

## **SOLID WASTE MANAGEMENT**

Solid waste management is an integral part of the Environmental Management of each city. Due to rapid growth of urban population, as well as constraint in resources, the management of solid waste poses a difficult and complex problem for the society and its improper management gravely affects the public health and degrades environment. In Indian scenario, the growth of population is about 50 % in 2001 as compared to that in 1947. Accordingly waste generation increases from 0.295 Kg/capita/day in 1947 to 0.56 Kg/capita/day in 2001. Total waste generated per year comes to 55.3 million ton/year in 2001 as compared to 6 million ton/year in 1947. Municipality solid waste is positively related to variation in per capita income and with population size. A survey estimates highest generation of solid waste in US (2.4 Kg/capita/day).

The general composition of solid waste being generated from the cities of India is 40.15 % vegetables & twigs, 3.8% glass, 0.8 % paper, 0.62% plastic, 0.44 ceramics, 0.64% metals, 41.81% sand & grit and others 11.73%.

The per capita generation of solid waste in Rourkela and Puri Municipality of Orissa is 0.5 Kg/day and 0.3 to 0.5 Kg/day respectively. The most common way of treating solid waste in Orissa is land filling. Awareness on Solid Waste management among the people and various Institutions, Government Organisations and non-government Organisations are working on it. In Puri Municipality there exists a mechanized Bio-compost plant for treatment of garbage of 100 TPD capacity.

Solid waste from industrial activities is one of the major environmental concern. About 25 million tons of solid waste is being generated from industrial sectors in the state. It includes fly ash & bottom ash from thermal power plants, chemical slags from Iron 7 Steel plants and red mud from Aluminium industries. Some of the wastes are designated as hazardous because of their composition and hazard potential. About 80000 MT/annum of hazardous waste being generated in the state. In the mining sectors, the major solid waste is the overburden waste.

<b>STATUS OF SOLID WASTE MANAGEMENT OF THE STATE</b>					
Year	City	Municipal Solid Waste Generation (Tonnes/day)	Municipal Solid Waste Per Capita (Kg/day)	No. of Landfill Area	No. of Safai Karamchari
2000	Cuttak	325	0.808	-	-
2000	Rourkela	60	0.346	-	-
2000	Sambalpur	34	0.259	-	-
2000	Balasore	2.6	0.30	-	-
2001	Puri	79	0.3 to 0.5	1	484

Source - Orissa Review

<b>MUNICIPAL WASTE GENERATED {QUANTITY IN TONNES(tons)}</b>										
Year	City	Solid Waste (Tonnes)		Collection Efficiency %age	Characteristics (%)- Non Degradable					Degradable Waste
		Generated	Collected		Paper	Plastics	Metal	Glasses	Ash & Earth	
2001	Puri	28835	18250	63	2	2.8	0.2	0.3	44	47.9

Source - Orissa Review

