

Solid Waste Management in Chennai City

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ABSTRACT. Human activities create waste, and it is the way these wastes are handled, stored, collected and disposed of, which can pose risks to the environment and to public health. Where intense human activities concentrate, such as in urban centers, appropriate and safe solid waste management (SWM) are of utmost importance to allow healthy living conditions for the population. Rapid increase in volume and types of solid and hazardous waste as a result of continuous economic growth, urbanization and industrialization, is becoming a burgeoning problem for national and local governments to ensure effective and sustainable management of waste. The environmental degradation caused by inadequate disposal of waste can be expressed by the contamination of surface and ground water through leach ate, soil contamination through direct waste contact or leach ate, air pollution by burning of wastes, spreading of diseases by different vectors like birds, insects and rodents, or uncontrolled release of methane by anaerobic decomposition of waste. This fact has been acknowledged by most governments, however many municipalities are struggling to provide even the most basic services. Typically one to two thirds of the solid waste generated is not collected (World Resources Institute, et al., 1996). Solid Waste (SW) generation in Chennai, the fourth largest metropolitan city in India, has increased from 600 to 3500 tons per day (tpd) within 20 years. The highest per capita solid waste generation rate in India is in Chennai (0.6 kg/d). Chennai is divided into 10 zones of 155 wards and collection of garbage is carried out using door-to-door collection and street bin systems. The collected wastes are disposed at open dump sites located at a distance of 15 km from the city. The community-based solid waste decomposition is an ideal and a safe disposal method, is more beneficial for solid waste management, as it easily converts waste to valuable fertilizer.

Key words: Economic Growth, Population, Solid Waste, Urban Poverty, Environment Problems.

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