sustainable sanitation alliance

Towards more sustainable sanitation solutions

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Introduction

The urgency for action in the sanitation sector is obvious, considering the 2.6 billion people worldwide who remain without access to any kind of improved sanitation, and the 2.2 million annual deaths (mostly children under the age of 5) caused mainly by sanitation-related diseases and poor hygienic conditions.

The United Nations, during the Millennium Summit in New York in 2000 and the World Summit on Sustainable Development in Johannesburg (WSSD) in 2002, developed a series of Millennium Development Goals (MDGs) aiming to achieve poverty eradication and sustainable development. The specific target set for the provision of water supply and sanitation services is to halve the proportion of people without access to safe drinking water and basic sanitation by 2015.

As the Joint Monitoring Programme of WHO/UNICEF and the UNDP Human Development Report (2006) have shown, the progress towards meeting the MDG sanitation target is however much too slow, with an enormous gap existing between the intended coverage and today's reality especially in Sub-Sahara Africa and parts of Asia.

The reasons for this are numerous. A major issue is the fact that sanitation rarely receives the required attention and priority by politicians and civil society alike despite its key importance for a society. Political will has been largely lacking when it comes to placing sanitation high on the international development agenda. This has pushed sanitation into the shadows of water supply projects for example, and limited innovation in the sector.

Motivated by the UN's decision to declare 2008 as International Year of Sanitation (IYS), a core group of organisations active in the field of sanitation took the initiative to form a task force to support the IYS. In January 2007, a first meeting resulted in a large number of commitments by the participants from various organisations, and in drawing up a first draft of a "joint road map for the promotion of sustainable sanitation in IYS 2008". During a second meeting which took place mid April, the goal and the objectives of this global competence network were clarified and the joint road map was reviewed.

In order to have a joint label for the planned activities, and to be able to align with other potential initiatives, the group formed the "Sustainable Sanitation Alliance (SuSanA)".

What is sustainable sanitation?

The main objective of a sanitation system is to protect and promote human health by providing a clean environment and breaking the cycle of disease. In order to be sustainable a sanitation system has to be not only economically viable, socially acceptable, and technically and institutionally appropriate, it should also protect the environment and the natural resources. When improving an existing and/or designing a new sanitation system, sustainability criteria related to the following aspects should be considered:

(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 and downstream populations. This topic also covers aspects such as hygiene, nutrition and improvement of livelihood achieved by the application of a certain sanitation system, as well as downstream effects.

(2) **Environment and natural resources:** involves the required energy, water and other natural resources for construction, operation and maintenance of the system, as well as the potential emissions to the environment resulting from use. It also includes the degree of recycling and reuse practiced and the effects of these (e.g. reusing wastewater; returning nutrients and organic material to agriculture), and the protecting of other non-renewable resources, for example through the production of renewable energies (e.g. biogas).

(3) **Technology and operation:** incorporates the functionality and the ease with which the entire system including the collection, transport, treatment and reuse and/or final disposal can be constructed, operated and monitored by the local community and/or the technical teams of the local utilities. Furthermore, the robustness of the system, its vulnerability towards power cuts, water shortages, floods, etc. and the flexibility and adaptability of its technical elements to the existing infrastructure and to demographic and socio-economic developments are important aspects to be evaluated.

(4) **Financial and economic issues:** relate to the capacity of households and communities to pay for sanitation, including the construction, operation, maintenance and necessary reinvestments in the system. Besides the evaluation of these direct costs also direct benefits e.g. from recycled products (soil conditioner, fertiliser, energy and reclaimed water) and external costs and benefits have to be taken into account. Such external costs are e.g. environmental pollution and health hazards, while benefits include increased agricultural productivity and subsistence economy, employment creation, improved health and reduced environmental risks.

(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 food security, compliance with the legal framework and stable and efficient institutional settings.

Most sanitation systems have been designed with these aspects in mind, but in practice they are failing far too often because some of the criteria are not met. In fact, there is probably no system which is absolutely sustainable. The concept of sustainability is more of a direction rather than a stage to reach. Nevertheless, it is crucial, that sanitation systems are evaluated carefully with regard to all dimensions of sustainability. Since there is no one-for-all sanitation solution which fulfils the sustainability criteria in different circumstances

to the same extent, this system evaluation will depend on the local framework and has to take into consideration existing environmental, technical, socio-cultural and economic conditions. Taking into consideration the entire range of sustainability criteria, it is important to observe some basic principles when planning and implementing a sanitation system. These were already developed some years ago by a group of experts and were endorsed by the members of the Water Supply and Sanitation Collaborative Council as the “Bellagio Principles for Sustainable Sanitation” during its 5th Global Forum in November 2000:

(1) Human dignity, quality of life and environmental security at household level should be at the centre of any sanitation approach.

(2) In line with good governance principles, decision making should involve participation of all stakeholders, especially the consumers and providers of services.

(3) Waste should be considered a resource, and its management should be holistic and form part of integrated water resources, nutrient flow and waste management processes.

(4) The domain in which environmental sanitation problems are resolved should be kept to the minimum practicable size (household, neighborhood, community, town, district, catchments, city).

