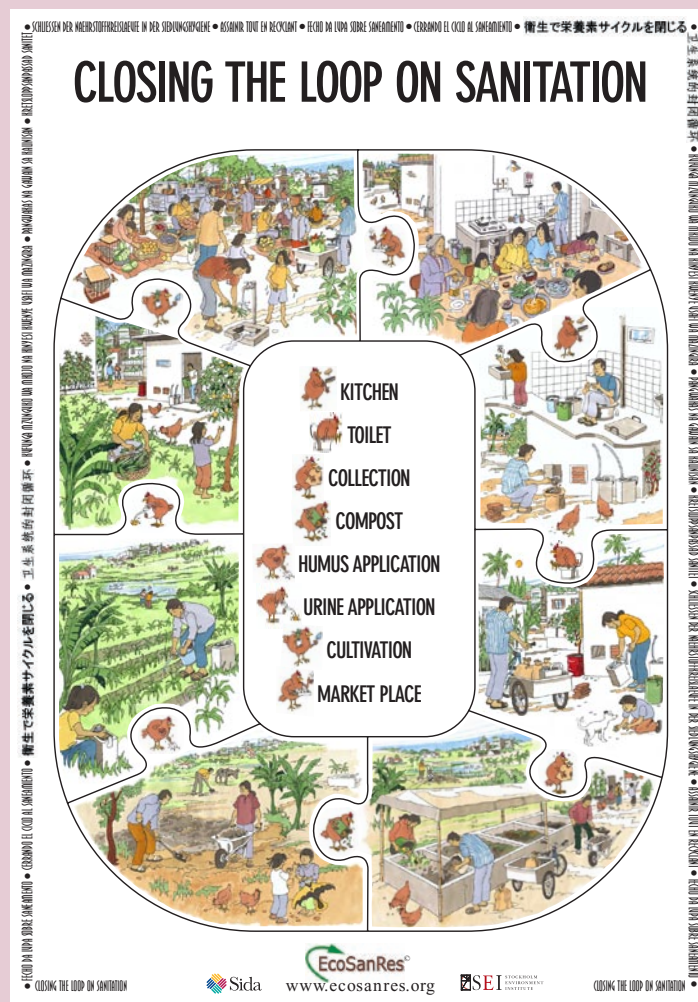


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# Ecological Alternatives in Sanitation



SWEDEN – AFRICA – ASIA  
 AUGUST 2007 & FEBRUARY/MARCH 2008

## Invitation

The Swedish International Development Cooperation Agency (Sida) is a government agency responsible for the major part of Sweden's development cooperation. Focus on long-term knowledge and competence development constitutes a major feature in all development cooperations.

Sida offers, as part of its bilateral development assistance, Advanced International Training Programmes of strategic importance to the social and economic development of cooperating countries based on identified priorities and needs. In the long-term perspective the programmes shall contribute to institutional strengthening and capacity development in the cooperating countries.

These programmes aim at enhancing managerial and technical skills and cover subjects of strategic importance to economic and social development. The Training Programmes are designed for experienced executives in middle and top management positions in their respective organisations.

With the Training Programmes, Sida aim to contribute to processes of change and development in the participants' organisations and lines of businesses. The foundation of the entire programme is a project assignment. The assignment shall be well established in the participant's organisation and is a basic part of the programme concept.

Most cities in the world have deficient sanitation services and water provision, while suffering from critical environmental degradation. Sewage discharges from centralised water-borne collection systems pollute surface waters and seepage from sewers, septic tanks and pit toilets pollute groundwater. The peri-urban areas offer among the worst polluted and disease ridden settlements.



Maria Norrfalk  
Director General  
Sida



Jan-Olof Drangert  
Training Programme Director  
EcoSanRes Programme

Urbanisation in addition to population growth puts stress on potable water and other natural resources. Additional individuals call for more food and consequently increased need for fertilizers. The water and nutrient cycles need to be closed. Greywater, urine and faecal matter should each be contained, sanitised and reused in order to protect ground and surface water resources and produce the required amount of food. Major changes in urban sanitation and water management are required and will involve professionals, authorities, entrepreneurs, trainers and households.

Sida supports a number of ecological sanitation initiatives through the EcoSanRes Programme ([www.ecosanres.org](http://www.ecosanres.org)) and other organisations. Urban pilot projects are ongoing in selected countries using urine-diversion dry sanitation with the circulation of sanitised urine and faeces to urban agriculture. Ecological sanitation is multi-disciplinary in character and includes cultural and social desirability, hygiene aspects, handling of greywater and reuse of nutrients from sanitised human excreta in agriculture, protection of surface and ground water, financing, technical performance, promotion and community involvement, policy development and related institutional issues, etc.

