Ecosan in Bangladesh

(May 2010, author's details see last page)

1. Govt. Initiatives on EcoSan

- GOB has undertaken initiatives for installation at least one EcoSan toilet in each union (4750 unions) as a demonstration and allocated resources accordingly in 2008:
- About 20% Unions could install the allocated EcoSan toilets:
- Most of unions could not install because of insufficient skill of union authorities;
- Govt. endorsed design of Comilla BARD
- One TV spot aired during 2008 initiated by the Govt.
- 2. Action research on ecological alternatives in sanitation in difficult areas of Bangladesh under The Sanitation, Hygiene Education and Water Supply in Bangladesh (SHEWAB) project:

SHEWA-B is the largest intensive hygiene, sanitation and water quality improvement project ever implemented in a developing country. It aims to cover 120 upazilas and 31 pourashavas in 31 districts and a population of 30 million in two phases from 2007-2011. The present implementation phase (2007-2009) covers 68 upazilas in 19 districts (including 300 paras in 8 upazilas in the three Chittagong Hill Tracts districts). The aim of the project is to support communities, and particularly the poorest in those communities, un-served and under-served areas, to adopt appropriate hygiene practices which reduce their exposure to diarrhoeal and other water and hygiene-related diseases. The project is founded on a community-based approached to hygiene promotion and action planning, for improvements in household sanitation facilities and community water supplies. SHEWA-B project envisaged the need for initiatives to try out an action research on ecological sanitation in the context of congested urban slums and haor areas; high water table areas and water crisis region like Chittagong hill tracts and barind region.

Purpose of the project:

The purpose is to-develop at least 5 innovative eco toilets options appropriate for geohydrological, physical, socio economic and cultural contexts of selected difficult areas (urban slums, haor areas, water scarce area like Chittagong Hill Tract and Barind region; flood prone and high water table) of Bangladesh.

Scope of Work:

- review and design different ecological toilet options appropriate for geo-hydrological, physical, cultural and social context of difficult areas
- construction of 100 household eco-toilet options appropriate for different geohydrological, physical of difficult areas
- build capacity of the local mason, local level DPHE and Pourashava engineers on construction and O&M of eco-toilets
- aware the community on the use and maintenance of eco-toilets including the use of sanitized human excreta

- establish linkage with fertilizer company/agricultural extension services for utilization of human excreta in agricultural farming
- undertake social assessment to get community feedback on different type of options (technologies, use of the facilities as well as use of eco-san products) and rectify as appropriate
- facilitate networking with different Government and NGOs, University and institutes, private companies and development partners for promoting ecological sanitation, knowledge sharing and dissemination at the grass root level

Project Duration:

16 months (Oct 2009-Jan 2011)

Project Partners: (Under SHEWA-B project supported by UNICEF and DPHE)

Project is being implemented thorough a consortium lead by Practical Action Bangladeshand associates

- Bangladesh Association for Social Advancement (BASA)
- Society for People's Actions in Change and Equity (SPACE)
- Commitment Consultants

Project Location: 4 difficulties areas in 7 districts

Difficult Areas	District	Upazila	LGI	Cluster Name
Slum/Low	Rangpur	Sadar	Rangpur	Vikorapara
Income			Municipality	Nasnia Railway Bosti
Settlement				Nasnia Bosti
				Mahiganj Pathbari bosti
	Moulovibaza	Sadar	Moulovibaza	Hafiz Shaheb's colony
	r		r	Kacchu's colony
			Municipality	
	Narsingdi	Raipura	Raipura	Srirampur purbo para
			Municipality	(Principle bari)
				Srirampur Dakkhin para-
				01
Haor	Sunamgonj	Bishambarpur	Solukabad	Gorer gao
			Dhonpur	Islampur
Hill Tract/ Barind	Bandarban	Alikadam	Alikadam	Babupara
		Thanchi	Boli Para	Ailmara
	CNgonj	Sadar	Gobratola	Amarok
		Gomostapur	Rohonpur	Bongpur
Flood	Gaibandha	Sadar	Badiakhali	Goal Bari (Akondo Para)
Prone/High		Polashbari	Monohorpur	Kumedpur
Water Table				

