

## **ENVIRONMENTAL STUDIES**

### **LECTURE-28**

#### **Effects of Poor Solid Waste Management**

##### **1. Litter Surroundings**

Due to improper waste disposal systems, particularly by municipal waste management teams, wastes heap up and become a menace. While people clean their homes and places of work, they litter their surroundings, which affect the environment and the community.

##### **2. Impact on Human Health**

Improper waste disposal can affect the health of the population living nearby the polluted area or landfills. The health of waste disposal workers and other employees involved with these landfill facilities are also at a greater risk.

Exposure to wastes that handled improperly can cause skin irritations, respiratory problems, blood infections, growth problems, and even reproductive issues.

##### **3. Disease-causing Pests**

This type of dumping of waste materials forces biodegradable materials to rot and decompose under improper, unhygienic and uncontrolled conditions.

After a few days of decomposition, a foul smell is produced, and it becomes a breeding ground for different types of disease-causing insects as well as infectious organisms. On top of that, it also spoils the aesthetic value of the area.

##### **4. Environmental Problems**

Solid wastes from industries are a source of toxic metals, hazardous wastes, and chemicals. When released to the environment, the solid wastes can cause biological and physicochemical problems to the environment that may affect or alter the productivity of the soils in that particular area.

## 5. Soil and Groundwater Pollution

Toxic materials and chemicals may seep into the soil and pollute the groundwater. During the process of collecting solid waste, hazardous wastes usually mix with ordinary garbage and other flammable wastes making the disposal process even harder and risky.

## 6. Emission of Toxic Gases

When hazardous wastes like pesticides, batteries containing lead, mercury or zinc, cleaning solvents, radioactive materials, e-waste and plastics mixed up with paper and other non-toxic scraps are burned they produce dioxins, furans, polychlorinated biphenyls, and other gases. These toxic gases have the potential of causing various diseases, including cancer.

## 7. Impact on Land and Aquatic Animals

Our carelessness with our waste and garbage also affects animals, and they suffer the effects of pollution caused by improperly disposed of wastes and rubbish. Consuming styrofoam and cigarette butts have been known to cause deaths in marine animals. Animals are also at risk of poisoning while consuming grasses near contaminated areas or landfills as the toxins seep into the soil.

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