The training programme is conducted in English and is designed for professionals engaged in town planning, service delivery, water supply, waste management, and socio-economic development; as well as researchers and trainers in fields of environmental sanitation, and key persons engaged in NGOs with projects related to improved sanitation and water supply.

## Programme Objectives

The overall objective of the programme is to disseminate information and knowledge about new options in sanitation to support urban dwellers in reducing environmental health risks, improving nutritional status and protecting water resources and other environmental assets. The long-term goal is better human health and environmental protection to attain the MDGs.

## Contents

The training builds on the participants' experiences and needs and consists of problem-solving activities and related lectures. The aim is to enable the participants to initiate and participate in the decision-making processes related to development of ecosystem-based sanitation initiatives and providing the participants with a more in-depth understanding of:

- Water and nutrient cycles in time and space and related routes of contamination
- Management options for improved urban environmental sanitation and ways to utilise nutrients

- in human excreta as a resource in urban agriculture
- Risk assessment, incl. hygiene in handling sanitized urine and faecal matter, and residents' and professionals' attitudes and norms concerning risks
- Costs and benefits, including those related to the environment, of ecological sanitation systems compared to current technical alternatives
- Exchange of experiences of household efforts to improve well-being through safe excreta disposal and protection of ground water
- Skills training in social inquiry.

## Programme Structure

The programme is divided into three phases as follows:

The first phase aims at presenting the principles of sanitation provision, water protection and how in a safe manner to reuse the nutrients from human excreta and water from greywater. This three-week phase takes place in Sweden- Stockholm, Linköping and Uppsala.

During phase 2, each participant undertakes a professional project within his/her organisation with advisory support by the training programme staff. The project is an integral part of the training programme and is reported on in phase 3.

Phase 3 gathers participants from Africa in South Africa and from Asia in India. The aim is to share experiences with participants and decision-makers in the host country on implementation issues, including systems analysis and selection algorithms. Participants establish country-based and regional networks.

## Date and Place

Phase 1: Sweden 13–31 August 2007  
Phase 3: South Africa in February 2008 and Asia in March 2008

## Teaching

During phases 1 and 3 the programme emphasis is on active involvement of all participants in exchange of experiences through discussions, workshops, and visits to ecological sanitation sites. Each phase includes daily programme activities based on a 40-hour work week.

## Management and Staff

The programme is organised by Stockholm Environment Institute (SEI) with assistance from the Swedish Institute for Infectious Disease Control, the Swedish University of Agricultural Sciences and universities, research institutions and governmental organisations in Sweden and elsewhere. The lectures, seminars and work groups are led by Swedish and international experts. Dr. Jan-Olof Drangert is the Programme Director and Cecilia Ruben is the Programme Administrator.

## Participation

The Programme is open to persons working professionally or on a volunteer basis with sanitation and water issues in urban and peri-urban areas.

Family members are not allowed to accompany participants.

### Target Regions

The target regions are Africa and Asia with 15 participants from each. Please refer to the Target Country lists below.

**Africa:** Botswana, Ethiopia, Kenya, Namibia, Nigeria, South Africa, Sudan, Tanzania, Uganda, Zambia, Zimbabwe.

**Asia:** Bangladesh, Cambodia, China, India, Iran, Laos, Mongolia, Pakistan, the Philippines, Sri Lanka, Syria, Thailand, Vietnam, and West Bank and Gaza.

### Target Group

Professionals engaged in town planning, water supply, waste management, and socio-economic development; researchers and trainers in fields of environmental sanitation, and key persons engaged in NGOs with projects related to improved sanitation and water supply.

## Language requirements

The Programme is conducted in English, and fluency in speaking, comprehending and writing English is a prerequisite. Candidates having other than English as their mother tongue must certify their proficiency in English through an English test with a certificate. Neither the Swed-

ish Embassy nor SEI can give advice on recognised language institutes to contact.

## Application Process

**Closing date for application is  
April 1, 2007.**

Applications (**form available at [www.ecosanres.org](http://www.ecosanres.org)**) should be submitted to the Swedish Embassy/Consulate

If there is no Swedish Embassy/Consulate in the applicant's country, the application should be submitted directly to the Programme Secretariat at SEI.

**Note!** A copy of the application should be sent by e-mail/fax to **Solveig Nilsson, Stockholm Environment Institute, [solveig.nilsson@sei.se](mailto:solveig.nilsson@sei.se), fax +46 8 6747020.**

Necessary information for contacting the candidate, i.e. e-mail, fax, telephone and postal address and possible alternative co-ordinates, must be provided.

