

Land : Land Pollution :

Land is the basic unit of environment. As it is a stable unit, its growth cannot be increased. Due to the large scale industrialization and urbanization, increasing population and the residual liquids and solid residual materials in the cities are polluting the soil. Pollution is spreading more in the land today due to solid waste. Solid waste often comes from homes, cattle houses, industries, agriculture and other places. Its heaps take the form of mounds because this solid waste includes ash, glass, fruit and vegetable peels, paper, clothes, plastics, rubber, leather, inerts, sand, metals, cattle house waste, cow dung etc. Hazardous chemicals released in the air become contaminated when sulfur, lead compounds reach the soil.

Any unintentional change in the physical, chemical or biological properties of the land, which affects humans and other organisms or destroys the natural quality and utility of the land is called land pollution. Only 50 percent of the available surface of the land surface is usable and the remaining 50 percent of it consists of mountains, trenches, marshes, deserts and plateaus. It is necessary to state here that 79 percent of the world's food is produced from soil. The importance of this resource (land) increases even more because only 2 percent of the globe gets arable land. Thus, land or soil is an extremely scarce (very limited) resource. Today's urgent need to save this limited resource from pollution for proper achievement of habitat and food items. Today, at the pace with which the population of the world and India is increasing, the land is being exploited excessively to provide food for these people. As a result, the nutrient capacity of the land is decreasing today. In order to increase nutrient, human is using chemical fertilizers and pesticides fiercely.

Along with this, harmful elements such as methylene, Gemaxin, dithane M75, dithane Z78 and 2,4 D, which are sprayed to protect the plants from diseases and germs and animal birds, destroy natural fertility and interfere with the cultivation of soil and contaminate it. Due to which the food produced in it is becoming toxic and when these toxins reach the human body through food, it becomes many types of diseases. Due to land (soil) pollution, when the land becomes out of its natural nature, that is, unsuitable for the use of agricultural work and standards, it is considered polluted due to various reasons behind this pollution like chemical pollution, earth quarrying, volcanic eruptions which are human Naturally generated land is believed to be due to pollution. During daily cleaning from the residential areas, the kitchen's wet scrubbing paper, plastic pieces, cloth pieces, glass, vials, thermocol, aluminum, iron wire, tin container, tires and other garbage debris are released. This waste gets contaminated in soil and pollutes the land. Under the municipality, the garbage of the entire city remains rotten in the mud and drains of human excreta, dead animals etc., which contaminates the land. Industrial units are causing the most land pollution, including fertilizer and chemical sugar factories, textile manufacturing units, graphite, thermal power plants, cement factories, soaps, oil and metal manufacturing factories in large quantities when harmful and toxic chemicals are on the ground. They fall and their solid residues take the form of mountains and dunes in many places and due to this the land of that place becomes polluted, without vegetation and unusable. To increase maximum yield in agriculture, one uses chemical fertilizers in the fields. And also spraying of pesticides for protection of crops.

Scientists claim that the effect of these pesticides lasts for 10 to 15 years on land. At the same time, after the crops are cut, when the heaps of unnecessary plants left in the fields are mixed with rainwater, the land gets polluted due to rotting. In search of his residence, humans cut trees from the land and built houses and colonies to live in it. During this construction, the materials used in it, cement, sand, stone, inert, ballast, lime and scattered here and there, after a few days, they join the soil and pollute the soil. When mining, when a

person extracts a mineral element from it, then it leaves out many useless substances and objects that have come out during the excavation. Due to which the land there becomes unusable as well as unusable because when the open dust blows in the air, its upper layer covers the land, which causes it to become polluted. Among other sources of land pollution, the desert sand blows into the land of other areas and destroys its fertility power, acid rain, building bricks, shattering due to earthquakes and natural disasters, hospital waste, waste and harmful plants. Due to dams built on rivers for farming and irrigation and drinking water, the land there is converted into marshes, due to which the land pollution comes before us in various forms.



