**Environment Awareness Campaign** 







**Pollution Control Board, Assam** 

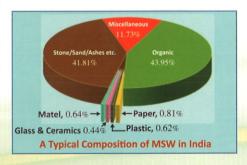
Bamunimaidam, Guwahati - 21

## MUNICIPAL SOLID WASTE: A GROWING CHALLENGE

Waste management has become an issue of growing global concern as urban populations continue to increase along with change in consumption patterns. The amount of municipal solid waste (MSW) is growing even faster than the rate of urbanisation. In many towns and cities, garbage is littered on road, on footpath, in public open space, municipal drains and in market places that makes most unhygienic conditions to live in. The prime reasons for the prevailing unhygienic conditions in our cities is the ignorance and casual attitude of the citizens, as well as the inability of the municipal authorities to upgrade or scale up the facilities required for proper management of increasing wastes. Poorly managed waste has enormous impacts on public health, local and global environment, and economy.

### **WASTE: KEY FACTS**

- As per one estimate at present about 1.3 billion tonnes of MSW is generated per year globally, and by 2025 it is likely to be increased to 2.2 billion tonnes.
- Every year about 20 million tonnes of solid waste accumulates in our oceans and seas.
- World Health Organization (WHO) has observed that 22 types of diseases can be prevented/ controlled by improving the MSW management system.
- Currently, about 62 million tonnes of MSW is generated everyday in urban India, which is projected to be increased to 165 million tonnes in 2031 and 436 million tonnes by 2050.
- The annual increase rate of MSW in India is about 1.3 percent.
- Waste generation in major Indian cities ranges from 200 grams to 600 grams per capita/day, which is expected to be 700 grams by 2025.
- India is the world's third-largest garbage generator.
- About 75 to 80 percent of the waste generated in India is collected, of which only about 20 to 28 percent is disposed of properly.
- The state of Assam produces about 1146 tonnes of MSW daily
- The Guwahati city alone produces about 450 tonnes of MSW daily



# WASTE: THE COST OF IMPROPER MANAGEMENT

# **Public Health Impacts of Uncollected Waste**

- Uncollected waste and improper dumping sites have been linked to many harmful health effects, including skin and eye infections, respiratory problems, vector-borne diseases such as diarrhoea, dysentery, typhoid, hepatitis, cholera, malaria and yellow fever, high blood lead levels and exposure to heavy-metal poisoning (UNEP, 2011).
- Uncollected waste and dumping sites are home of many virus carrier insects, rat, flies etc, which spread infectious diseases to the nearby areas.
- It causes odour pollution and make living troublesome in nearby areas.





# **Environmental Impacts of Open Dumping and Burning**

- Severe land pollution leading to decrease of productivity.
- Water pollution freshwater, groundwater and sea water, and harm to ecosystem.
- Local air pollution and contribution to climate change through Green House Gas emission.
- Accumulated waste in drains encourage vectors to breed, resulting in the spreading of cholera, dengue fever and other infectious diseases, and is a major contributing factor to flooding in urban areas.
- Uncontrolled burning of waste causes particulate and organic pollutant emission that are highly dangerous locally and globally.

# **Economic Impacts of Uncollected Waste**

- Reduce productivity of land and help in unemployment aggravation.
- Damage aesthetic sense of places and hamper businesses and tourism.
- Increase health care expenditure.
- Increase cost for water treatment and soil management.

## WASTE: WHAT WE CAN DO

- Reduce domestic waste through less and efficient use of resources.
- Do not throw, burn or burry the solid waste on streets, open public spaces or in the drain or water bodies.
- Reduce food waste with better storage. Always take only that much of food in your dish or in tiffin box which you can consume.
- Segregate and store the waste at source in three separate streams namely biodegradable remains of vegetables, fruits, fish, meat, egg, other food waste and garden waste etc.; non-biodegradable glass, scrap iron, plastic etc.; and domestic hazardous wastes electronic and electrical wastes (discarded computer, printer, mobile phones, TVs, refrigerators, bulbs & tube light etc.), waste cells, health-care waste etc. in suitable bins and handover to authorised waste pickers or waste collectors.
- Composting is a very useful option for biodegradable wastes. This can be done
  with less effort either by simply digging a waste disposal pit in the premises of
  our residence or even can be done using different vessels available in market.
- Reusable waste should be reused after necessary cleaning and care.
- Don't dispose of recyclable waste paper, plastic, cardboard, metal, glass etc., with bio-degradable and other wastes. Store them separately and sale to the vendor.
- Construction and demolition waste should be stored separately and can be

used for road repairing and landfilling works etc.

 What great thing we can do easily is - a little adjustment in our lifestyle and change in our attitude towards environment, which will make a great difference in making our towns and cities clean and healthy.

#### MUNICIPAL SOLID WASTE: LEGAL FRAMEWORK

The Ministry of Environment, Forest and Climate Change to the Government of India has published the new 'Solid Waste Management Rules, 2016' on 8th April 2017 in supersession of the 'Municipal Solid Waste (Management and Handling) Rules, 2000'. Some important provisions of this new Rules are -

- Every waste generator shall segregate and store the waste generated by them in three separate streams namely bio-degradable, non-biodegradable and domestic hazardous wastes in suitable bins and handover segregated wastes to authorised waste pickers or waste collectors.
- Every waste generator shall store separately construction and demolition waste in his own premises and shall dispose of as per the Rules.
- No waste generator shall throw, burn or burry the solid waste generated by him, on streets, open public spaces outside his premises or in the drain or water bodies.
- No person shall organise an event or gathering of more than one hundred persons at any unlicensed place without intimating the local body.
- Every street vendor shall keep suitable containers for storage of waste generated during the course of his activity.
- All hotels and restaurants in partnership with the local body shall ensure segregation of waste at source.

Besides the 'Solid Waste Management Rules, 2016', there are a few other Rules in India enacted under 'Environment (Protection) Act, 1986' for the purpose of management and handling of different categories of waste. These Rules are -

- The E-waste (Management) Rules, 2016
- The Plastic Waste Management Rules, 2016
- The Bio-Medical Waste Management Rules, 2016
- The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended by (Amendment) Rules, 2016
- The Batteries (Management and Handling) Rules, 2001
- The Construction and Demolition Waste Management Rules, 2016
- The Regulation on Lead contents in Household and Decorative Paints Rules, 2016

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