

POLLUTION AND ENVIRONMENT

Dr. Urmila Yashawant Bodhe,
Assistant Professor,
Kasturbai College of Education,
Ashok Chowk, Solapur - 413006

Abstract

Environmental pollution is one of the most serious problems facing humanity today. Air, water and soil, all harmed by pollution, are necessary to the survival of living things. Badly polluted air can cause illness, and even death. Polluted water kills fish and other marine life. Pollution of soil reduces the amount of land available for growing food. Environmental pollution also brings ugliness to our naturally beautiful world. People have always polluted their surroundings. But throughout much history, pollution was not a major problem. Most people lived in uncrowded rural areas, and the pollutants (waste products) they produced were widely scattered. People had no pollution, causing machines or motor vehicles. The development of crowded industrial cities made pollution a major problem. People and factories in these areas put huge amounts of pollutants into small areas. As the urbanisation continues automobiles and many more industries made pollution steadily worse, due to new inventions. Pollution had affected the air, water, and soil over every major city and other industrial area. Millions of people have become alarmed by the dangers of pollution. Large numbers of people are now working to pollution and engaged to save the environment.

Key Words: Environmental Pollution, Pollutants, Industrial Revolution, Contaminants, Environmental Tragedy, Urbanization, Natural Resources, Ecology, Global Warming, Environmentalism, Environmental movement

Introduction

People have always caused some environmental pollution. Pollution problems first arose during ancient times, when large numbers of people began living together in cities. As cities grew, pollution grew with them. But environmental problems seldom became extremely serious or widespread during a period called industrial revolution. As a result, the air over such industrial cities became filled with huge amount of smokes and soot. In addition poor sanitation facilities allowed

raw sewage to get in to water supplies, caused hazardous health problems. Public concern over environmental tragedies have pointed up the seriousness of the problem. The development of nuclear science introduced radioactive contamination, which can remain lethally radioactive for hundreds of thousands of years. Also the borderless nature of atmosphere and oceans inevitably resulted in the implication of pollution on a planetary level with the issue of global warming. Growing evidence of local and global pollution and an increasingly informed public over time have given rise to environmentalism and the environmental movement which generally seek to limit human impact on the environment.

Definition of Pollution

Pollution is the introduction of contaminants in to the environment that cause harm or discomfort to humans or other living organisms, or that damage the environment, which can come in the form of chemical substances, or energy such as noise, heat or light. Pollutants can be naturally occurring substances or energies, but are considered contaminates when in excess of natural levels.

This is the addition of any substance or form of energy to the environment at a rate faster than the environment can accommodate it by dispersion, breakdown, recycling, or storage in some harmless form. It's a special case of habitat destruction, is in reality the non-recoverable matter sources and waste heat. Any use of natural resources at a rate higher than nature's capacity to restore itself can result in pollution of air, water and land.

In one word environmental pollution takes place when the environment cannot process and neutralize harmful bi-products of human activities in due course without any structural or functional damage to its system.

Environmental Pollution

Environmental Pollution is the term that refers to all the ways by which people pollute their surroundings. People dirty the air with gases and smoke, poison the water with chemicals and other harmful substances, and damage the soil with too many fertilizers and pesticides. People also pollute their surroundings in various other ways. eg. they ruin natural beauty by scattering junk and litter on the land and in the water. They operate machines and motor vehicles that fill the air with disturbing noise. Nearly everyone cause environmental pollution in some way.

This is the problem both in developed and developing countries. Factors such as population growth and urbanisation invariably place greater demands on the planet and stretch the use of natural resources to the maximum. Technological progress facilitated by super efficiency of

capitalist business practices had probably become one of the main causes of serious deterioration of natural resources. At the same time, of course, development of natural sciences led to the better understanding of negative effects produced by pollution on the environment.

It has been argued that the carrying capacity of earth is significantly smaller than the demands placed on it by large numbers of human populations. And over use of natural resources often results in nature's degradation. It's interesting to note that natural resources had been stored virtually untouched in the earth for millions of years. But since the start of the industrial revolution vast amounts of these resources had been exploited within a period of just a couple of hundreds of years.

Kinds of Environmental Pollution

They include air pollution, water pollution, soil pollution, and pollution caused by solid waste, noise and radiation. All parts of the environment are closely related to one another. The study of the relationship among living thing and between living things and other parts of the environment is called ecology. Because of the close relationships, a kind of pollution that chiefly harms one part of the environment may also affect others.

- *Air pollution* turns clear, odourless air into hazy, smelly air that harms health, kills plants, and damages property. One of the most common forms of air pollution is smog. The pollutants range from small amounts of colourless poison gases to clouds of thick black smoke.
- *Water pollution* reduces the amount of pure, fresh water that is available for such necessities as drinking and cleaning, and for such activities as swimming and fishing. The pollutants that affect water come mainly from industries, farms, and sewage systems. These wastes include chemicals, wastes from animal and plant matter, and hundreds of other substances. Another major pollutant is oil, which enters oceans primarily from oil tankers. Such oil spills ruin beaches and kill birds and marine life.
- *Soil pollution* damages the thin layer of fertile soil that covers much of the earth's land and is essential for growing food. Natural processes took thousands of years to form the soil that supports crops. But, through careless treatment, people can destroy soil in a few year.
- *Solid wastes* are probably the most visible forms of pollution. People throw away billions of tons of solid material every day. Much of this waste ends up littering roadsides, floating in lakes, and collecting in ugly dumps. It includes junked automobiles, tyres, refrigerators, and

stoves, cans and other packing materials, and scraps of metal and paper. The way in which ways it is disposed results in some type of damage to the environment.

