

DHAKA (BANGLADESH)

General information

Area:	360km ²
Population:	10 million
National GDP per capita:	USD 1,602
Total income:	BDT 2098 million (USD 37 million)

Solid waste generation

Total generation:	4500-5000 ton/day
Waste generation per capita:	0.60kg/person · day (residential area)
Waste source:	46.8% households, 21.8% street sweeping, 19.2% commercial, 12.9% industrial, 0.5% clinical
Waste composition:	72.5% food, 13.7% polythene, 5.6% paper/cardboard, 3.3% plastic

Solid waste management

Collection rate:	Estimated at 50-60%
Recycling:	Estimated at 26%; carried out by scavengers
Composting:	Conducted by residents together with NGO initiative
Expenditure:	BDT 53.00 (USD 0.90) per capita expenditure; 32.57% collection, 47.9% transportation, 19.37% disposal Conservancy tax of 2% is charged. Expenditure rate of the total budget is 15.4%.

Major challenges and strategies

According to the municipal corporation ordinance of 1983, the Dhaka City Corporation (DCC) is responsible for collection of solid waste from corporation's bins and transportation to the landfill area. Thus, DCC's involvement is only with secondary collection and final disposal. Although DCC has tried to work with communities and NGOs for primary collection and street sweeping, it is not yet well managed. On the institutional side, rules and regulations are not clear. The role and responsibilities of waste generators are not clearly defined and Municipal Corporation is unable to impose rules on the public, i.e. the present law does not provide penalties for illegal disposal of waste or littering. DCC has shortages of skilled human resources and finances, and lacks scientific approaches for problem solving.

Strategies for efficient solid waste management for DCC are therefore to carry out institutional strengthening, capacity building and gradual private sector participation in solid waste management. In particular, the formulation of laws and regulations, and promotion of community-based programs and local initiatives with NGO support are important.

Dhaka City hosts an innovative "waste to composting" mechanism that has reduced solid waste at source as well as created a market mechanism for sustainable business. The project is being organised by a local NGO ("Waste Concern"), with support from the United Nations Development Programme (UNDP). In this project, communities are directly involved in the waste management program. Each household contributes to the collection mechanism by paying fees. The collected waste is then separated, recycled and sent to a composting plant. The composting plant converts organic waste to fertiliser and enriches it chemically for local suitability. Local fertiliser companies buy the enriched fertiliser and sell it on a larger scale. The process has been sustainable, and no subsidies have been given for its operation except for NGO support and use of land.

The Kitakyushu Initiative could be instrumental to DCC in learning from the experiences of other cities especially in collection and disposal. Frameworks for law, rules and regulations for solid waste management and collection management systems must be established in DCC; some cities in the Kitakyushu Initiative Network have already excelled in these areas. Examples from Surabaya, which is based on community managed collection, could be useful to DCC. Such experiences would be of good reference to DCC in managing solid waste issues. Similarly, other cities can learn valuable insights from Dhaka's successful and replicable composting program.