

WSSCC Fifth Global Forum
MAP Executive Summary
Working Group on Environmental Sanitation
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Background

Half of the people in the world today lack basic sanitation and as a consequence over three million people die each year from disease related to environmental pollution. Millions more suffer nutritional, educational, and economic losses because of diarrhoeal diseases that improvements in environmental sanitation can prevent. A staggering 1.5 billion people suffer, at any one time, from parasitic worm infections stemming from human excreta and solid wastes in the environment. In addition to this toll of sickness and disease, the lack of good management of excreta and solid wastes is a major environmental threat to the world's water resources and a fundamental stumbling block in the advancement of human dignity.

In order to address the question why sanitation is so badly neglected and poorly implemented and how this could be overcome, the Water Supply and Sanitation Collaborative Council at the Second Global Forum in Rabat in 1993 established a Working Group on Promotion of Sanitation. This earlier Working Group identified the main barriers to progress in sanitation and produced the book, **Sanitation Promotion**, which is a collection of articles designed to give all who wish to promote sanitation the tools to do so effectively. The book helps to understand the nature of the sanitation challenge, how to gain the political will and partnerships necessary for success, how to do better sanitation programmes and shares new ideas and case examples of sanitation promotion. It focuses exclusively on promotion and does not attempt to give guidance on programming, how to run sanitation institutions or choosing sanitation technologies.

At the Fourth Global Forum of the Council in Manila in November 1997, there was overwhelming consensus from the keynote speakers, regional sessions and the participants in general for greater emphasis in addressing the issue of nearly 3 billion people who are without adequate access to safe sanitation. In responding to the call, the Council launched a Global Environmental Sanitation Initiative (GESI) and set up a new Working Group on Environmental Sanitation (ESWG).

Objectives

The ESWG was given the overall mandate to develop strategies and models to overcome barriers to progress in environmental sanitation¹ and to give guidance to the members of the WSSCC on how to devise better (sustainable) environmental sanitation projects and programmes with special emphasis on the low-income areas. One of the specific mandates given to the ESWG by the Council was to provide the environmental sanitation input to VISION 21: Water for People.

Activities

Due to the size and importance of the task and considering the limited financial and human resources available, the activities of the ESWG were focused on the development of a vision for environmental sanitation in the 21st century including the goals and strategies to make that vision a reality. The milestones of the work can be summarised as follows:

- a) A draft of a vision on environmental sanitation was developed by a core group of the ESWG during a workshop in Hilterfingen, Switzerland from 15-19 March 1999. This suggested the Household-Centred Environmental Sanitation (HCES) approach;

¹ The earlier WSSCC Working Group on Promotion of Sanitation defined environmental sanitation as: "Interventions to reduce peoples' exposure to disease by providing a clean environment in which to live with measures to break the cycle of disease. This usually includes disposal of or hygienic management of human and animal excreta, refuse, wastewater, the control of disease vectors and the provision of washing facilities for personal and domestic hygiene. Environmental sanitation involves both behaviours and facilities which work together to form a hygienic environment."

- b) The draft of the vision was presented at the knowledge synthesis meeting in Wageningen, Netherlands.
- c) Preparation of a paper describing in detail the Household-Centred Environmental Sanitation Approach.
- d) Preparation of terms of reference for conducting case studies to assess the potential usefulness of the HCES approach in improving the planning and sustainability of environmental sanitation.
- e) At a workshop in Bellagio, Italy in February 2000, a group of experts drawn from a wide range of organisations involved in environmental sanitation reviewed the recommendations of the Hilterfingen workshop and developed them further. The main principles to govern the new approach (Bellagio Principles) were formulated in the Bellagio Statement.
- f) The Bellagio Statement was included in the Vision 21 document, which was presented at the Second World Water Forum, held in The Hague, 17–22 March 2000.
- g) A first draft of a Framework for Action for implementing the HCES Approach has been prepared and is being discussed with several organisations involved in the development and implementation of new strategies and approaches in environmental sanitation.
- h) The HCES approach and the Bellagio Principles have been presented at several workshops and conferences.

Main Activities and Outputs of the Working Group

Development of a vision for environmental sanitation in the 21st century: The Household-Centred Environmental Sanitation Approach (HCES):

A sub-group of the ESWG met from 15-19 March 1999 in Hilterfingen and developed the first draft of a vision on environmental sanitation for the 21st Century. The group determined that any ‘vision’ must contain two components: an expression in concrete terms of goals and objectives to be reached; and a description of the means or methods to be used which would facilitate their attainment.

