www.ecosanres.org/discussion\\_group.htm](http://www.ecosanres.org/discussion_group.htm)). Join the 800 member group via ecosanres website ([www.ecosanres.org/discussion\\_group.htm](http://www.ecosanres.org/discussion_group.htm)) or directly via yahoo: [tech.groups.yahoo.com/group/ecosanres/](http://tech.groups.yahoo.com/group/ecosanres/)

**Sanitation Updates:** News feed jointly maintained by the International Water and Sanitation Centre (IRC) and USAID's WASHplus project; provides news, information and resources in support of the goal of sanitation for all ([www.sanitationupdates.wordpress.com/](http://www.sanitationupdates.wordpress.com/)).

**IRC E-Source:** WASH news and features in English, French and Spanish with an emphasis on rural and peri-urban areas in developing countries ([www.source.irc.nl/](http://www.source.irc.nl/)).

Other web-based news and discussion:

- [www.watersanitationhygiene.org](http://www.watersanitationhygiene.org) (forum on water, sanitation and hygiene)
- [www.assemblyonline.info](http://www.assemblyonline.info) (news service from Nigeria)

f) Learning alliances, communities of practice and networks

**Sustainable Sanitation Alliance (SuSanA)**, ([www.susana.org](http://www.susana.org)): Informal network of partner organisations sharing a common vision on sustainable sanitation; has served since 2007 as a coordination platform, a work space, a sounding board, and a catalyst; contributes to policy dialogue, conferences and events. Offers for example an extensive online library, a case study collection, and a partial copy of website on DVD; available are a vision document, a joint road map and factsheets authored by eleven thematic working groups and a discussion forum.  
Contact: ([info@susana.org](mailto:info@susana.org) or [susana@giz.de](mailto:susana@giz.de))

**Global Community of Practice for Sanitation and Hygiene:** Initiative of the Water Supply and Sanitation Collaborative Council (WSSCC) launched in 2011 in response to sector demand for collaborative learning; global space for honest debate on sanitation and hygiene; platform for national-international and South-South exchange of successes, failures and lessons learned.

**Cap-Net** (Capacity Building for Sustainable Water Management), ([www.capnet.org](http://www.capnet.org)): UNDP programme that supports capacity development in water management towards achievement of the MDGs; global network made up of professional networks at country and regional levels and international partners; works with networks worldwide; seeks to expand reach, achieve on-the-ground impact and embed new knowledge into existing capacity building institutions.  
Contact: ([nick.tandi@cap-net.org](mailto:nick.tandi@cap-net.org)).

**Ecosanlac**, ([www.ecosanlac.org](http://www.ecosanlac.org)): Regional Latin America network of professionals and academics interested in ecological sanitation. Shares news of learning opportunities and organises events and conferences.  
Contacts: Paula Paulo ([ppaulo.ufms@gmail.com](mailto:ppaulo.ufms@gmail.com)) and Ricardo Franci ([franci@npd.ufes.br](mailto:franci@npd.ufes.br))

g) Video clips

New forms of digital media distribution allow widespread access to quality educational material. Educational films on sustainable sanitation worldwide are available on the SuSanA website: ([www.susana.org/lang-en/videos-and-photos/resource-material-video](http://www.susana.org/lang-en/videos-and-photos/resource-material-video)) or on Youtube: ([www.youtube.com/user/susanavideos](http://www.youtube.com/user/susanavideos)).

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