

**34th WEDC International Conference, Addis Ababa, Ethiopia, 2009**

**WATER, SANITATION AND HYGIENE:  
SUSTAINABLE DEVELOPMENT AND MULTISECTORAL APPROACHES**

**SuSanA's Road Map Towards More Sustainable  
Sanitation Practices**

*Arne Panesar (GTZ), Arno Rosemarin (SEI),  
Sören Rüd (GTZ) and Roland Schertenleib (EAWAG)*

**[OFFICE USE ONLY: REVIEWED / REFEREED PAPER]**

---

*The Sustainable Sanitation Alliance (SuSanA) is a network of over 100 multi- and bilateral organisations, NGOs, businesses, governmental and research institutions active in the field of sustainable sanitation. The network was formed in 2007, initially mainly to support sustainable sanitation approaches for the UN International Year of Sanitation in 2008. After having set up a number of working groups, produced a website, several fact sheets and other documents it has now become clear that the partners wish to continue with the SuSanA work beyond 2009 as well. This paper introduces the network and its structure, its definition of sustainable sanitation, the goals and objectives of SuSanA and presents a road map for the network including the status of the twelve thematic working groups.*

---

**Background for the formation of the SuSanA network**

Motivated by the decision of the United Nations to declare 2008 as International Year of Sanitation (IYS), a core group of organisations active in the field of sustainable sanitation took the initiative to form a task force to support the IYS.

In January 2007, the first kick-off meeting took place in Eschborn (Germany) and resulted in a large number of ideas and commitments by the participants from various organisations. Although the network was first started at the initiative of organisations active in ecological sanitation (ecosan), the group decided not to limit itself to ecosan solutions but to widen the focus and to emphasise the support for all approaches aiming at improving the overall sustainability of sanitation systems. The definition which the network adopted for "sustainable sanitation" is provided below. In order to have a joint label for the planned activities, and to be able to align with other potential initiatives, the group decided to form the "Sustainable Sanitation Alliance" (SuSanA). Twelve thematic working groups are the core "backbone" of SuSanA.

Between April 2007 and November 2008, seven further SuSanA meetings took place in Dübendorf (Switzerland), Stockholm, New Delhi, Durban (South Africa), New York, again Stockholm (in conjunction with the World Water Week) and Macau, China (in conjunction with the World Toilet Summit) (SuSanA, 2008a).

At the SuSanA meetings in 2008, results of the thematic working groups were presented and discussed. Additionally, a discussion on the future structure of the network is currently taking place. In 2009, there will be two SuSanA meetings, one in Addis Ababa in conjunction with the WEDC meeting in May, and one during Stockholm World Water Week in August. In order to allow for more involvement of the partners from developing countries, online solutions for working group meetings and extensive knowledge exchange are also prioritised.

## Goals and objectives of SuSanA

The overall goal of SuSanA is to contribute to the achievement of the MDGs by promoting sustainable sanitation systems (SuSanA, 2008b). The MDGs and the UN International Year of Sanitation 2008 have been focal points for SuSanA placing sanitation higher up on the political agenda.

The general objectives of SuSanA are to:

- raise awareness around the globe of what sustainable sanitation approaches are and to promote them broadly
- highlight how sustainable sanitation systems have a positive impact on meeting other MDGs (e.g. to reduce child mortality, promote gender equity, ensure environmental sustainability, improve livelihoods and reduce poverty)
- show that sanitation projects should be planned with early participation by stakeholders, responding to the needs of the users, also linked with hygiene promotion and capacity building activities

In order to achieve these objectives, a joint road map for SuSanA was developed which now spans to 2012. Specific activities of SuSanA are to:

- provide information to help assess different sanitation systems and technologies using sustainability criteria so that informed decisions can be taken
- demonstrate that productive sanitation systems (which produce soil conditioner, fertiliser, biogas, biomass and irrigation water) can contribute to reach the MDGs beyond sanitation, and consequently present a change of paradigm from purely disposal-oriented to rather reuse-oriented sanitation
- provide examples of “smart practice” in sanitation
- identify the mechanisms to scale up implementation of these examples and develop sustainable financing instruments for pro-poor sanitation provision
- develop global and regional visions of how sustainable sanitation can be applied to the MDGs and beyond