Building on the earlier WSSCC Working Group definition of environmental sanitation, the group felt that the goal of environmental sanitation is to contribute to the improvement of quality of life and the achievement of social development by creating and maintaining conditions whereby:

- people lead healthy and productive lives; and
- the natural environment is protected and enhanced.

To achieve these twin objectives, the group restated the universal goal of environmental sanitation as: *Water and sanitation for all within a framework which balances the needs of people with those of the environment to support healthy life on earth.*

Recognising the deficiencies of conventional service design and delivery models, the group elaborated and suggested a radically different approach which should improve the chances of attaining these goals and objectives: The Household-Centred Environmental Sanitation approach. The approach takes as its fundamental premise the need to put people and their quality of life at the centre of any environmental sanitation system and is based on two principles (recognising that they should be applied in such a way as to balance economic and environmental good):

- The minimisation of waste-generating inputs (water, goods and materials), and the reduction of waste outputs (wastewater, solid waste and stormwater); and
- The solution of environmental sanitation problems as close as possible to where they occur..

The HCES approach is a radical departure from past central planning approaches as it places the stakeholder at the core of the planning process. The approach responds directly to needs and demands of the user, rather than the often poorly-informed opinions of central planners. It recognizes that the achievement of environmental service sustainability requires stakeholder support for any measure intended to improve environmental services and thus the health, wellbeing and productivity of the population to be served. It makes the user who is demanding services responsible for their provision, either directly or by contracting for them. The process starts with the user at the household level and then delegates to the community only those aspects of service provision clearly beyond the capacity of the household. Similarly, communities are expected to manage on their own and only delegate those functions beyond their capacity to handle to the next higher level of governance. The highest level, the national government, should be responsible for establishing policies and a regulatory framework to enable the various levels to manage their own services efficiently. In addition to stakeholder participation in environmental services as a basis of service sustainability, the HCES Approach also emphasizes environmental sustainability. It promotes resource

conservation and reuse as an integral part of service provision and management and thus contributes to successful integrated water resource management at every level of governance.

In March 1999, the conclusions and recommendations of the Hilterfingen workshop were presented at the Knowledge Synthesis meeting in Wageningen and the household-centred approach became a basic theme in the ‘Vision for Water Supply and Sanitation for the 21st Century’ (Vision 21).

The rationale and the main principles of the HCES approach/model are given in the report of the Hilterfingen workshop. (Annex 1) A full discussion of the proposed HCES approach is presented in a paper dated July 1999. (Annex 2)

The Bellagio Principles

A group of 25 experts drawn from both headquarters and field offices of international organisations involved in environmental sanitation, met at Bellagio over 1-4 February 2000. The purpose of the meeting was to review the recommendations of the Hilterfingen workshop and to take forward the work in developing a new approach to environmental sanitation. A variety of case studies were reviewed at the workshop, some of which had been specifically undertaken to examine the existing application of approaches very similar to HCES, or incorporating HCES features, as part of post-Hilterfingen activity². (ToR for case studies in Annex 3) The Bellagio meeting was timed so that its outcome would feed into the process of developing ‘Vision 21’ and its presentation at the Second World Water Forum in The Hague in March 2000.

The participants of the workshop all accepted the need to challenge conventional thinking and agreed that ‘business as usual’ is no longer acceptable because it:

- cannot provide services for those not yet served in developing countries where the poor, in particular, live in squalor, suffer human indignity and live with constant threat of disease;
- does not provide sustainable service even in the industrialised world where sewerage and drainage systems are over-extended and the use of drinking-quality water to transport excreta is wasteful and contributes to the pollution of the environment;
- is based on centralised systems planned without stakeholder consultation that usually result in services not sustainable by those they are supposed to serve;
- lacks the holistic planning of environmental sanitation components, including sanitation, solid wastes and storm water management, all of which should be part of urban planning, thus reducing the effectiveness of each;
- neglects the potential for conservation, reuse and recycling of resources.