Other Kinds of Pollutions

Some things that pollute environment cannot be classified as air, water or soil pollutants, or as solid waste. They travel through and affect various parts of the environment. These pollutants includes noise, radiation, acid rain, pesticides, and such metals as mercury and lead.

- *Noise* is an especially troublesome pollutant in urban areas. People in and near cities are exposed to loud noise much of the time. This causes discomfort in human beings.
- *Radiation* is an invisible pollutant that can be highly dangerous. Some radiation reaches the earth from the sun and the outer space. Other radiation comes from radio-active materials, such as fallout from nuclear weapons testing and waste materials from nuclear power plants. Various electronic devices also produce radiation.
- *Acid Rain* has become an increasingly serious problem. This pollutant forms when moisture in the air combines with nitrogen oxide and sulphur dioxide released by automobiles, factories, and by power plants. Acid rains cause the contamination of drinking water and also can harm crops and reduces the fertility of the soil.
- *Pesticides* affect more than the natural cycles in the soil and water. Much pesticides travel through an ecological system called a food chain. When it is consumed by human or living organism, the material collects in tissues and organs, resulting into serious damage or even to cause of death.
- *Mercury, Lead and other heavy metals*, in large quantity are put in to the water and air daily in the form of liquid and gases. Most heavy metals are highly poisonous. In large amounts, these pollutants can affect the human nervous system.

Causes of Environmental Pollution

New inventions and processes have been continuously developed to improve our way of life. Such developments are called technological advances. Though it helps us, but many of them also bring about harm to the environment. In addition, there are economic and social causes of pollution.

- *Technological causes*-many environmental pollution problems are a result of the rapid advances in technology that have been made since about end of World War II (1945).

Technological advances in agriculture, industry, and transportation have greatly improved our way of life. But most of the advances were made without consideration of the effects they would have on the environment.

- *Economic causes*-many pollution problems have developed because methods of preventing pollution are expensive. Many waste products could be reused in some way. However such practices have seldom been followed, in part because of the high costs involved in reprocessing waste products.
- *Social causes*- our desire for convenience is another cause of pollution. Many synthetic materials that pollute the environment were developed to save people time, work, or money. With effort, some of the pollution from these materials could be eliminated. But, just as prevention of pollution is often considered too expensive, it is often considered too inconvenient. The use of throwaway packaging materials is an example of how demands for convenience cause environmental pollution.

Waste Recycling

The reprocessing of waste products for reuse is called waste recycling. Many kinds of waste can be recycled. Some, including cans and newspapers, glass, automobile tyres, can be used over and over again for the same purpose. It helps reduce solid waste materials into new, useful materials. Paper is one of the most common recycled products. Others include aluminium, glass and like waste material.

Clean India Mission

Prime Minister Narendra Modi, surprisingly visited the Mandir Marg police station in central Delhi to check how clean it was, and wielded a broom on finding its environs dirty. This incident led to the launch of the nationwide Clean India mission on 2nd October 2014, the Mahatma Gandhi's birth anniversary. It's a national level campaign by the government of India covering 4041 statutory towns to clean the streets, roads and infrastructure of the country.

Concluding Note

Thus, to end or greatly reduce pollution immediately, people would have to stop using many things that benefit them. Most people don't want to do that, of course. But pollution can be gradually reduced in several ways. Scientists and engineers can work to find ways to lessen the amount of pollution that such things as automobiles and factories cause. Government can pass and enforce laws

that require business and individuals to stop, or cut down on certain polluting activities. And-perhaps most importantly-individuals and groups of people can work to persuade their representatives in government, and also persuade businesses, to take action toward reducing pollution.

Reference

1. Deshbandhu, G. Berberet, (1987) *Environmental Education for conservation and Development*, Indian Environment Society, New Delhi.
2. Government of India, (1986) *The Environment (Protection) Act 1986*, Ministry of Environment & forests, GOI, New Delhi.
3. Pal B.P.,(1981), *National Policy on Environment*, Dept. of Environment,GOI, New Delhi.
4. Patil C.S., Prabhu M. Biradar (2010), *Environmental Education*, APH Publishing Corporation, New Delhi.
5. Rao K.L. (1975) *India's Water Wealth*, Orient Longman Limited, New Delhi.
6. SahaSanjib (2012), *Environmental Education*, APH Publishing Corporation, New Delhi.
7. Shrivastava K.K.,(2014), *Environmental Education- Principles, concepts and Management*, KanishkaPublishers Distributors, New Delhi.