## Structure and partners of SuSanA

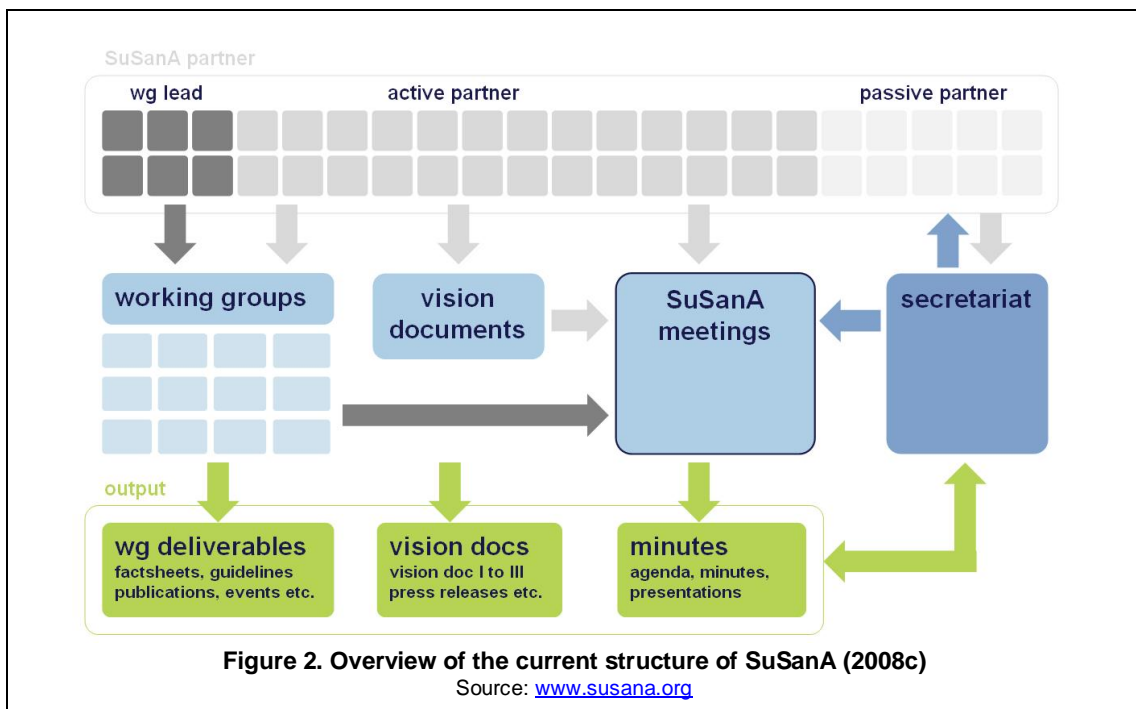
There are four different levels of participation within SuSanA as: interested party, passive but listed partner, active working group member and working group lead. Furthermore, a core group was formed at the eighth SuSanA meeting in order to improve the coordination and structure of the network.

Interested parties are informed by group e-mails and through [www.susana.org](http://www.susana.org). Passive partners support the aims of SuSanA and provide their logo for the website and vision documents. In October 2008, SuSanA had 99 partners (Fig. 1) many of which are active members attending meetings or contributing to working groups. Organizing events to promote sustainable sanitation is another way to become active in the network.

The website of SuSanA also features a login area where working group members can register as well as upload and share documents. The website is also being translated into other major languages e.g. Spanish and French.



Besides participating in meetings and leading or taking part in the working groups, partners also contribute to the vision documents. The working groups produce fact sheets, best practice examples, guidelines, other publications and the support of related events. Fig. 2 provides an overview of the current structure of SuSanA.



