

# **ENVIRONMENTAL STUDIES**

## **LECTURE-2**

### **Major environmental problems**

Our environment faces several problems, and many of these seem to be worsening with time, bringing us into a time of a true environmental crisis. It is therefore becoming increasingly important to raise awareness of the existence of these issues, as well as what can be done to reduce their negative impact. Some of the key issues are:

#### **1) Pollution**

Pollution of the air, water and soil caused by toxins such as plastics, heavy metals and nitrates, caused by factors such as toxins and gases released by factories, combustion of fossil fuels, acid rain, oil spill and industrial waste.

#### **2) Global warming**

The emission of greenhouse gases due to human activity causes global warming, which in turn causes an increase in temperature that then leads to rising sea levels, melting of polar ice caps, flash floods and desertification.

#### **3) Overpopulation**

We are facing a shortage of resources such as food, water and fuel to sustain the rising global population, particularly in developing countries. Intensive agriculture attempting to lessen the problem actually leads to more damage through the use of chemical fertilizers, pesticides and insecticides.

#### **4) Waste disposal**

An excessive amount of waste is produced and dumped in the oceans. Nuclear waste is particularly dangerous, as well as plastics and electronic waste.

#### **5) Ocean acidification**

The increase in the production of carbon dioxide by humans causes the oceans' acidity to rise, which has a negative impact on marine life.

#### **6) Loss of biodiversity**

Species and habitats are becoming extinct due to human activity. This causes an imbalance in natural processes like pollination and poses a threat to ecosystems – coral reef destruction is particularly affected.

#### **7) Deforestation**

Loss of trees in order to make space for residential, industrial or commercial projects means that less oxygen is produced, and temperature and rainfall are affected.

#### **8) Ozone layer depletion**

Pollution caused by chlorofluorocarbons (CFCs) in the air creates a hole in the ozone layer, which protects the earth from harmful UV radiation.

#### **9) Acid rain**

Pollutants in the atmosphere such as sulfur dioxide and nitrogen oxides cause acid rain, which has negative consequences for humans, wildlife and aquatic species.

### **10) Public health issues**

Lack of clean water is one of the leading environmental problems currently. Pollutants in the air also cause issues such as respiratory disease and cardiovascular disease.

SWETA SAXENA