Mama-86’ experience on introduction of the dry urine-diverting toilets in Ukraine

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Sofia, Bulgaria
MAMA-86 is a network of 17 NGOs initiated by mothers in 1990 to raise public awareness and to work with environment and health problems.

Drinking Water Campaign is a network project, launched in 1997 as a women grass root initiative aimed to improve access to safe drinking water and sanitation.

11 local organizations participated in the campaign activities.
Rural areas: access to Water supply and sanitation

- 54% of the population live in rural areas & settlements with less than 20,000 inhab.
- 11 mln (74%) of rural population use wells, captages
- 800,000 use transported water
- 14.3 mln (91%) - pit latrines and septics
- 1,8 mln wells are contaminated by nitrates, microorganisms, pesticides, fluorine, others
- As usual pit latrines and septics are the sources of nitrates and biological contamination of ground water.
“Cooperation for sustainable rural development”

Project implementing by MAMA-86 and WECF funded by MATRA Program, the Netherlands, In 2003-2006
3 project rural areas of Ukraine
Focus on water supply, eco-sanitation and organic agriculture

To safe water in rural areas (wells) we have to stop pollution by pit-latrines, septic tanks or canalization, introduce environmentally friendly, affordable and alternative technologies
Project background

Project areas: villages Gozhuly, Vorokhta and Bobryk

v. Gozhuly, Poltava rayon, 3 km close to city Poltava
- Population about 3600 people,
- Old centralized water supply and canalization, 2 artesian wells for tap water are naturally contaminated by fluorine (7-7.5 times higher than norms), WW treatment unit is on emergency stage
- 448 shallow wells nitrate (>250-500 mg/l) and biologically contaminated, because of pit latrines and canalization

V. Vorokhta, Yaremche rayon, Ivano-Frankivska oblast,
- Population about 4500 people
- Old centralized water supply for ½ population, rest use wells

v. Bobryk, Nizhyn raion of Chernigiv oblast
- Population about 650 people, mainly pensioners, only 45 children in school
- Wells and pit latrine are used
First eco-san toilet for rural school in Ukraine

In October 2004
MAMA-86 and WECF
in cooperation with
experts of
Hamburg Technical
University built the
first eco-san toilet
for school
in v. Gozhuly,
Poltava rayon.
Stefan Deegener, Ralf Otterpohl

"Ecosan – a step towards sustainable rural development in Eastern Europe"

TUHH
Hamburg University of Technology
Eco-toilet

- It consists of 3 double vault urine diverting toilets and 1 room with 3 waterless urinals and 2 urine tanks of 2 m³ each. The facility is used by 155 pupils (6 – 16 years old) and 30 staff members.
- The cost of the toilet building with VAT (20%) is 61,000 hrv (nearly 10,000 Euro).
- Water is used only for hands washing and toilet rooms cleaning: about 50 l/day.
- Instead of flushing the faecal is covering by dry materials (mixture of soil, ash, sawdust) now water supply service payment is 20% less
Vorokhta private eco-san toilets

- 2005-2006 - 5 eco-toilet were built
Construction of Ecosan Toilet in Private House
Toilet Seat

Urine

Faeces
Finished Toilet
Bobryk eco-san toilets

- 2006
- Building school dry toilet for 36 children and 16 teachers
- 2 Private ecosan toilets for 10 villagers
Sustainable Development for All: ecological sanitation and waste-(water) management in rural areas of Ukraine

- Project was implemented by MAMA-86 and WECF, and funded by private French Foundation Ensemble.
- September 2005-November 2006
- 2 project rural areas of Ukraine
- Focus on safe water supply and eco-sanitation
Project Background

- Stepanivka Villages Council:
  5 villages, Odesa Oblast
  Population is 3345 inh.

- Village Peredovoe youth summer camp in Natural reserve of Baydarska valley, Crimea
  Appr. 60 children per day
  (appr. 80 days/per year)
Eco-san toilet for rural school in v. Stepanovka

- 2006
- School dry toilet for 350 pupils and 50 teachers
- A private ecosan toilet in v. Stepanovka (4 family members)
Eco-toilet in v. Peredovoe (summer camp), Baydarska valley, Crimea

- Dry urine diverting toilet
- Rain harvesting technology was introduced for the technical purposes of summer camp
Ecosan Advantages

Installation of urine-diverting dry toilets and waterless urinals

- immediate realisation possible
- thus immediate improvement of the hygienic and sanitary situation
- demonstration that situation can be improved
- low-cost
- production of fertiliser for the dwellers
Eco-san technologies introduction tasks are

- Adaptation for local condition (climate, building and hygiene standards, market)
- Monitoring and analysis of the costs at different stages (investments, maintenance)
- Introduction of nutrients recycling
- Optimization of the technology and development the capacity for scaling up
Thank you

www.mama-86.org.ua