- Applications submitted after closing date will not be considered
- Applications written on the attached special form, includes a recent photograph, required information and supportive documents
- An English language test certificate from a recognised institution must be attached, unless the applicant can provide other documentation to support her/his proficiency
- The Swedish Embassy/Consulate does not carry out language tests
- Applications should be approved by the official nominating authority in the applicant's country

Once accepted, the candidate must urgently confirm participation and willingness to accept the stipulated conditions regarding participation during phases 1 and 3, costs to be defrayed, tasks to be undertaken by the participant and the assignment to be carried out during phase 2. Once such confirmation has been received, a formal invitation letter will be issued, containing information regarding the programme and practicalities.

## Cost of Participation

Participation costs consist of a fee, accommodation and travel expenses. The participation fee covers training, i.e. lectures, literature, documentation, study tours and certain social activities. The accommodation includes board and lodging. The two categories of travel are international and national.

### Phase 1

*The Swedish International Development Cooperation Agency (Sida) covers:*

Participation fee

Accommodation

Travel between the study locations and field trips in Sweden

*The participant defrays the following costs, namely:*

International travel to and from Sweden and arrangement of all tickets

Travel to/from nearest international airport in country of residence

Travel in Sweden to/from Arlanda airport and Stockholm City

Visa application and issuance

Pocket money for personal expenses.

### Phase 2

All costs for the ecosan project carried out at the participant's workplace are paid by the participant

### Phase 3

*The Swedish International Development Cooperation Agency (Sida) covers:*

Participation fee

Accommodation

International travel from country of residence to Africa and India.

Local travel for study tours and field visits in Africa and India.

*The participant covers the following costs, namely:*

Travel to/from nearest international airport in country of residence

Visa application and issuance

Pocket money for personal expenses

## Selection

We attempt to achieve a balance of qualified men and women in the training programme. Applicants will be informed by email, fax or phone by 20 May 2007.

## Accommodation

The participants will be accommodated in medium-standard hotels/guest houses

in single rooms with access to toilet, shower/bath and often cooking facilities.

## Visa

The participant is responsible for obtaining visa in connection with phases 1 and 3. The visa must be valid for the duration of the programme. Check validity requirements of the passport. Inquiries should be directed to respective Swedish Embassy/Consulate (details at [www.migrationsverket.se/english.html](http://www.migrationsverket.se/english.html)) alternatively another Schengen country representation as soon as possible after acceptance into the programme. Participants visiting other countries on

their way to or from Sweden must ensure that correct visas are obtained before leaving country of residence, especially for countries not included in the Schengen Agreement. Also notice visa requirements for Africa and Asia. Participants carry visa costs.

## Insurance

Participants are covered by a group insurance, while in Sweden and during phase 3 in Africa and Asia respectively, which includes costs for medical care in the event of acute illness or accident. Medical and dental check-ups and vaccinations are not included.

## Contact information

The address for all communication is:

### SEI

ITP Secretariat Sanitation  
Kraftriket 2B  
SE 106 91 Stockholm  
Sweden

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[www.sei.se](http://www.sei.se) and [www.ecosanres.org](http://www.ecosanres.org)

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### Presentation of Programme Secretariat



The advanced training programme is managed by the Stockholm Environment Institute (SEI). See [www.sei.se](http://www.sei.se). SEI is a research institute with offices in Stockholm, Sweden, and Boston, US, York and Oxford, UK, Tallinn, Estonia, and Bangkok, Thailand. SEI's mission is to bridge science and policy in the field of environment and development at local, national, regional and global scales.

SEI has six main research programmes, which are implemented Institute-wide, namely:

- **Climate Change and Sustainable Energy Systems**
- **Atmospheric Pollution**
- **Sustainable Water and Sanitation**
- **Risk, Livelihoods and Vulnerability**
- **Sustainability Science and Future Scenarios**
- **Policy and Institutions**
- **Communications**



One of SEI's major undertakings is the **EcoSanRes Programme**.

It is a Sida-financed global programme aiming at enhanced provision of sustainable sanitation and Sweden is now one of the larger international actors in sustainable sanitation. EcoSanRes, focussing on **Closing the nutrient and water cycles**, is managed according to the following structure:

- **Capacity building, training and awareness raising**
- **Global institutional networking and policy development**
- **Methods development, studies and evaluation**
- **Implementation in pilot projects, especially in urban and peri-urban areas**

The central goal of the EcoSanRes Programme is to build capacity at regional nodes in the area of sustainable sanitation.

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

*Halving poverty by 2015 is one of the greatest challenges of our time, requiring cooperation and sustainability. The partner countries are responsible for their own development. Sida provides resources and develops knowledge and expertise, making the world a richer place.*



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