The recently formed SuSanA core group consists of the working group leads, voluntary partners, and the secretariat. The list of core-group members is available on the partner intranet linked to the website.

The secretariat (currently carried out by GTZ) has the following tasks:

- organisational support for SuSanA meetings
- coordination of decisions between SuSanA meetings with the core-group
- registration of new SuSanA partners
- coordination of final document approval within SuSanA
- development and maintenance of the website
- support for the development of a communication strategy

### **The definition of sustainable sanitation**

The objective of a sanitation system is to protect human health by providing a clean environment and by breaking the cycle of disease. It should protect the environment and natural resources, be economically viable, socially acceptable and technically and institutionally appropriate. SuSanA has developed sustainability criteria related to the following aspects which should be considered when improving an existing and/or designing a new sanitation system (SuSanA 2008b):

1. **Health and hygiene:** includes the risk of exposure to pathogens and hazardous substances that could affect public health at all points of the sanitation system from the toilet via the collection and treatment system to the point of reuse or disposal.
2. **Environment and natural resources:** involves energy, water and other natural resources for construction, operation and maintenance of the system, as well as emissions.. It also includes recycling and reuse of the products and the effects of these.
3. **Technology and operation:** incorporates the functionality and the ease with which the system can be constructed, operated and monitored using the available human resources.
4. **Financial and economic issues:** relate to the capacity of households and communities to pay for sanitation, including the construction, maintenance and depreciation of the system. It also takes into account the economic benefits from “productive” sanitation systems, including the recyclables (soil conditioner, fertiliser, energy sources and reclaimed water), employment creation, increased productivity through improved health and the reduction of environmental and public health costs.
5. **Socio-cultural and institutional aspects:** the criteria in this category evaluate the socio-cultural acceptance and appropriateness of the system, convenience, system perceptions, gender issues and impacts on human dignity, the contribution to subsistence economies and food security, and legal and institutional aspects.

### **The SuSanA road map and thematic working groups**

SuSanA’s joint road map for sustainable sanitation-related activities which can also be downloaded via the SuSanA homepage gives an overview of the various activities of the network. The first part of the road map consists of the three vision documents and other initiatives that do not form part of one of the 12 thematic working groups.

The first vision document, the SuSanA statement “Towards More Sustainable Sanitation Solutions” (SuSanA 2008b) was prepared under supervision of EAWAG/Sandec and was endorsed at the third SuSanA meeting in Stockholm in August 2007. The latest version 1.2 is available in English, Arabian, Chinese, French, Hindi, Japanese, Portuguese and Spanish. It is furthermore planned to translate the statement into German, Russian and Urdu.

The second vision document will deal with the question of how to put the sustainable sanitation approach into practise. A background paper for this vision document, the SEI/IWA publication “Pathways for Sustainable Sanitation - Achieving the Millennium Development Goals” was recently published and launched at the World Toilet Summit in Macao, November 2008 (Rosemarin *et al.* 2008).

The third vision document will include recommendations on how to develop local sanitation action plans, in particular how sustainable sanitation can be scaled up and what means of financing have to be developed

for achieving this large-scale implementation. Collection, review and updating of existing guidelines and MDG country road maps are ongoing.

Further planned activities include the elaboration of a general document explaining the structure of SuSanA to interested parties. In mid-2008 a dialogue was initiated on how SuSanA can contribute to improve the criteria for sustainable sanitation and the definition of “improved”/“unimproved” sanitation of the WHO/Unicef Joint Monitoring Programme. The Japan Water Forum supported by GTZ and SEI launched the second version of a joint sanitation database ([www.sanimap.net](http://www.sanimap.net)) for identification, documentation and promotion of sustainable sanitation projects.

Furthermore, a strong co-operation between SuSanA and different on-going sanitation financing initiatives is aspired. The main goal of SuSanA is to include sustainable criteria in existing financing instruments such as the World Sanitation Fund Forum or the WSSCC Global Sanitation Fund and the initialisation of new financing mechanisms in the sanitation sector. A last but very important instrument of the first part of the joint road map is knowledge management and communication for SuSanA. This topic includes the internet presence of the network ([www.susana.org](http://www.susana.org)), the corporate design for aimed deliverables and the SuSanA group logo.