The group reached consensus on a statement entitled, “*Clean, healthy and productive living: A new approach to environmental sanitation*”. The Bellagio Statement, as it is now called, is believed to encapsulate the key elements of a ‘new start’ in environmental sanitation. (Annex 4) It suggests that the principles governing the new approach are as follows (Bellagio Principles):

- Human dignity, quality of life and environmental security at household level should be at the centre of the new approach, which should be responsive and accountable to needs and demands in the local and national setting.
- In line with good governance principles, decision-making should involve participation of all stakeholders, especially the consumers and providers of services.
- Waste should be considered a resource, and its management should be holistic and form part of integrated water resources, nutrient flows and waste management processes.
- The domain in which environmental sanitation problems are resolved should be kept to the minimum practicable size (household, community, town, district, catchment, city) and wastes diluted as little as possible.

The participants at the Bellagio meeting agreed that the HCES approach suggested by the Hilterfingen workshop responds largely to these principles. The proposed approach offers the promise of overcoming the shortcomings of business as usual because its two components correct existing unsustainable practices of planning and resource management. These components are:

- The HCES planning process, which makes the household the focal point of Environmental Sanitation Planning, reversing the customary order of centralised top-down planning;

² Studies were undertaken in Faisalabad, Pakistan, and Mozambique, by GHK Research and Training and WEDC respectively, funded by DFID, UK; and in Heredia, Costa Rica, funded by GTZ.

- The circular system of resource management, which emphasizes conservation of resources (reducing imports) and the recycling and reuse of resources used (minimizing exports). The circular system, in contrast to the current linear system normally followed, practices what economists preach: *waste is a misplaced resource*. By applying this concept, the circular system reduces “downstream” pollution.

Presentation of the HCES Approach and the Bellagio Principles at international workshops and conferences

The HCES approach and the Bellagio Principles have been presented and were well received at the following workshops and conferences:

- Knowledge Synthesis meeting in Wageningen (March 2000)
- SIMAVI Workshop in The Hague (17 March, 2000)
- World Water Forum in The Hague (17 – 22 March, 2000)
- ICLEI Conference in Lisbon, Spain (29 – 29 April, 2000)
- Aguasan Workshop in Bern, Switzerland (26 – 30 June, 2000)
- ICLEI World Congress in Dessau, Germany (July, 2000)

Implementing the Bellagio Principles and the HCES Approach: Proposal for a Framework for Action

The HCES approach does not require the invention of new and sophisticated technologies. Rather, it is based on using existing technologies more appropriately in the short term and exploring new approaches that have already been successfully pioneered for special circumstances in the long term. Hopefully, innovations will be made, but innovations are not necessary to begin the HCES approach and improve environmental services in the immediate future. Rather than based on new technologies and inventions, the HCES approach is based on implementing a process of holistic planning whose key participants are the stakeholders, beginning with those at the household level, especially women, who make the basic decisions on personal hygiene and environmental services. The major obstacle to the successful implementation of the approach is not a lack of knowledge about technologies, but rather a lack of interest by professionals in alternatives depending exclusively on conventional approaches and a lack of holistic planning.

Successful implementation of the HCES approach requires the dissemination of information to those responsible for improving environmental services, such as municipal officials, urban planners, and policy makers responsible for creating an enabling environment and their training in the use of HCES. To play their new roles, stakeholders need to be provided with information and assistance so their capacity to make decisions and implement and manage services becomes adequate to the task. Those who help stakeholders need to provide funds and time to develop and implement the new approach. Projects based on the HCES approach will take more time to develop than single-sector, capital-intensive projects. ESAs in particular will find it difficult to provide adequate development time. The investment in development is justified, however, because the HCES approach offers the one result that previous approaches have been unable to achieve, sustainability.

Based on these considerations, a draft Framework for Action for implementing the Bellagio Principles and the HCES approach was prepared in April 2000. It suggests that the next steps should consist of the following:

- Preparation of provisional guidelines for the implementation of the HCES approach;
- Review of existing technologies and “software” to evaluate their effectiveness as part of the HCES approach and recommend appropriate modifications in their use;
- Preparation of HCES case studies based on information from existing environmental sanitation projects (most likely projects not covering all environmental sanitation sub-sectors) and incorporation of the results in future revisions of the provisional guidelines;
- Design and implementation of HCES demonstration projects;
- Applied research to generate new technologies and approaches suitable for the HCES approach; and
- Risk assessment and limitation to safeguard public health.

The proposed list of supporting investigations required to implement the HCES approach is currently being discussed with several research, implementing and donor organisations involved in environmental sanitation. Some of these institutions hopefully will be willing and able to form a coalition to collaborate closely on the work of the ESWG to overcome the serious lack of sanitation services that result in both illness and economic stagnation in the lives of hundreds of millions of people in developing countries.