Ecosan Experience in Village Hayanist, Armenia

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Sofia, 2007
Armenia

• 43.7% live in poverty
• 14.7% in utter poverty < 1 USD per day

Source: IMF 2006, Country Report No. 06/239

80% rural have no access to sewage

Source: OECD and country report, 2004
Hayanist

- Hayanist is situated in a basin-shaped and swampy area with a high groundwater table
- 2440 inhabitants
- Women overrepresented due to migration of men
- 90% refugees
- High unemployment and/or low income
Sanitation

- Pit-latrines with a pit of less than 1 meter deep
- Grey and black water from toilets is disposed into the open drainage channels
- Usage of drainage water for irrigation
- High risk of soil and groundwater contamination
Secondary School

- 350 pupils and 26 staff
- A very bad condition of the school building
- Regularly flooded during spring
- Very poorly heated by diesel
- Needs in for furniture, school books and other materials
Hayanist School
Hayanist School Toilets
Objectives of the project

- Establishment of a sustainable, affordable and safe school sanitation system
- Introduction of approaches of ecological sanitation and wastewater management
- Reducing contamination of drainage water and groundwater
- Raising public awareness on hygienic and health risks
WECF support and continuous monitoring
AWHHE Actions

• Community mobilization through establishment of Women and Village Committees
• Involvement of children in raising awareness campaign through innovative artistic approaches (ecogames, exhibitions, created book)
• Raising awareness campaign (lectures, seminars, meetings etc.)
AWHHE Actions
Training Course on Ecosan
in pilot village Hayansl, Armenia

Photo A/VHHE
AWHHE Actions

- Parasitological investigation of schoolchildren’s stool
- Treatment of infected children
- Parasitological investigation of the soil around the school pit-latrine
- Designing ecotoilet of school and construction:
  7 urine diverting toilets
  3 waterless urinals
  6 hand washing basins
Hayanist ecosan toilet
Hayanist ecosan toilet
Cost

• The costs of the toilet were about 28,700 Euro
• Construction materials are very expensive in Armenia, because most of them have to be imported
Type of reuse

- Urine will be analysed on nutrients and bacteria
- Treated faces on bacteria and parasites and eggs
- A demonstration school garden with application of the sanitized urine is planned.
- Approx. 3 years after construction of the facility local farmers will use the first compost for decorative trees in the schoolyard.
Operation and Maintenance

• Education materials, leaflets and posters for the use and maintenance
• The caretaker daily inspections and cleaning of the toilets
Lessons Learnt

• The establishment of ecological sanitation is especially reasonable in regions with no central WSS
• The good cooperation between the school staff and AWHHE
• Ecological education of the school children
• Acceptance of new toilet system by villagers
Lessons Learnt

• This pilot-project can serve as an example not only for other Armenian villages, but for many EECCA
• More active and financial support is needed to realize ecosan toilets for schools and households
Lessons Learnt

• The innovative approaches can be a very powerful tool for public awareness raising

• The necessity of legislation on sanitation in particular sound sanitation
Thank you for your attention!