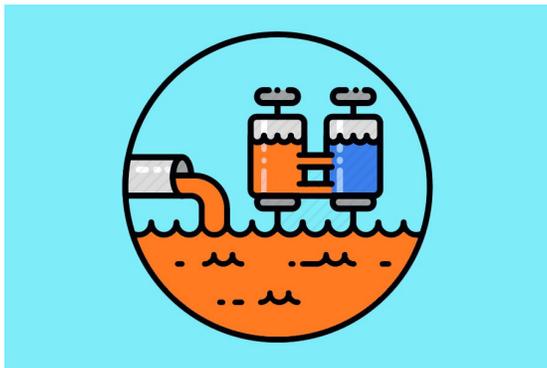


Improving faecal sludge management

Mowshumi Sharmin | Monday, 4 June 2018



Human excreta persist to be a taboo issue, even when poor sanitation costs the world USD 260 billion annually and 1.5 million child deaths. Over 2.4 billion people do not have access to improved sanitation and a billion people worldwide still practice open defecation. Another estimate indicates that 5-cubic-metres-truck-load of faecal sludge (FS) dumped into the environment is equivalent to 5,000 people practising open defecation. Second generation sanitation challenges pose a threat to safe management of FS due to inadequate attention paid to it not only in Bangladesh but across the world.

Sensible faecal sludge management system (FSM) is a solution to this problem. It is high time we shovel our own trash prudently.

An economic study conducted in Bangladesh has brought into light that the impact of poor sanitation and hygiene cost is worth Tk 295 billion (US\$ 4.2 billion) annually, equivalent to 6.3 per cent of Gross Domestic Product (GDP). Economic cost is around Tk 2,025 (US\$ 30) per inhabitant per year. Environmental cost of the pollution due to indiscriminate sludge disposal is not yet understood and as such is an area which has not been intervened into.

Successfully adopted by several countries in south-east Asia, faecal sludge management system involves different activities like containment, emptying, transport, treatment, disposal and reuse. However, FSM needs recognition and proper knowledge for maintenance. When septic tanks and pit latrines fill to the brim, the sludge that is collected from them is largely discharged untreated into open drains, irrigation fields, open lands or surface waters. This poses a serious public health risk and threat to environment. Wastewater from drainage system has high levels of E.Coli. This superbug infects the lungs or urinary tract of human beings and can be treated only with antibiotics. Due to lack of adequate FSM services in cities and towns, severe environmental pollution is a common phenomenon endangering the environment and public wellbeing in the process. Effective sanitation measures like FSM are critical for saving lives. It is not only a matter of building lavatories but also of changing entrenched attitudes.

Among the developing countries, Bangladesh has made great strides in ensuring basic sanitation and reducing open defecation. Bangladesh is one of the most densely populated country in the world with a population of 162 million people. The demographic trend indicates that by 2050, the population will be around 220 million. Providing proper sanitation facilities to this ever-increasing number will be a daunting task.

Despite bringing down the practice of open defecation in the country from 34 per cent in 1990 to zero per cent in 2016 through significant investment in toilet/latrines building, the problem still lies with disposal and treatment of faecal sludge. A World Bank report has shed light on the detail that there is no systematic sewer disposal and treatment system in Bangladesh. Only Dhaka city has a sewerage treatment plant in Pagla, which serves barely 18 per cent of the city.

Unfortunately, though most of Dhaka's population has access to a toilet (improved or otherwise), 99 per cent of the city's waste returns to the environment untreated. Only 20 per cent of households and institutions in the mid to high-income areas of the city are connected to the sewerage network. Due to the population density, high rate of wastewater generation and frequent water-logging after a downpour, septic tanks and soakage pits often overflow in Dhaka. It is common practice in areas with inadequate drainage and sewerage system to discharge untreated waste into the storm drain network. Awareness of mechanical emptying is low and the existing layout of urban neighbourhoods makes access to pits and tanks challenging.

Dhaka was divided into Dhaka North City Corporation (DNCC) and Dhaka South City Corporation (DSCC) in 2011 in a bid to bring visible changes. According to Economist Intelligence Unit (2015), Dhaka ranked second in three consecutive years as the least liveable city in the world. The way a city manages its waste, especially solid waste, is one of the international indicators of a city's liveability. Some NGOs and private organisations are providing septic tank/pit emptying services in selected areas of the city using Vacutags, a sludge disposal system. It was estimated that the city corporations of Dhaka will have to bring around 5.28 million un-served people under the FSM service by 2025 and 7.59 million un-served people by 2035.

Given the circumstances, we need to set up efficient FSM. It is apparent that technologies that can use excreta to generate electricity are much more thrilling to display than a public health education campaign that is trying to sensitise society about FSM. Funding in sanitation needs to increase but financing can look at innovative ways to attain sustainability. Sustainable implementation and operation of FSM requires an approach that will incorporate technology, management, planning, public financing and stakeholders to meet the objective of having clean cities and ensure sanitary practices to protect the environment.

Mowshumi Sharmin is Assistant Director (Research Wing) of Bangladesh Institute of Governance and Management (BIGM).

mowshumi405@gmail.com

Editor : A.H.M Moazzem Hossain

Published by the Editor for International Publications Limited from Tropicana Tower (4th floor), 45, Topkhana Road, GPO Box : 2526 Dhaka- 1000 and printed by him from City Publishing House Ltd., 1 RK Mission Road, Dhaka-1000.

Telephone : PABX : 9553550 (Hunting), 9513814, 7172017 and 7172012 Fax : 880-2-9567049

Email : editor@thefinancialexpress-bd.com, fexpress68@gmail.com

Print