

# ROLE OF SOLID WASTE AS SOURCE OF LIVELY HOOD AND INCOME

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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. In urban areas, especially in the rapid urbanizing cities of the world, problems and issues of Municipal Solid Waste Management (MSWM) are of immediate importance. This has been acknowledged by most governments, however rapid population growth over-whelms the capacity of most municipal authorities to provide even the most basic services. Typically one to two thirds of the solid waste generated is not collected. As a result, the uncollected waste, which is often also mixed with human and animal excreta, is dumped indiscriminately in the streets and in drains, so contributing to flooding, breeding of insect and rodent vectors and the spread of diseases. Furthermore, even collected waste is often disposed of in uncontrolled dumpsites and/or burnt, polluting water resources and air.*

## INTRODUCTION

While urbanisation in developing countries has contributed to wealth accumulation, it has also been accompanied by an alarming growth in the incidence of poverty. Waste generation and its management, is fast becoming a global problem. According to a United Nations report (2004)

1. Per capita waste generation in the developed world has increased threefold over the past 20 years.
2. Waste generation in the developed world is now approximately five to six times higher than in the developing world.
3. In the developing world, waste production is expected to double during the next decade.
4. By, 2025, it is estimated that there will be a five fold increase in global waste generation.
5. Roughly 30 to 40 percent of local authority's budgets in developing world cities are consumed by the provision of waste management services.

Consumption, linked to per capita income, has a strong relationship with waste generation. As per capita income rises, more savings are spent on goods and services, especially when the transition is from a low income to a middle-income level. India will probably see a rise in waste generation from less than 40, 000 metric tonnes per year to over 125, 000 metric tonnes by the year 2030.

In 1947 cities and towns in India generated an estimated 6 million tonnes of solid waste; in 1997 it was about 48 million tonnes. Between 2000 and 2025 the waste composition of Indian garbage will undergo the following changes:

1. Organic Waste will go up from 40 %to 60 %
2. Plastic will rise from 4% to 6%
3. Metal will escalate from 1% to 4%
4. Glass will increase from 2% to 3%
5. Paper will climb from 5% to 15%
6. Others (ash, sand, grit) will decrease from 47% to 12%

### **MATERIAL AND METHOD**

According to TERI (Tata Energy Research Institute), dumpsites in Indian cities have occupied in the last 50 years as much space as 20, 000 hectares, which is slightly less than twice the area of Chandigarh. Eighty per cent of the cities have less than the recommended manpower of 28 sanitary workers per 10, 000 populations.

More than 25% of the municipal solid waste is not collected at all. The existing landfills are not lined properly to protect against contamination of soil and groundwater.

### **CONCLUSION AND DISCUSSION**

Higher incomes and economic growth tend to have an impact on the composition of wastes. Wealthier individuals consume more packaged products, which results in a higher percentage of inorganic materials –metals, plastics, glass, textiles, and so on– in the waste stream. Higher volumes of wastes and a changing composition have a profound impact on waste management practices. It also points out the policy changes that developing countries need to make.

The Ministry of Environment and Forests, Government of India has notified "Draft of Municipal Waste (Management & Handling) Rules 1999" on 27th September, 1999:

The manual includes composition and quantity of solid waste, storage of waste at source, primary collection of waste, transportation of waste, composting, energy recovery from municipal solid waste, economic and financial consideration, Environmental and Health Impact Assessment, Institutional aspects and capacity building, prospects of private sector participation, community participation, legal aspects, etc.

It is pertinent that solid waste management requires urgent attention in urban area. Metropolitans are virtually sitting on time bomb which can explode at any time causing epidemics like plague and other dreaded diseases as it happened in 1994 in Surat (Gujarat).

Solid waste management is not the duty of municipal corporations but it concerns everybody. Experts have offered three tier solutions to the problem.

1. Proper administration
2. Suitable technology
3. Active people participation

Participation has been viewed by the researchers, policy makers and scientists as an important factor in the management of the solid waste. Active and positive participation by the people will not only make handling, disposal and recycling of waste easy but also will be regarded as valuable resources of income. Need not to mention it is going to improve the environmental conditions too. The cities cannot achieve 'zero-waste' status without the cooperation of people no matter how much efficient administration of technology can be.

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