Water Supply and Sanitation in Rural Armenia

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Background Information/ Water and Sanitation Services

- Old infrastructure for rural water supply (average age is about 35 years)
- No national policy on sanitation services
- Existence of the sewage system - 3% in rural areas

Source: TME draft final report. 2008
Health

• The diarrhea - a major cause of morbidity, and cause of infant and child death
• 7 % of all infant deaths are attributed to diarrheal diseases
• The childhood mortality is especially higher among children living in rural areas

Source: NSS of RA, 2005
Aims of the project

• Establishment of a sustainable, affordable and safe school and household sanitation system
• Introduction of approaches of ecological sanitation and wastewater management
• Reduction of contamination of drainage water and groundwater with pathogens and nitrates from pit latrines
• Public awareness raising with regard to the hygienic and health risks associated with poor sanitation and drinking water supply
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
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
- Pit latrines location - corner of a school yard
- Close to a drainage channel
Hayanist School
Hayanist School Toilets
Строительство нового водопровода
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.)
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AWHHE Actions
Training Course on Ecosan
in pilot village Hayanist, Armenia

Photo AWHHE
AWHHE Actions

• Parasitological investigation of schoolchildren’s stool and treatment of infected children (10%)
• Parasitological investigation of the soil around the school pit -latrine
• Designing and construction of ecotoilet of school
  7 urine diverting toilets
  3 waterless urinals
  6 hand washing basins
AWHHE Actions

• *Type of reuse:* The ecosan school toilet in Hayanist constructed in 2006.
• Construction of 4 household toilets (planned 20)
• The director of the school used the urine as fertilizer for the burley field.
• There are not "liquid manure spreaders" in Armenia.
Hayanist ecosan toilet
Hayanist ecosan toilet
Household toilets
Operation and Maintenance

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

- A clean, safe and warm sanitation building
- The children’s gained knowledge on the importance of hygiene and hand washing with soap
- The population awareness on the ecosan
- Women active involvement in ecological education of the schoolchildren
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
• The importance of ecological education of schoolchildren
• Acceptance of new toilet system by villagers
Lessons Learnt

• The 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 necessity of legislation on sanitation in particular sound sanitation

• Follow-up projects with more eco san toilets in schools and for households and other schools
Thank you for your attention!