

Sanitary Landfill – 1st step to Swachh Bharat

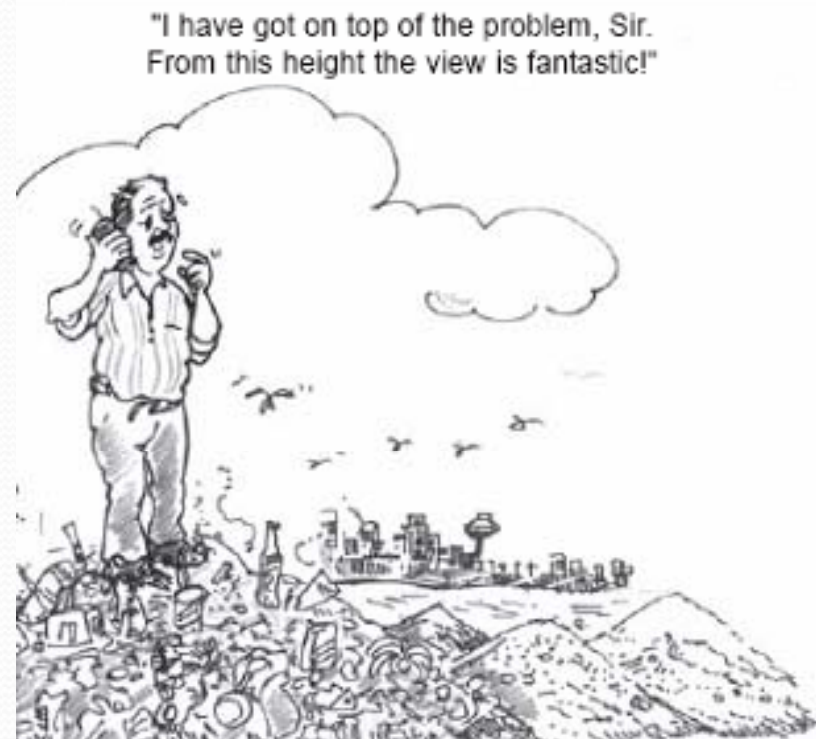
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Waste generation data(as per CPCB)

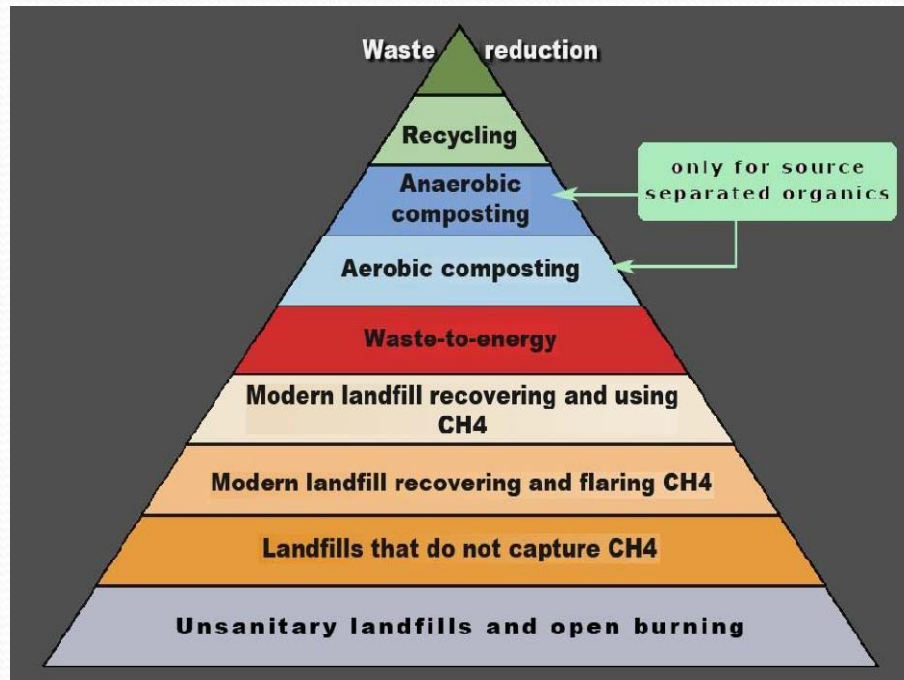
- 2016 Estimates

- India generates about 141,064 TPD
- Only 27% is treated i.e 38,087 TPD
- While only 3.2 % goes to the Landfill i.e 4515 TPD
- Implies that rest of the waste is being open dumped i.e **102,976 TPD**



- Source – TERI paper

Hierarchy of Sustainable waste management



- Landfill has been the last of the option – In fact that should be the first step till the segregation and processing is done
- Reduce the waste going to SLF- 100% - 70% - 40% – 20%
over time , say 4yrs - 8 yrs - 10 years
- State Pollution Control Boards to Monitor

SWM 2016 Rules

- Sch I – C (ii) – Clause

“Till the time waste processing facilities for composting or recycling or energy recovery are set up, the waste shall be sent to the sanitary landfill. The landfill cell shall be covered at the end of each working day with minimum 10 cm of soil, inert debris or construction material.” – **Avoid polluting the environment by open dumping**

Subsequent steps

- Following steps need to be taken from the 1 year -
 - Improve segregation (DtD) and collection of waste
 - Increase Reduce, Recycle, Reuse and Reform
 - Improve efficiency of transportation systems
 - Improve /start Processing of waste
- Closure of open dump sites
 - Start in 2nd year – completed in 3rd year

Closure of Open dump sites

- Open dump sites are biggest problems – fire, litter, odour, flies, bird menace and leachate
- Present in every city – 1 or more
- Ghazipur landslide –
 - Huge waste volume
 - Vertical heights of 50-60m
 - Slope stability issue
 - Killed 2 person
- Remediation by biomining/ gas extraction/closure is a must on urgent basis

Primary Objectives of MSW 2016 Rules

- Accomplish Swachh Bharat Mission by
- Eliminating Health Hazards
- Stopping Contamination of
 - Soil
 - Ground Water
 - Surface Water
 - Air
- Conserve nature

*Thank
you*



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