

POLLUTION AND ENVIRONMENT

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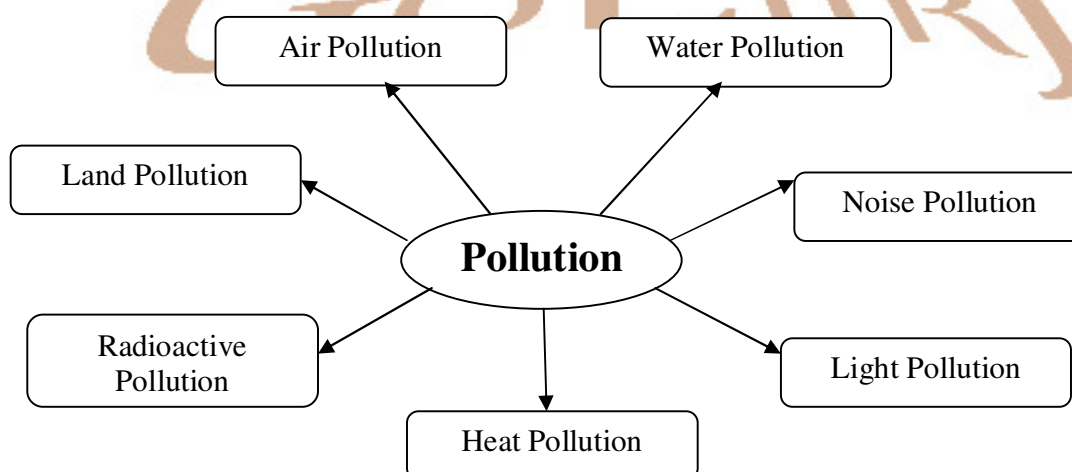
Introduction :

Pollution is the addition to the ecosystem of something which has a detrimental effect on it. Means pollution disturbs our ecosystem and the balance in the environment. With modernization and development in our lives pollution has reached its peak giving rise to global warming and human illness. Another cause of pollution is the high rate of energy usage by modern growing populations. Pollution occurs when pollutants contaminate the natural surroundings which brings about changes that affect our normal lifestyles adversely. Pollutants are the key components of pollution which are mostly waste materials of different forms.

Types of pollution :

Pollution occurs in different forms. There are actually seven different kinds of environmental pollution. These are as Air pollution, Water pollution, soil pollution, Noise pollution, Light pollution, Heat pollution and radioactive pollution.

Types of Pollution



1) Air Pollution :

Air pollution is the contamination of air by smoke and harmful gases mainly oxides of carbon, sulphur and nitrogen. It is the most prominent and dangerous form of pollution. It also occurs due to excessive burning of fuel which is a necessity of our daily lives for cooking, driving and other industrial activities releases a huge amount of chemical substances in the air. Everyday these pollute the air – smoke from chimneys, factories, vehicles or coal burning.

The six major types of air pollutants are carbon monoxide, hydrocarbons, nitrogen oxides, particulates, sulphur dioxide and photochemical oxidants.

Examples of Air pollution :

1. Noise pollution that are carried by the air have an irritating and detrimental effect on humans and other animals.
2. Tobacco smoke is one of the major form of pollution in buildings. It is not only the smoker who is infected but everyone who inhales the polluted air.
3. Pollution from exhaust gases of vehicles is responsible for approximately 60 % of all air pollution and in cities it is up to 80% these gas mainly contaminated lead one of the dangerous chemical.
4. The combustion of coal without precautions can have serious consequence.

The effects of air pollution are evident too release of sulphur dioxide and hazardous gases into the air causes global warming and acid rain, which in turn have increased temperature, erratic rains and droughts worldwide, making it tough for the anima to survive. We breathe in every polluted particle from the air results in asthma, cancer in the lungs, allergies and other respiratory illness.

How to control air pollution?

- To the establishment of more smokeless zone.
- To control over the kinds of fuel used in cars, aeroplanes, power stations etc.

2) Water Pollution :

Water pollution is the introduction into fresh waters of chemical, physical or biological material that degrades the quality of the water and affects the organisms living in

it. This process ranges from simple addition of dissolved or suspended solids to discharge of the most insidious and persistent toxic pollutants.

Water pollution occurs due to spraying insecticides, pesticides like DDT on plants pollutes the ground water system. Eutrophication is another big source, it occurs due to daily activities like washing clothes, utensils near lakes, ponds or rivers this forces detergents to go into water which blocks sunlight from penetrating, thus reducing oxygen and making it inhabitable.

Water pollution also harms the aquatic beings, contaminates the entire food chain by severely affecting humans dependent on these water – borne disease like cholera, diarrhoea have also increased in all places.

Examples of water pollution :

1. Water from industries discharged from after having been used in production processes. This waste water may contain acids, alkalis, salts, poisons, oils and harmful bacteria.
2. Sewage disposal and domestic as well as farm wastes were also pollutes rivers and dams.
3. Mining and Agricultural wastes especially gold and coal mines are responsible for large quantities of acid water.

How to control Water Pollution :

Every person should be wise enough not to pollute water in any way. by legislation and research the pollution of water bodies even though not entirely prevented, must be effectively controlled.

3) Land Pollution : (Soil Pollution)

Land Pollution is the degradation of the earths land surface through misuse of the soil by poor agricultural practices, mineral exploitation, industrial waste dumping, and indiscriminate disposal of urban wastes. It includes visible waste and litter.

Soil pollution occurs due to incorporation of unwanted chemicals in the soil due to human activities. Use of insecticides and pesticides absorbs the nitrogen compounds from the soil making it unfit for plants to derive nutrition from Release of industrial waste, mining and deforestation also exploits the soil. Since plants can't grow properly, they can't hold the soil and this leads to soil erosion.

