

GREEN HOUSE EFFECT

Lecture -1

Dr. Shweta

B.Sc part 1

Department of Zoology

M.V.College,Buxar.

Greenhouse Effect is the process of heating of the surface of Earth till the troposphere. It happens because of higher concentration of carbon dioxide, water vapour, methane, chlorofluorocarbons (CFCs) and other gases. The greenhouse effect is a natural process that warms the Earth's surface. When the Sun's energy reaches the Earth's atmosphere, some of it is reflected back to space and some is absorbed and re-radiated by greenhouse gases. In the greenhouse effect, the concentrated gases absorb the energy, thereby increasing the global temperature. Hence, greenhouse effect and global warming are correlated.

A greenhouse is a house made of glass that can be used to grow plants. The sun's radiations warm the plants and the air inside the greenhouse. The heat trapped inside can't escape out and warms the greenhouse which is essential for the growth of the plants.

Causes of Greenhouse Effect

The major causes of the greenhouse effect are:

Burning of Fossil Fuels : Burning of fossil fuels releases enormous amounts of carbon dioxide into the air.

Deforestation : Due to the cutting of trees, there is a considerable increase in the greenhouse gases which increases the earth's temperature.

Farming : Fertilisers used during farming releases greenhouse gas nitrous oxide. It is a major cause of global warming.

Industrial Waste : The industries and factories produce harmful gases which are released in the atmosphere.

Date : 18-01-22

Lecture -2

Consequences of Greenhouse Effect :

- The major consequences of Greenhouse Effect are –
- Ozone layer depletion
- Global warming
- Environmental degradation
- Extinction of species

Effects of Greenhouse Effect :

Global Warming : It is the phenomenon of a gradual increase in the average temperature of the Earth's atmosphere. The main cause for this environmental issue is the increased volumes of greenhouse gases such as carbon dioxide and methane released by the burning of fossil fuels, emissions from the vehicles, industries and other human activities.

Depletion of Ozone Layer : Ozone Layer protects the earth from harmful ultraviolet rays from the sun. It is found in the upper regions of the stratosphere. The depletion of the ozone layer results in the entry of the harmful UV rays to the earth's surface that might lead to skin cancer and can also change the climate drastically.

Smog and Air Pollution : In general, smog is generally formed by the accumulation of more greenhouse gases including nitrogen and sulfur oxides. The major contributors to the formation of smog are the automobile and industrial emissions, agricultural fires, natural forest fires and the reaction of these chemicals among themselves.

Acidification of Water Bodies : Increase in the total amount of greenhouse gases in the air has turned most of the world's water bodies acidic. The greenhouse gases mix with the rainwater and fall as acid rain. This leads to the acidification of water bodies.