

Land Pollution

What is Land Pollution?

When we talk about air or water pollution, the reactions garnered are stronger. This is because we can see the effects caused by the pollutants and their extent very clearly. It is normal human psychology to believe in what you see first hand. Our land on the other hand is living a nightmare too. We may not be able to see the effects with clarity, but land is being polluted and abused constantly and we are unable to calculate the damages incurred. Land Pollution has come to become one of the serious concerns that we collectively battle.

Land pollution, in other words, means degradation or destruction of earth's surface and soil, directly or indirectly as a result of human activities. Anthropogenic activities are conducted citing development, and the same affects the land drastically, we witness land pollution; by drastic we are referring to any activity that lessens the quality and/or productivity of the land as an ideal place for agriculture, forestation, construction etc. The degradation of land that could be used constructively in other words is land pollution.

Land Pollution has led to a series of issues that we have come to realize in recent times, after decades of neglect. The increasing numbers of barren land plots and the decreasing numbers of forest cover is at an alarming ratio. Moreover the extension of cities and towns due to increasing population is leading to further exploitation of the land. Land fills and reclamations are being planned and executed to meet the increased demand of lands. This leads to further deterioration of land, and pollution caused by the land fill contents. Also due to the lack of green cover, the land gets affected in several ways like soil erosion occurs washing away the fertile portions of the land. Or even a landslide can be seen as an example.

Causes of Land Pollution

Below are the sources of land pollution:

1. Deforestation and soil erosion: Deforestation carried out to create dry lands is one of the major concerns. Land that is once converted into a dry or barren land, can never be made fertile again, whatever the magnitude of measures to redeem it are. Land conversion, meaning the alteration or modification of the original properties of the land to make it use-worthy for a specific purpose is another major cause. This hampers the land immensely. Also there is a constant waste of land. Unused available land over the years turns barren; this land then cannot be used. So in search of more land, potent land is hunted and its indigenous state is compromised with.

2. Agricultural activities: With growing human population, demand for food has increased considerably. Farmers often use highly toxic fertilizers and pesticides to get rid off insects, fungi and bacteria from their crops. However with the overuse of these chemicals, they result in contamination and poisoning of soil.

3. Mining activities: During extraction and mining activities, several land spaces are created beneath the surface. We constant hear about land caving in; this is nothing but nature's way of filling the spaces left out after mining or extraction activity.

4. Overcrowded landfills: Each household produces tonnes of garbage each year. Garbage like aluminum, plastic, paper, cloth, wood is collected and sent to the local recycling unit. Items that can not be recycled become a part of the landfills that hampers the beauty of the city and cause land pollution.

5. Industrialization: Due to increase in demand for food, shelter and house, more goods are produced. This resulted in creation of more waste that needs to be disposed of. To meet the demand of the growing population, more industries were developed which led to deforestation. Research and development paved the way for modern fertilizers and chemicals that were highly toxic and led to soil contamination.

6. Construction activities: Due to urbanization, large amount of construction activities are taking place which has resulted in large waste articles like wood, metal, bricks, plastic that can be seen by naked eyes outside any building or office which is under construction.

7. Nuclear waste: Nuclear plants can produce huge amount of energy through nuclear fission and fusion. The left over radioactive material contains harmful and toxic chemicals that can affect human health. They are dumped beneath the earth to avoid any casualty.

8. Sewage treatment: Large amount of solid waste is leftover once the sewage has been treated. The leftover material is sent to landfill site which end up in polluting the environment.

Effects of Land Pollution

- 1. Soil pollution:** Soil pollution is another form of land pollution, where the upper layer of the soil is damaged. This is caused by the overuse of chemical fertilizers, soil erosion caused by running water and other pest control measures; this leads to loss of fertile land for agriculture, forest cover, fodder patches for grazing etc.
- 2. Change in climate patterns:** The effects of land pollution are very hazardous and can lead to the loss of ecosystems. When land is polluted, it directly or indirectly affects the climate patterns.
- 3. Environmental Impact:** When deforestation is committed, the tree cover is compromised on. This leads to a steep imbalance in the rain cycle. A disturbed rain cycle affects a lot of factors. To begin with, the green cover is reduced. Trees and plants help balance the atmosphere, without them we are subjected to various concerns like Global warming, the green house effect, irregular rainfall and flash floods among other imbalances.
- 4. Effect on human health:** The land when contaminated with toxic chemicals and pesticides lead to problem of skin cancer and human respiratory system. The toxic chemicals can reach our body through foods and vegetables that we eat as they are grown in polluted soil.



5. Cause Air pollution: Landfills across the city keep on growing due to increase in waste and are later burned which leads to air pollution. They become home for rodents, mice etc which in turn transmit diseases.

6. Distraction for Tourist: The city loses its attraction as tourist destination as landfills do not look good when you move around the city. It leads to loss of revenue for the state government.

7. Effect on wildlife: The animal kingdom has suffered mostly in the past decades. They face a serious threat with regards to loss of habitat and natural environment. The constant human activity on land, is leaving it polluted; forcing these species to move further away and adapt to new regions or die trying to adjust. Several species are pushed to the verge of extinction, due to no homeland.

Other issues that we face include increased temperature, unseasonal weather activity, acid rains etc. The discharge of chemicals on land, makes it dangerous for the ecosystem too. These chemicals are consumed by the animals and plants and thereby make their way in the ecosystem. This process is called bio magnification and is a serious threat to the ecology.

Solutions for Land Pollution

1. Make people aware about the concept of Reduce, Recycle and Reuse.
2. Reduce the use of pesticides and fertilizers in agricultural activities.
3. Avoid buying packages items as they will lead to garbage and end up in landfill site.
4. Ensure that you do not litter on the ground and do proper disposal of garbage.
5. Buy biodegradable products.
6. Do Organic gardening and eat organic food that will be grown without the use of pesticides.
7. Create dumping ground away from residential areas.

Several creatures survive under the land too. Disrupting the harmony of the land, is disrupting their habitat. This has led to several creatures reaching the endangered status like the Gilbert's Potoroo in Australia.

We walk and survive on land. It is literally the base of our ecosystem. It is in our good interest to take care of it and nurture it.

Conclusion

Land is such an important part of this planet that we cannot afford to waste or degrade it. We have seen that most of the causes of land pollution are actually human activities. Some of them are deliberate while others happen due to lack of information and others as accidents.

Many of the factors that cause land pollution could be avoided if only we became proactive and realized that the conservation of the planet is every human being's responsibility. Sometimes we fall sick from diseases such as cancer and begin to wonder what could have gone wrong. Maybe it's the food we eat or the air we breathe that is contaminated and making us ill. Plants that have been harvested from contaminated land are likely to affect our healthy because of the chemicals we ingest. The air we breathe also contains dust particles from polluted pieces of land. It is something that must be approached from every angle.

Land pollution has several ripple effects and sometimes with far much worse consequences. The biggest question that everyone should be asking him or herself should be, "How can I make the earth more habitable?" When we answer this, we do what is right and reduce pollution. Some of the natural disasters such as famine, drought, and floods occur as a result of land degradation. Why then can't we, as the inhabitants of this planet, do what is necessary to keep it clean and make it better? The issue of land conservation should be part and parcel of our daily activities. It is not an event that happens once but a continuous process. When we adopt that line of thinking, we will do what we must and reduce land degradation.

Reference

www.google.com

www.wikipedia.org

www.studymafia.org