Due to land pollution:-

Land pollution hinders the development of the entire animal world because the land itself is capable of producing food and other essential things for the living of the world. But human beings are polluting the land, playing with their future to fulfil their selfishness. Land pollution occurs due to various reasons -

- (i) The materials used in home, hospital, school and market fall under the category of solid waste generated on plastic containers, bins, plastics, electronic goods etc. Some of these are biodegradable and others are non-biodegradable and difficult to dispose of. It is non-biodegradable waste that causes large land pollution.
- (ii) The forests are being cut at a rapid pace to meet the various needs of humans. Trees are essential for soil as they help in maintaining various essential nutrients. Cutting trees due to mining, urbanization and other reasons are factors promoting land pollution.
- (iii) Disposal of chemical waste is difficult. Both liquid and solid waste derived from pesticides, pesticides and fertilizers are either dumped in landfills or other locations. This degrades the soil and creates another type of land pollution.
- (iv) Many high-end farming techniques are being used these days by farmers to ensure high yield of crops. Excess use of these techniques such as excessive use of pesticides and pesticides causes soil erosion. Fruits and vegetables grown in such land are also not considered healthy. It is considered a type of land pollution.

(v) Broken glass, plastic, furniture and polythene etc. thrown from homes also cause land pollution.

(vi) The chemicals released from Ughogo also cause land pollution as heavy metals accumulate on the soil and contaminate the land.

(vii) During the excavation to extract mineral oils from the land, the oil falls on the ground several times and contaminates the soil.

(viii) During the rains, the polluted substances in the air come to the ground and the land is milked.

Sources of land pollution -

Land pollution is the result of the accumulation of various types of waste. This waste is in the form of waste, domestic, public, industrial, mineral mining and agricultural waste. Based on this, the following categories of sources of land pollution can be done -

- (1) Household waste
- (2) Industrial and mining waste
- (3) municipal waste
- (4) Agricultural waste

(1) Household waste - A large part of land pollution is the result of domestic waste. Dirt comes out after cleaning the houses daily. Where on one side there is dust and soil, on the other side there are also paper, cloth, plastic, wood, metal pieces etc.

Along with this, the remaining parts of vegetables, fruit peels, tea leaves, other rotten throat, dried flowers and leaves, spoiled foods are also included. All these substances are collected from the houses at the time of cleaning and put at some place. In developed countries, there is a system to cover and dispose of this waste.

But due to lack of this type of system mostly in India or other developing countries, this waste material keeps on rotting, producing various bacteria in it which causes pollution and ultimately disease.



(2) Industrial and mining waste - A large amount of garbage and waste material comes out of industrial institutions. This waste is extracted from everyone in every industry, whether it is metal industry or chemical industry and is left in the open near the industry. Many gases and chemical elements pollute not only the air but also the land.

A lot of ash also comes out of many industries. Many toxic, acidic and alkaline substances make the land unusable. Sometimes these materials are suppressed near industries, which make the land unusable as land pollution.



(3) Municipal waste - Municipal waste refers to publicly collected dirt. This includes household wastes which are collected in public, along with the collection of feces and urine is the main one. Apart from this, the dirt collected from various institutions, markets, roads, the remains of dead animals, the materials coming out of houses, etc. are also included in this.

In fact, the entire filth of the city or town falls under the category of municipal waste. This is a major cause of municipal waste land pollution.



(4) Agricultural waste - After agriculture, the remaining straw, stalks, weeds, leaves, etc. are collected or spread from one place after agriculture. Due to falling water on it, it starts to rot and due to biological activity, it becomes a cause of pollution. However, this is not a more serious problem than other sources as most agricultural waste is now used in some form or the other.

In our country, about 90 percent of the garbage in the form of mixed matter, ash and fire clay and carbon is in the cities. While its quantity varies in developed countries. In the United States, 42 percent is paper and related items, 24 percent metals, glass-ceramic pieces and ashes, 12 percent waste food and other items. The reality is that the amount of waste increases with the size and growth and expansion of cities.