Major Output

- 1. Inception report
- 2. Designs (at least 5) and /BOQ of different innovative ecological toilet options
- 3. Training manuals in Bengali (Construction manuals & Operation manuals for users)
- 4. 100 eco-toilets (constructed)
- 5. Build Local capacity (DPHE, Municipality, CBOs and Community masons)
- 6. Laboratory test of eco-san products and Usage in crop production
- 7. Network and linkage with relevant stakeholders

- 8. Knowledge products, including, user friendly catalogue
- 9. Final workshop, for knowledge dissemination, lobbing, networking, linkage and advocacy
- 10. Reports (Activity and Final report)

3. Ongoing activities by the NGO, Sector partners

i. Bangladesh Academy of Rural development (BARD), Comilla

- 15 Eco-toilet constructed in 4 villages (2004-2007) in collaboration with JADE Eco-toilet construction at Shabazpur tea-Estate Ltd. (2007-2008)
- 99 Eco-toilet construction in six villages of Comilla districts (2007-2009) in collaboration

with JADE and JIC

Future Activities

- Improvement of Sanitation (Ecosan) and Water Supply System in a Rural School of Bangladesh
- Evaluation of Present State of Government Constructed Union Level Demo Ecosan toilet

ii. **Practical Action Bangladesh** has so far accomplished the following activities in Ecological Sanitation:

- Construction of 19 household level Eco-Toilet in Gazipur Town
- Practical Action has developed two different model of eco-toilet and also has engineering design and BOQ.
- Construction of Ecological Sanitation Block with Bio-gas plant at G.K. Model High School under School Sanitation Project.
- Urine test for nutrient value and micro-organism is on going and will be finished within October 2009.
- Important case studies on ecosan have been documented and few learning points identified.
- A consortium has formed on Ecological Sanitation and Waste Management consisting with Practical Action Bangladesh, Bangladesh Association for Social Advancement (BASA), and Society for People's Actions in Change and Equity (SPACE), Bangladesh Academy for Rural Development (BARD), Bangabandhu Sheikh Mujibur Rahman Agriculture University (BSMRAU), Bikalpo Unnayan Kormachuchi (BUK), Gazipur Municipality.
- Construction city wide sludge collection and treatment system for Faridpur Municipality is in progress.
- Construction of Bio-gas plant where human excreta and solid waste would be used as raw material in on going in Faridpur Municipality.
- Promotion of urine use at homestead gardening in Gazipur Municipality.
- Production of plastic fiber made Eco-pan
- Construction and promotion of concrete Urine Diversion Pan (UDP) through piloting community based Urine Diversion Toilet (UDT) in Wrishipara Polli of Gazipur Municipality.
- Implementing Unicef funded Action Research Project on Ecological Alternatives in Difficult Areas of Bangladesh.

iii. BASA

 School Ecological Sanitation project in Gazipur completed construction of Ecosan in two school and construction in three school is going on.

- In another project with WHO they have constructed 10 Ecosan toilet at Sitakunda Upazila in Chittagong district. They also have started construction of Ecosan toilet in Noakhali district under the same project with WHO.
- The negotiation of the following projects are in progress:
 - -From PKSF demanded a fund for constructing 200 Ecosan and they have agreed.
 - -With Action Aid to build Ecosan toilets for the poor and excluded of indigenous community in Durgapur, Netrokona

iv. SPACE

SPACE has implemented the following activities on EcoSan from its inception of 2005 to till now

on.

- Piloted an EcoSan project at 2 selected villages of Patavog union under Srinagar Upazila of Munshigonj (A flood prone area) for two years.
- piloting, 47 EcoSan toilets Barind Tract areas (water scarce region)
- installed another 153 EcoSan toilets in 4 districts
- Installed 60 Household based double vault dry laltrine in Gazipur district and another 60 eco-toilets in Manikgonj district.
- Installed 06 Household based double vault EcoSan toilets at Rangamati (Hill tract area) Municipal areas
- Installed household based 09 Eco-toilet three districts. It was also a piloting of Eco toilet through micro-financing.
- installed 10 EcoSan toilets (Household based double vault and tiles fitted floor) at one district
- SPACE also installed 15 Double vault EcoSan toilet (Room attached) and 10 Urinals at 5 secondary schools

iv. Oxfam GB

Pilot project in 6 Unions three Kurigram, Gaibandha, Sirajganj:108 UDL and Ecosan options

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