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Research Paper

SOLID Waste Management And Indian Urbanization

Management

KEYWORDS :

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ABSTRACT

One of the steps to economic development of any country is the development of its industries. Over, the last few decades therefore, rapid industrialization has taken place along with unprecedented urbanization leading to deterioration of various environmental media like air, water, soil and land. The key environmental challenged that the country faces today relates to the nexus of environmental degradation with poverty in all its facets. These challenges are connected with state of environmental resources.

In India, generation of municipal solid waste (MSW), industrial, hazardous waste, biomedical waste have been increasing due to population growth, life style changes and economic development. On the other hand, waste management responses have not kept pace with the increasing quantities of waste resulting in (a) a high proportion of uncollected waste, and (b) poor standards of transportation, storage, treatment and disposal. The insanitary methods adopted for disposal of solid wastes is a serious health concern with significant environmental, social and health costs associated with it. Open dumping of garbage facilitates the breeding of disease vectors such as flies, mosquitoes, cockroaches, rats, and other pests..

Introduction

The three important components of sustainable development are economic development, social development and environmental protection as interdependent and mutually reinforcing pillars. Unfortunately, unsustainable patterns of construction and consumption are increasing the quantities and varieties of environmental polluting waste which include :

(i) Household waste – generally classified as municipal waste which consists of kitchen waste, vegetables, flowers, leaves, fruits, plastic bags, sanitation residue and waste from streets.
(ii) Industrial waste as hazardous waste consists of cans, aluminium foils, plastics and other non biodegradable items which could be highly toxic to humans, animals and plants. India generates around 7 million tones of hazardous waste every year.
(iii) Biomedical waste or hospital waste as infectious waste in the form of disposable syringes, swabs, bandages, body fluids, cultures, discarded medicines etc. These can be a serious threat to human health if not managed in a scientific manner.

As per the report of the Energy and Resources Institute (TERI), the waste generation per capita is increasing at the rate of 1 to 1.33% annually and the total waste generation within next five decades would multiply five times the present level of about 50 million tones per day. It is reported that 4.4 million tons of hazardous waste is generated per year out of which about 60% goes for land fill sites about 18% is disposed off by various other methods.

Some landfills create their own problem. In most landfills little air is available to decompose the waste. Items buried 20 years ago have been dug up intact. The ocean floors are also being affected because of the bulk of waste material that humans are creating. Rivers are an important source for the transport of waste to the oceans. Waste – solid disposal by coastal cities is sufficiently large to modify shorelines.

Improper disposal of sewage and solid waste is one of the basic causes which made excessive rains coupled with high tide all the more hazardous for the people of Mumbai on 26th of JULY 2005.

Household Hazardous Waste (HHW)

Leftover household products that contain corrosive, toxic, ignitable, or reactive ingredients are considered to be household hazardous waste (HHW). Products, such as paints, cleaners, oils, batteries, and pesticides, that contain potentially hazardous ingredients require special care when you dispose of them. Improper disposal of HHW can include pouring them dow

the drain, on the ground, into storm sewers, or in some cases putting them out with the trash. The dangers of such disposal methods might not be immediately obvious, but improper disposal of these wastes can pollute the environment and pose a threat to human health. Many communities in the United States offer a variety of options for conveniently and safely managing HHW.

Consider reducing your purchase of products that contain hazardous ingredients. Learn about the use of alternative methods or products—without hazardous ingredients—for some common household needs.

To avoid the potential risks associated with household hazardous wastes, it is important that people always monitor the use, storage, and disposal of products with potentially hazardous substances in their homes. Below are some tips for individuals to follow in their own homes:

- Use and store products containing hazardous substances carefully to prevent any accidents at home. Never store hazardous products in food containers; keep them in their original containers and never remove labels. Corroding containers, however, require special handling. Call your local hazardous materials official or fire department for instructions.
- When leftovers remain, never mix HHW with other products. Incompatible products might react, ignite, or explode, and contaminated HHW might become unrecyclable.
- Remember to follow any instructions for use and disposal provided on product labels.
- Call your local environmental, health, or solid waste agency for instructions on proper use and disposal and to learn about local HHW drop off programs and upcoming collection days.
- See if your community has a facility that collects HHW year-round. Some of these facilities have exchange areas for unused or leftover paints, solvents, pesticides, cleaning and automotive products, and other materials. By taking advantage of these facilities, materials can be used by someone else, rather than being thrown away.
- Special collection days. If your community doesn't have a year-round collection system for HHW, see if there are any designated days in your area for collecting solid waste at a central location to ensure safe management and disposal.
- Local business collection sites. If your community has neither a permanent collection site nor a special collection day, you might be able to drop off certain products at local businesses for recycling or proper disposal. Some local garages, for example, may accept used motor oil for recycling.

Aim for Zero Waste

Since 2003, India already has two zero-garbage towns. Suryapet

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in Andhra Pradesh (population 103,000 in 34 sq km) and Namakkal in Tamil Nadu (pop. 53,000 in 10 sq km) are both self-motivated "Zero-Garbage Towns" since 2003 without any external funding whatsoever, with almost complete compliance with MSW Rules. This has been achieved simply through the political will of the elected members, the sincerity of the municipal staff, and excellent cooperation from the public. Both are dust-bin-free cities where cleaning is done every day of the week and no waste is burnt anywhere. Sorting space has been provided for rag-pickers and kabadiwalas to store and dispatch their different kinds of waste, preferably sheltered from rain. Almost everyone keeps the wet food wastes free of plastics etc so that low-cost vermi-composting is easy.

Waste Minimisation is always the first step, especially for remote locations. If Special Wastes are managed as described below, Rishikesh too can be another Zero-Garbage Town.

IMPORTANCE OF SOLID WASTE MANAGEMENT

Practically every citizen is now search of clear air and pleasant environment. The land pollution problem has grown enormously in the recent years due to waste dumping civics administration are facing the problem for hygiene disposal waste. Those calls for separate efforts of not only the civics administration but participation of several responsibilities publics groups and industrial lists.As the cities are growing in size and problems seen as the generation of plastic waste, various municipal waste treatment and disposal methods are now being used to try resolving these problems. Garbage generation in household can be recycled and reused to prevent creation of waste at sources and reducing amount of waste thrown into the community dustbins. Because of this solid west management is essential

PROBEMS

- Individual housewives as well as other family members have an erroneous notion that garbage disposal are entirely the job of civic authorities.
- The communities' welfare associations give a very low priority to solid waste management as compared to security, water, lighting etc.
- As the rag pickers work in the early hours of the morning they are looked upon with suspicion and any theft or trespasses in colonies is blamed on them.
- After collection of waste the segregation is done in the open where the recyclables are taken away, leaving the area dirty.
- In industrial areas urban waste system often co-mingle human, industrial and food waste, complicating waste management.

SOLUTIONS

There are solution available to the urban waste problem, the framework for this could be in adopting the 4-R principles of waste management i.e. Reduce, Reuse, Recycle and Recover which are mutually supporting and provide a comprehensive and environmentally responsible strategy. Children from the local schools should be trained on the benefits of use of utilizing waste. Eco-clubs can be formed at primary, secondary and college level. Initially strict implement and enforcement of environmental laws will pave the way for compliance.

Above all we have to contribute as responsible citizens living in a community which respects and understands nature and environment.