Land pollution results - Land pollution results

Currently, the biggest concern is the increasing pollution. It is causing irreparable damage to the environment as well as living beings. All types of pollution are very deadly for the animal world. The consequences of these pollution are very harmful. Various harmful consequences of land pollution are as follows -

- (1) Waste products stored in an area for a few days become contaminated and cause foul smell. Passing through such areas can be extremely difficult due to this. People are scared of diseases caused by land pollution. It is impossible to live in areas with nearby dumping grounds. In addition, the foul-smelling odor from these areas is a constant major disadvantage.
- (2) In areas near the garbage dumping ground, the price of land is comparatively low, as the area is not considered habitable. Despite the low rates, people do not like to rent or buy property here.
- (3) Toxins that contaminate the land can disrupt the respiratory system of humans as well as animals. It is also the cause of various respiratory diseases which are proving fatal to mankind.

- (4) Landfills are often lit to get rid of waste products and reduce land pollution. However, it causes air pollution which is equally bad for the environment and life.
- (5) People come into direct contact with waste materials due to land pollution, due to which they face skin allergies and other skin problems.
- (6) Land pollution is also a cause of various types of cancer. The land littered with toxins is a breeding ground for mosquitoes, flies, mice, rodents and other such creatures. The diseases transmitted due to these small organisms are known to all. Various types of fever and diseases are increasing due to these.
- (7) Land pollution caused by excessive use of pesticides and other chemicals contaminates agricultural land.
- (8) Vegetables and fruits grown on soil which are contaminated cause various types of diseases.
- (9) Due to land pollution, the fertile power of the land is dying, due to which crops are not good. Because of which we do not get good food.
- (10) People have started applying vaccines in crops to increase the yield, which causes great harm to human body.
- (11) Land: Our mines are one of the main resources. Humans mostly depend on agriculture. Human health, crops and plants are severely affected due to contamination of land.

Measures to prevent land pollution -

Land pollution is taking terrible form day by day. If land pollution is not banned in time, then it will take a formidable form and then it will be impossible to get rid of it. Land pollution is increasing all the time and hence has harmful consequences. While the government and other organizations are working at their level to control this, it will be a dream to control any kind of pollution till everyone makes their full contribution. We can also contribute towards reducing it by making some small changes in our daily life. To curb land pollution, we can adopt the following methods -

- (1) Wherever possible, use biodegradable products instead of non-biodegradable products. This is because biodegradable waste is easy to dispose of.
- (2) Food that is grown without the use of pesticides. Such food products are marked pesticide or fertilizer-free so that you can easily separate from others. This will encourage farmers to avoid pesticide use.
- (3) If you have space then it is a good idea to grow organic vegetables and fruits at home.
- (4) These days a lot of paper, ribbon and other material is wasted on packaging. It has been suggested to go for products that have very little packaging.
- (5) Avoid use of poly bags. The government has banned the use of these bags in many states, although people still use them. Poly bags are difficult to dispose of and contribute greatly to land pollution.
- (6) It is also suggested not to use plastic utensils and other plastic items. This is because it is difficult to dispose of plastic in any form.

- (7) When you go shopping, use paper or cloth bags as they are reusable.
- (8) Disposal of wet and dry waste separately in two different dustbin separates the waste.
- (9) Government of India has already started this campaign and distributed green and blue dustbins for segregation of waste products. Several green and blue dustbins have been installed in different areas in different cities across the country.
- (10) Do not waste paper, limit its use. Avoid using it wherever possible. Each year several trees are cut to make paper. Cutting of trees is also a cause of land pollution. Going digital is a good idea.
- (11) Use cloth or reusable duster and broom instead of paper wipes or tissue.
- (12) Land pollution causes many losses, spread awareness about these ideas by sharing with your friends and relatives.
- (13) The garbage of the houses should not be thrown out in the open, for that a garbage truck should be sent by the government.
- (14) Minerals must also be extracted carefully and preserved for future.
- (15) We should also make the air less polluting so that there is no acidic rain.
- (16) We should use such things which we can use again. We should adopt the habit of recycling.