The backbone of SuSanA, the 12 thematic working groups, are presented in the second part of the road map. The following table gives an overview of the aimed outputs and the current status of the different working groups:

<b>Table 1. Overview of the current status of the SuSanA thematic working groups</b>		
<b>Working Group Name</b>	<b>Expected Outcomes</b>	<b>Current State</b>
<b>capacity development for sustainable sanitation</b>	<ul style="list-style-type: none"> <li>• fact sheet</li> <li>• strategy document</li> <li>• adding of capacity development information to a joint database</li> <li>• SuSanA resource material DVD</li> </ul>	<ul style="list-style-type: none"> <li>➤ circulated 08/08 for final comments</li> <li>➤ in preparation</li> <li>➤ collection of information</li> <li>➤ draft version circulated 08/08</li> </ul>
<b>costs and economics of sustainable sanitation</b>	<ul style="list-style-type: none"> <li>• fact sheet</li> <li>• case studies</li> <li>• methodology on financial and economic assessment of sanitation</li> </ul>	<ul style="list-style-type: none"> <li>➤ circulated 10/08 for final comments</li> <li>➤ 4 case study drafts prepared</li> <li>➤ draft available, open for comments</li> </ul>
<b>sustainable sanitation, renewable energies, ground-water protection &amp; climate change</b>	<ul style="list-style-type: none"> <li>• fact sheet on renewable energies and climate</li> <li>• fact sheet on groundwater protection</li> <li>• collection of best practices</li> </ul>	<ul style="list-style-type: none"> <li>➤ draft in preparation</li> <li>➤ not yet started</li> <li>➤ not yet started</li> </ul>
<b>sanitation systems, technology options, hygiene and health</b>	<ul style="list-style-type: none"> <li>• fact sheet</li> </ul>	<ul style="list-style-type: none"> <li>➤ draft version circulated for comments</li> </ul>
<b>food security and productive sanitation systems</b>	<ul style="list-style-type: none"> <li>• fact sheet</li> <li>• collection of case studies</li> <li>• guide for application of excreta</li> <li>• papers and articles</li> </ul>	<ul style="list-style-type: none"> <li>➤ final fact sheet available</li> <li>➤ on-going</li> <li>➤ draft in preparation</li> <li>➤ input to RUAF magazine</li> </ul>
<b>sustainable sanitation for cities</b>	<ul style="list-style-type: none"> <li>• thematic papers on 'cities'</li> <li>• fact sheets on 'planning'</li> <li>• source book on urban sanitation</li> <li>• collection of case studies</li> </ul>	<ul style="list-style-type: none"> <li>➤ final thematic paper available</li> <li>➤ final fact sheet available</li> <li>➤ in preparation</li> <li>➤ in preparation</li> </ul>
<b>community and rural sanitation</b>	<ul style="list-style-type: none"> <li>• fact sheet</li> <li>• case study collection</li> </ul>	<ul style="list-style-type: none"> <li>➤ not yet started</li> <li>➤ not yet started</li> </ul>

