Ecosan Experience in Village Hayanist, Armenia

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Armenia



- •Area 29, 743 sq km
- •Population-3mln people
- •The annual GDP growth-13.9%
- •Per capita GDP is \$1,514 in 2005

Source: http://www.state.gov/r/pa/ei/bgn/

<u>5275.htm</u>

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
- Some investments for water sector and absolutely neglected sanitation

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

Hayanist

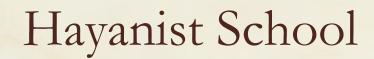
- Hayanist is situated in a basin-shaped and swampy area with a high groundwater table
- 2440 inhabitants
- Women overrepresented due to migration of men
- 90% refugees

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 Toilets





Objectives of the project

- Establishment of a sustainable, affordable and safe school 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
- Raising public awareness with regard to the hygienic and health risks associated with poor sanitation and drinking water supply

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 Hayanist, Armenia

Photo AWHHE

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





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
- Ecological education of the school children
- 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!