

EVS

Chapter-2.

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Environmental Pollutions.

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Environmental pollutions refers to the contamination of natural surroundings by various harmful substances.

Types of Environmental Pollution.

Air Pollution :- Air gets polluted

Sources :- Vehicular exhaust, burning of fossil fuels releases pollutants like Sulphur dioxide (SO_2), nitrogen oxides (NO_x) into the atmosphere.

Water Pollution :- Water gets polluted

Sources :- Discharge of untreated sewage, industrial wastes like heavy metals, chemicals

Soil pollution. Soil gets polluted.

Sources :- pesticides, herbicides, improper disposal of ~~haz~~ hazardous waste and industrial activities contaminate soil with toxins, affecting agriculture and ecosystem.

Noise pollution.

Sources :- Urbanization, transportation and industrial operations generates excessive noise levels, causing health issues and disrupting natural habitats.

Impact of pollutions on Ecosystems and Human Health.

1. Biodiversity loss :- Pollution disrupts ecosystems by harming plants and animal species leading to a decline in biodiversity. Toxic substances in soil, water, air can kill or harm species leading to habitat destruction.

2. Water contamination

Water pollution can result in the death of aquatic life. Also polluted water bodies become unsuitable for many species, leading to imbalances in aquatic ecosystems.

3. Soil degradation: - Soil pollution impact negatively on soil quality and fertility which result in reducing agricultural productivity. It can also harm beneficial soil organisms, affecting nutrient cycling and plant health.

4. Air quality: - Air pollution can damage plants and trees and reducing crop yields. This can lead to the formation of acid rain, which harms forests, water bodies and organisms living therein these environments.

5. Disruption of food chains. ~~pollutions~~
can disrupt food chains and webs.

6. Respiratory problems: - Air pollution, pollutants like sulfur dioxide, nitrogen oxides can cause respiratory diseases such as asthma, lung cancer.

7. Waterborn diseases: Contaminated water sources can spread diseases like cholera, hepatitis.

8. Cancer: - Exposed to certain pollutants such as benzene, heavy metals increases risk of cancer.

9. Neurological effects: - Some pollutants like lead and mercury can affect the nervous system leading to developmental issues in children.

10. Cardiovascular problems: Air pollution has been linked to heart attacks, strokes and other cardiovascular diseases.

11. Endocrine disruption - Certain chemicals in the environment can disrupt the endocrine system, affecting hormone production and regulation.

Pollution prevention and Mitigation Strategies -

1. Technological Innovation - Continued research and development can lead to more effective and sustainable solutions.

2. EIAs - Environmental Impact Assessments : Before major developments. Conducting EIA - helps identify potential environmental impacts and implement mitigation measures to reduce pollution.

3. Green Building Practices - Promoting energy efficient and sustainable building designs can reduce resources consumption and limit pollution.