<b>sustainable sanitation in emergency and reconstruction situations</b>	<ul style="list-style-type: none"> <li>• fact sheet</li> <li>• commenting on standard publication "Excreta management in emergencies"</li> <li>• capacity building with emergency and reconstruction organisations</li> </ul>	<ul style="list-style-type: none"> <li>➤ first draft prepared</li> <li>➤ started in close cooperation with one of the authors</li> <li>➤ not yet started</li> </ul>
<b>sanitation as a business</b>	<ul style="list-style-type: none"> <li>• compilation of best practises</li> <li>• directory of suppliers</li> <li>• proposal for expert system</li> <li>• capacity dev. for entrepreneurs</li> </ul>	<ul style="list-style-type: none"> <li>➤ not yet started</li> <li>➤ in preparation</li> <li>➤ in preparation</li> <li>➤ not yet started</li> </ul>
<b>public awareness and sanitation marketing</b>	<ul style="list-style-type: none"> <li>• different lobbying activities</li> </ul>	<ul style="list-style-type: none"> <li>➤ on-going</li> </ul>
<b>operation and maintenance of sustainable sanitation</b>	<ul style="list-style-type: none"> <li>• fact sheet</li> <li>• range of articles</li> </ul>	<ul style="list-style-type: none"> <li>➤ not yet started</li> <li>➤ not yet started</li> </ul>
<b>gender aspects of sustainable sanitation</b>	<ul style="list-style-type: none"> <li>• fact sheet</li> </ul>	<ul style="list-style-type: none"> <li>➤ first draft prepared</li> </ul>

The road map is completed by the most relevant future events and conferences in the sector of sustainable sanitation, a list of abbreviations and the SuSanA partner logos.

## Conclusions

With the initiative of the Sustainable Sanitation Alliance, over 100 multi- and bilateral organisations, NGOs, businesses, governmental and research institutions active in the field of sustainable sanitation have been brought together. Thus, the SuSanA network is a unique opportunity to improve the knowledge about sustainable sanitation and communicate sustainable sanitation solutions to a global audience. To be able to do so, upcoming questions about decision making in a growing network and funding for targeted and demonstration initiatives are being tackled.

The Sustainable Sanitation Alliance invites other international, regional and local organisations to join the network, contribute ideas, and to become active partners in the thematic working groups. Feedback for the advancement of the joint road map is certainly appreciated. To contact SuSanA, please send an email to [info@sustainable-sanitation-alliance.org](mailto:info@sustainable-sanitation-alliance.org).

---

## Acknowledgements

The authors would like to extend thanks to the participating SuSanA partners.

---

## References

- Rosemarin, A., Ekane, N., Caldwell, I., Kvarnström, E., McConville, J., Ruben, C. and Fogde, M. (2008) Pathways for Sustainable - Achieving the Millennium Development Goals. Stockholm Environment Institute, IWA. 56p. [www.ecosanres.org/PathwaysForSustainableSanitation.htm](http://www.ecosanres.org/PathwaysForSustainableSanitation.htm)
- SuSanA (2008a) Website of the Sustainable Sanitation Alliance - Meetings, [www.susana.org/index.php/lang-en/meetings](http://www.susana.org/index.php/lang-en/meetings)
- SuSanA (2008b) SuSanA Vision Statement *Towards More Sustainable Sanitation Solutions*. Sustainable Sanitation Alliance. [www.susana.org](http://www.susana.org)
- SuSanA (2008c) Current organisational structures and processes of SuSanA, Presentation given at the seventh meeting of the Sustainable Sanitation Alliance by Sören Rüd. [www.susana.org](http://www.susana.org)

---

## Contact details

Arne Panesar PhD & Sören Rüd	Arno Rosemarin PhD	Roland Schertenleib
Division Water-Energy-Transport	EcoSanRes Programme	Eawag
GTZ	Stockholm Environment Institute	Sandec

PANESAR, ROSEMARIN, RÜD AND SCHERTENLEIB

Eschborn, Germany  
+496196791273  
[arne.panesar@gtz.de](mailto:arne.panesar@gtz.de)  
[soeren.rued@gtz.de](mailto:soeren.rued@gtz.de)  
[www.gtz.de](http://www.gtz.de)

Stockholm, Sweden  
+4686747430  
[arno.rosemarin@sei.se](mailto:arno.rosemarin@sei.se)  
[www.ecosanres.org](http://www.ecosanres.org)  
[www.sei.se](http://www.sei.se)

Dübendorf, Switzerland  
[roland.schertenleib@eawag.ch](mailto:roland.schertenleib@eawag.ch)  
[www.eawag.ch](http://www.eawag.ch)

---