Goal and objectives of the "Sustainable Sanitation Alliance" (SuSanA)

The overall goal of the SuSanA is to contribute to the achievement of the MDGs by promoting sanitation systems which are taking into consideration all aspects of sustainability. The MDGs and the UN’s “International Year of Sanitation 2008”

are highly appreciated by the “Sustainable Sanitation Alliance” as they help push sanitation high up in the political agenda. The main focus of the work of the ”Sustainable Sanitation Alliance” will be to promote the implementation of sustainable sanitation systems in large scale water and sanitation programmes, in line with the strategies proposed e.g. by WHO, UNDP-PEP, UNSGAB and UNESCO.

General objectives of the SuSanA are therefore:

- to raise awareness around the globe of what sustainable sanitation approaches are and to promote them massively;
- to highlight how important sustainable sanitation systems are as a precondition to achieve a whole series of MDGs (e.g. to reduce child mortality, to promote gender equity and empower women, to ensure environmental sustainability, to improve livelihood, and to reduce poverty);
- to show how sustainable sanitation projects should be planned with participation of all stakeholders at an early stage, should respond to the initiative and preferences of the users, and that these has to go hand in hand with hygiene promotion and capacity building activities for sustainable water and wastewater management.

Specific objectives of the SuSanA are:

- to collect and compile information, which will assist decision makers (including the civil society) to assess different sanitation systems and technologies with regard to the full range of sustainability criteria so that informed decisions can be taken;
- to demonstrate how sanitation systems, which produce soil conditioner, fertiliser, biogas, energy, and irrigation water, can contribute to reaching the MDGs beyond sanitation, and consequently present a change of paradigm from purely disposal oriented to more reuse oriented sanitation;
- to collect and present examples of “smart practice” in sanitation for the “International Year of Sanitation 2008” and beyond;
- to identify and describe the mechanisms to up-scale implementation of more sustainable sanitation systems including appropriate financing instruments for pro-poor sanitation provision;
- to develop global and regional visions of how sustainable approaches can contribute to reach the sanitation MDG and to promote them in the IYS 2008 and beyond.

How to achieve the objectives?

A joint roadmap

In order to achieve these objectives, a joint road map of sustainable sanitation related activities for the IYS was developed in the meetings of January and April 2007 by participants from more than 30 multi and bilateral organisations, NGOs and research institutions. The roadmap consists mainly of a series of thematic working groups that will jointly elaborate a range of publications on sustainable sanitation issues, will organise or contribute to international events and will contribute to develop new funding instruments as well as sustainable sanitation capacity building and program initiatives.

The "Sustainable Sanitation Alliance" invites others to ioin in

SuSanA is not a new organisation, but rather a loose network of organisations working along the same lines, and open to others who want to join and be active in the promotion of sustainable sanitation systems. The Sustainable Sanitation Alliance invites other international, regional and local organisations to join the network, contribute ideas, and to become active members in the thematic working groups. Feedback for the advancement of the joint road map is certainly appreciated, as it is work in progress that will be continuously updated, and will include all joint activities leading towards an increased implementation of sustainable sanitation systems.

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Literature

GTZ (2003): "10 Recommendations for Action from the Luebeck Symposium on ecological sanitation, April 2003."
http://www.gtz.de/de/dokumente/en-ecosan-recommendations-for-action-2003.pdf

IWA (2007): Sanitation21 – simple approaches to complex sanitation. A draft framework for analysis,
http://www.iwahq.org/uploads/iwa%20hq/website%20files/task%20forces/sanitation%2021/Sanitation21v2.pdf

SEI (2005): "Sustainable pathways to attain the Millennium Development Goals - Assessing the role of water, energy and sanitation"
http://www.ecosanres.org/pdf_files/MDGRep/MDG_folder.pdf

SuSanA website: www.susana.org – contains publications of working groups, case studies, minutes from SuSanA meetings, etc.

UNDP HDR (2006): Human Development Report 2006 - Beyond scarcity: Power, poverty and the global water crisis.
http://hdr.undp.org/hdr2006/pdfs/report/HDR06-complete.pdf

UNDP PEP (2006): "Poverty Environment Partnership Joint Agency Paper on Poverty Reduction and Water Management"
http://www.who.int/entity/water_sanitation_health/resources/povertyreduc2.pdf

UNESCO-GTZ (2006): "Capacity building for ecological sanitation."
http://www2.gtz.de/Dokumente/oe44/ecosan/en-ecosan-capacity-building-2006.pdf

UNSGAB (2006): The Hashimoto Action plan http://www.unsgab.org/Compendium_of_Actions_en.pdf

WHO (2006): Guidelines series on the safe use of wastewater, excreta and greywater in agriculture and aquaculture.
http://www.who.int/water_sanitation_health/wastewater/gsuww/en/index.html

WSSCC/Sandec (2000): The Bellagio Statement on Sustainable Sanitation:
http://www.eawag.ch/organisation/abteilungen/sandec/publikationen/publications_sesp/downloads_sesp/Report_WS_Bellagio.pdf