Examples of Land Pollution:

1. The accumulation of waste threatens the health of people in residential areas. Waste decays encourages house hold pests and turns urban areas into unsightly, dirty and unhealthy places to live in.
2. Land pollution in mainly due to chemicals in herbicides and pesticides litter is waste material dumped in public places such as streets, parks, picnic areas at bus stops and near shops.

How to control land pollution?

- Organic waste can be dumped in places far from residential areas.
- In organic materials like metals, glass and plastics reclaimed and recycled.
- Antilitter campaigns can educate people against littering.

4) Noise Pollution:

Noise pollution occurs through air so it is the type of air pollution. Noise pollution is any loud sounds that are either harmful or annoying to humans and animals.

Examples of Noise Pollution:

1. Human activities such as sporting events or concerts.
2. Construction or demolition noise.
3. Air plans, Helicopters and motor vehicle.

By developing the awareness of environment in people some human activities can be minimised so that noise pollution can be stopped in some extent.

Similarly by using some modern new techniques for construction and demolition noise from it should be minimised.

5) Light Pollution:

Light pollution is the brightening of the night sky inhibiting the visibility of stars and planets by the use of improper lighting of communities. Light pollution called sky glow also makes it difficult for astronomers both professional and amateur, to properly see the sky.

Examples of Light Pollution:

1. Cities that run lights all night long.

2. Extra unnecessary lights anunt the home.
3. Street lamps that shine high in all directions instead of with a hood to point light download towards the street.

6) Heat Pollution (Thermal Pollution):

Heat pollution is the increase of temperature by human activity. It is due to the excess heat in the environment creating unwanted changes over long time periods due to huge number of industrial plants, deforestation and air pollution. It increase the earth's temperature causing drastic climatic changes and extinction of wildlife.

Examples of Heat Pollution:

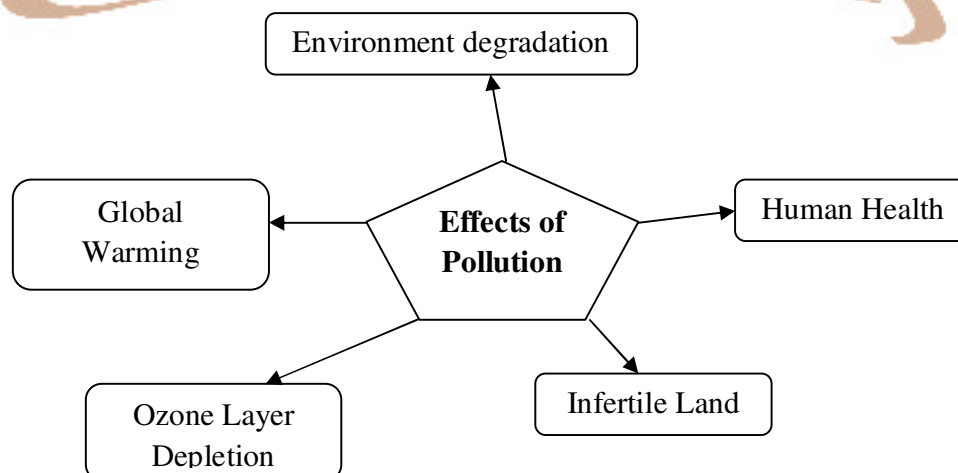
1. Included in thermal pollution should also be the increase in temperatures in areas with lots of concrete or vehicles generally in cities.
2. Warmer lake water from nearby manufacturing.

7) Radioactive Pollution:

It is highly dangerous when it occurs. It can occur due to nuclear plant malfunctions, improper nuclear waste disposal, accidents etc. It causes cancer, infertility, blindness, defects at the time of birth, can sterilise soil and affect air and water.

These are the fundamental seven types of pollutions which affects our environment so everybody has a precaution to preserve environment by avoiding pollution.

Effects of Pollution:



1. Environment Degradation:

Environment is the first casualty for increase in pollution weather in air or water. The increase in the amount of CO₂ in the atmosphere leads to smog which can restrict sunlight from reaching the earth. Thus, preventing plants in the process of photosynthesis. Gases like sulphur dioxide and nitrogen oxide can cause acid rain.

2. Global Warming :

The emission of greenhouse gases particularly CO₂ is leading to global warming. Every other day new industries are being set up, new vehicles come on roads and trees are cut to make way for new homes. All of them, in direct or indirect way lead to increase in CO₂ in the environment. The increase in CO₂ leads to melting of polar ice caps which increases the sea level and pose danger for the people living near coastal areas.

3. Human Health :

The air pollution leads to several respiratory problems including asthma, lung cancer, Chest pain, congestion, throat inflammation, Cardiovascular disease such as bronchitis etc. Water pollution occurs due to contamination of water and may pose skin related problems including skin irritations and rashes. Noise pollution leads to hearing loss, stress and sleep disturbance.

4. Infertile Land :

Due to constant use of insecticides and pesticides, the soil may become infertile. Plants may not be able to grow properly, various forms of chemicals produced from industrial waste is released into the flowing water which also affects the quality of soil.

5. Ozone Layer Depletion :

Ozone layer is the thin shield high up in the sky that stops ultra violet rays from reaching the earth. As a result of human activities, chemicals, like chlorofluorocarbon were released in to the atmosphere which contributed to depletion of ozone layer.

Conclusions :

Pollutions all types may be air, water, land, noise, light, radioactive and heat not only affects human by destroying their health like respiratory cardiovascular and neurological systems. It also affects the nature plants, fruits, Vegetables, rivers, Ponds, Forests, Animals etc. on which they are

highly dependent for Survival.

Therefore it is crucial to control pollution as the nature, wild life and human life are precious gifts to the mankind.

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