

Opportunity of Low Cost Solution for Faecal Sludge Management to Improve Urban Sanitation Situation: Experience in Bangladesh

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Session 3. Achieving Total Sanitation in South Asian cities

Policy Dialogue on Sustainable Urbanization in South

Asia: Greening the Infrastructure Gap

17-18 December, 2014

New Delhi, India



Overview of the Presentation

1. Solid Waste Management in Bangladesh
2. Sanitation Situation in Bangladesh
3. Background of Kushtia Municipality
4. Faecal Sludge Management Situation in Bangladesh
5. Problem of Solid and Faecal Sludge Waste Management
6. Pilot Intervention on Faecal Sludge Management in Kushtia
7. Key Findings

Location of Kushtia Municipality



- Bangladesh has a population of over **154 million people**, making it the largest least developed country in the world, by population Bangladesh has one of the highest population densities in the world (**1,125 per sq km**) and has been rapidly urbanizing.
- Current estimated urban population **39 million**, accounting for about **26% of the country's total population**, to about **116 million** by 2040, accounting for about **50% of the country's total population** (BBS 2012).
- There are **11** (eleven) **city corporations** throughout the country and **315 municipalities (pourashavas)**.

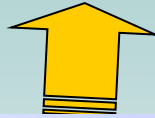
Solid Waste Management in Bangladesh

- Rapid urbanization in Bangladesh is creating an increasing strain on overburdened infrastructure, as well as more demand on limited public services.
- Solid Waste Generation in Urban Areas: **20,000 tons/day**
- Organic Waste: **80%**
- Collection Efficiency of Waste: **50-60-%**
- Crude dumping of waste in low-lying areas is the most common method of disposal of waste
- Organic waste management, therefore, is a key sub-sector of municipal waste management which deserves more attention.

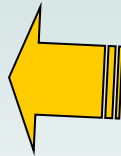


Negative Impacts of Unmanaged Waste

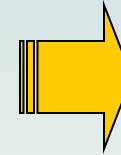
VERMINS
*Spreading more than
40 Diseases*



METHANE GAS
*Bad Odor &
Green House
gas*



LEACHATE
*Polluting Ground
& Surface Water*



PROBLEMS OF SOLID WASTE MANAGEMENT

Sanitation Situation in Bangladesh

“Sanitation” means total sanitary condition for healthy living which includes hygienic latrine facilities, proper management of solid waste and proper disposal of household wastewater and storm water.

- Urban sanitation remains also a major challenge in Bangladesh. Sanitation is the responsibility of the municipalities, who do not have necessary organizational and technical capacity to take up their role.
- Conventional sewerage systems are absent in all urban areas except in parts of Dhaka city. Only 20% of the population of Dhaka is served by a highly expensive sewerage network; the rest use septic tanks, pit latrines, unhygienic latrines or none at all.
- Although it is claimed that the **urban sanitation coverage is 88%** as of March 2009, the overall sanitation situation in all urban areas is far from satisfactory (Rahman, M.M, 2009).
- Most households do have standard toilet facilities within premises but the sewage collected are discharged untreated directly into lakes, canals and rivers causing pollution and health hazards in the densely populated areas.



Faecal Sludge Management in Bangladesh

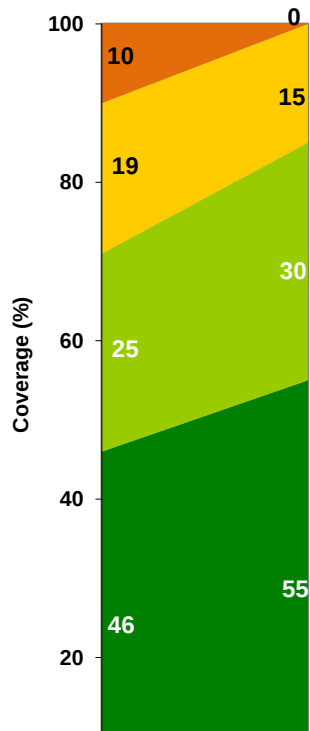
Faecal sludge: Sludges are collected from so called on-site sanitation systems; such as pit latrines, non sewerred public toilets, septic tanks

- At present there is no formal or environmentally sound faecal sludge collection and disposal system in Bangladesh.
- Septic tanks and pits are not de-sludged regularly to keep them functional. These are occasionally emptied manually and dumped into the nearby drainage system, low lands, surface waters and into open environment.
- Municipal authorities and the people in general, are not aware of the seriousness of the problem and therefore of the needs for improvement. Financial and operational capacity of the municipalities for improved faecal sludge collection, treatment and safe disposal are also limited.

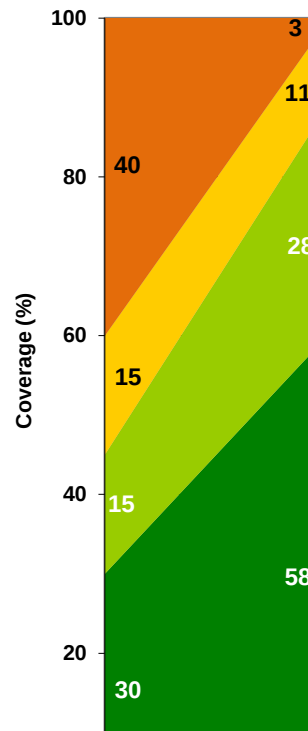


Estimated Trends of Sanitation Coverage in Bangladesh

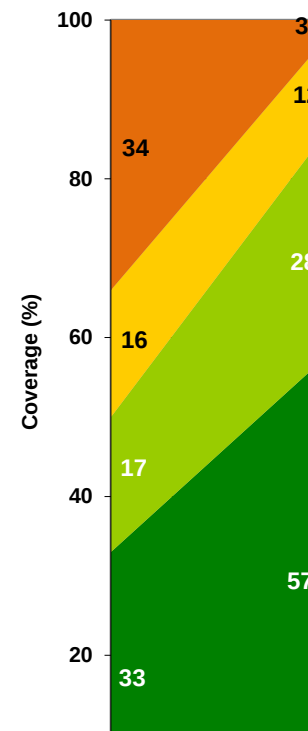
Urban Sanitation Trends



Rural Sanitation Trends



Total Sanitation Trends



With the increase in sanitation coverage in urban areas using septic tanks and pit latrines it is expected that faecal sludge volume will increase considerably within a few years and if collection and disposal systems are not developed serious environmental degradation and associated health risk will increase.

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_4764

