

Essay on Pollution

Pollution may be defined as an undesirable change in the physical, chemical or biological characteristics of air, water and land that may be harmful to human life and other animals, living conditions, industrial processes and cultural assets. Pollution can be natural or man-made. The agents that pollute are called pollutants. Pollutants are nothing but the by-products of man's action. Smoke, tar or dust and domestic wastes are some of the examples of pollutants. In field of agriculture, pollutant may be Pesticides, herbicides, fungicides and fertilizers. Mainly CO, nitrogen oxides, sulphur oxides, halogens (chlorine, bromine and iodine) are those gases which are contributing in increasing pollution now a days.

Mainly there are 3 types of pollution. Which are responsible for 95% of overall pollution.

1. **Air Pollution.**
2. **Noise Pollution.**
3. **Water Pollution.**

Air Pollution

The WHO defines air pollution as the presence of materials in the air in such concentration which are harmful to man and his environment. A number of ingredients find their way in the air and these are mostly gases, which rapidly spread over wide areas. This type of pollution contribute about 70 percent of overall pollution of atmosphere.

Source Of Air Pollution

Main sources of air pollution are fossil fuels, emissions from Automobiles, industries, agricultural activities and wars. Some of them are describe below.

Fossil Fuels: Due to Burning of fossil fuels, the pollution level increasing day by day. Burning of wood, charcoal and other fossil fuels causes air pollution by the release of carbon dioxide , carbon sulphur dioxide and other harmful gases in atmosphere.

Emissions from Automobiles: Automobiles are mainly contributing over 80 percent of overall air pollution. Many harmful gases like CO, un-burnt hydrocarbons and nitrogen oxide are emitted from automobiles, locomotives, aircraft etc.

Industries: Industries are one of the major source of increasing pollution now a days. Due to huge need of paper, textile, petroleum refineries and thermal power plants the pollution

level increasing by large factor. This industries adds various harmful gases like CO, SO, NO, Hydrocarbons to the atmosphere.

Effects of Air Pollution

Air pollution can directly affects both plants and animals. Due to air pollution the cells and tissues of plants are highly affected. Oxides of nitrogen and fluorides reduce crop yield. Smoke and dust cover the leaf surface and reduce photosynthetic capacity of plants. Ozone damages cereals, fruits, and cotton crop. This air pollution also affects the animals in the following ways.

- Ozone causes dryness of mucous membranes, changes eye vision, causes headache, pulmonary congestion and oedema.
- SO₂ causes drying of mouth, scratchy throat, smarting eyes and disorders of respiratory tract.
- Cotton dust leads to respiratory disorders e.g. bronchitis and asthma.
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Noise Pollution

Noise can be defined as unwanted/unpleasant sound. So noise pollution is unwanted sound dumped into the atmosphere without regard to the adverse effects it may have. In our country urbanization and industrialization have become twin problems. Cities and towns have sprouted up where industries are concentrated. Lack of town' planning had led to residential, commercial and industrial areas being mixed up. Houses, schools and hospitals are situated near industries. All the boons of industrialization and civilization such as motors, horns, heavy and light machinery, work and movement, blaring radios, supersonic airplanes have become disturbing and irritant. Our ears can hear ordinary conversation between 30-60 decibels. Modern conversation has a noise value of 60 decibels. A decibel value greater than 80 decibels causes noise pollution. Noise becomes troublesome above 140 decibels.

Effect of Noise Pollution

1. Constant noise affects a man physically and mentally. Physical effects include blood vessels to contract, skin to become pale, muscles to constrict and rise in blood pressure leading to tension and nervousness.
2. High intensity sound emitted by industrial plants, bottling machines, supersonic aircrafts, when continued for long periods of time not only disturbs but also permanently damages hearing.
3. Offices, industries and crowded places where constant noise prevails can produce temper tantrums, headaches, fatigue and nausea.

Water Pollution

Water is extremely essential for life, this common fact is known to all. It is required to meet our basic needs in day to day life viz., cooking, drinking, bathing, disposal of sewage, irrigation, generating electricity in power plants, cooling and manufacturing different

products in industries and the disposal of industrial wastes. During all these processes the undesirable substances are added to the water resources to a great extent. This alters the basic chemistry of water in rivers and streams. That's why we need to clean the water and [save water](#) for future generation.

Effects Of Water Pollution

Water pollution can directly affects the kidneys and liver due to its Cadmium content. Compounds of mercury, arsenic and lead are poisonous and chemically harmful as they even affect water treatment plants e.g. organic sulphur compounds interfere with nitrification. Mercury when dissolved in water is absorbed by aquatic plants and enters the food chain. Lead impairs metabolism and brings about congenital deformities, anemia etc.

Solutions to pollution problems

We very often see people blaming public and government sectors to control pollution through controlling market mechanisms and government blaming people to avoid and check pollution. Who would control whom? Many ecologists and environmental scientists believe in that pollution problems can be overcome by using market mechanisms to reduce pollution rather than rigid rules and regulations. However, on the other hand man should identify and gear up his own potential to curb down pollution. Man could achieve this by identifying his own role at individual level in prevention of pollution. This is possible through environmental awareness, education and enlightenment. So the major question is that **How can one reduce pollution?** and hence, the Ways by which pollution problems can be reduced at individual level are given below.

- We should reduce those Waste disposal methods which are producing large amount of harmful gases during waste destruction process to reduce pollution.
- We should Maintenance our vehicles to avoid emission of harmful gases and other pollutants in to the atmosphere.
- Gadgets like Generators and other which are producing harmful gases or pollutants are should be kept maintained.
- Use of chemical fertilizers should be limited as to avoid water pollution e.g. DDT 6. Timely disposal of waste to prevent decomposition of household refuse as to check foul odors and spread of disease by insects, flies and other pathogenic bacteria.

How to Reduce Pollution?

Some measures have to be taken to control or reduce pollution are given below.

- The height of chimneys should be increased to the highest possible level to reduce air pollution at the ground level.
- Trees should be planted on the roadside, riverbanks, parks and' open places as they keep the environment fresh.
- Nuclear explosions should be restricted.

- Population growth, which is the main cause of pollution should be checked.
- Separate ponds and tanks to be used for cattle and animals to reduce water pollution.
- Domestic sewage and industrial wastes should be treated before discharging them into drains.
- Increasing the use of natural fertilizer and avoiding the chemical fertilizers.