

Essay on Greenhouse Effect and Global Warming

Hints: Introduction, Ozone layer, Definition of the greenhouse effect, Greenhouse effects and global warming, Disaster in the Ozone layer, Effect on weather, Conclusion.

Introduction

Through the surprising advancement of science man, in this world, has made his life comfortable, but at the same time, he is making an arrangement for endangering his entity or existence; he is making the world environment unstable. Because of population explosion and big industrial factories including engine-driven vehicles, environmental balance is being spoilt which is creating manifold problems. Of these problems, the greenhouse effect is an interrelated complex problem. In recent years, there have been many alarming reports that the world climate is undergoing a significant change. All these reports provide strong evidence that world temperatures are increasing day by day. This increase in global warming is caused by increased amounts of carbon dioxide around the earth. Most climatologists believe that the greenhouse effect is likely to cause this global warming.

Ozone layer

Before going to the discussion of the greenhouse effect, the Ozone layer needs a brief discussion. Now, what is the Ozone layer? A light atmosphere around the Earth is extended to the height of 1600 km. The nearest sphere of the earth's surface is known as Troposphere whose average height from sea level is 12 km. There is another atmosphere encircling Troposphere. This is called Stratosphere. Here the layer extended to 20 km is called the Ozone layer. Here the density of the gas named Ozone is much more. The ultraviolet ray of the sun, harmful

to the biosphere, is filtered at the Ozone layer and infiltrates into Troposphere. Consequently, the biosphere remains safe from the noxious effects of the ultra-violet ray of the sun. It is as it were a beautiful, defensive and automatic arrangement for the biosphere arranged by the Almighty.

Definition of the greenhouse effect

The concept of the greenhouse effect was first used in 1986 by R Heinous, a reput-ed Swedish Chemist. 'Greenhouse' means a house that is green in color. `Greenhouse is a house of glass in which temperature is preserved to grow green plants. Scientists assume that solar heat is entrapped for the non-conductor gas layer in the atmosphere. The gas layer is like a glass wall through which heat cannot enter except the sunray. Again, the gas layer around the Earth is a good conductor for light, but a bad conductor for re-extracted heat. Therefore, given the condition of the 'Greenhouse', scientists say that the incident of worldwide increase of heat is marked as the greenhouse effect.

Greenhouse effects and global warming

The greenhouse effect is the gradual warming of the air surrounding the earth as a result of heat being trapped by environmental pollution. This is exemplified by the destruction and burning down of tropical rain forests, by traffic that clogs up city streets, by the rapid growth of industry, the use of chlorofluorocarbons (CFCs) in packaging and manufacturing commercial products, the use of detergents such as washing powder and washing-up liquid and so on. The oceans are also said to be affected both because of human waste and because of pollution caused by industrial waste products, oil seeping from damaged supertankers, and other maritime disasters. However, the main culprits for global warming are carbon dioxide gas,

produced by the burning of fossil fuels and forests, and pollutants such as methane and chlorofluorocarbons.

Climatologists predict that midway through the next century, temperatures may have risen by as much as 4°C. This could catastrophically reduce mankind's ability to grow food, destroy and severely damage wildlife and wilderness, raise sea level and thereby flood coastal areas and farmland. The alarming news about Bangladesh is that as a result of the rise of the sea level, the lower southern part of the country may one day go underwater. Greenhouse effects are manifold. Some are described below:

Disaster in the Ozone layer

As a greenhouse effect, now we see, because of CFC, the decay of the Ozone layer which filters the ultraviolet ray of the sun. According to environmental scientists, one molecule of CFC destroys two thousand molecules of Ozone. In the presence of excessive CFC, the Ozone layer is gradually being thinner and thinner. In 1985, a group of environmental scientists observed a hole in Antarctica of the southern hemisphere. As a result, the infiltrated ultraviolet ray is concentrating in the hemisphere mentioned above. According to professor Donar Herb, a German researcher, there the ultraviolet ray effect has increased by 5%. If this percentage goes to 10 or more, the sea photosynthesis will cease and CO₂ concentration will increase. However, in this way, CFC may make holes in the Ozone layer, and humans and animals under the sun will be directly exposed to an ultra-violet ray of the sun. Consequently, we shall be attacked with some killer diseases like skin cancer.

Effect on weather

Because of temperature rise, due to the greenhouse effect, the main

tropics and the Temperate Zone of the Earth's Torrid Zone will shift to (150-200) Km. north and south. Consequently, there will appear a great change in the world climate; the change in the Torrid Zone will be three times of the Temperate Zone. Again, regions of the winter zone will become warm and the usual air current will be hindered. Alongside vapor, precipitation will also increase. Again, in the regions of drought, drought will be more austere.

Merging many parts of the land area into the oceans is an irresistible and dreadful fate of global warming. With the rise of temperature polar ice caps and accumulated ice on the mountain peak will melt, and the oceans with additional water will be overflowed resulting in flooding in the coastal areas. Ice caps of Magnetic Island in Antarctica have already begun melting. Over the past hundred years, the height of sea level has risen by 10-15 cm. The sea, adjacent to Indonesian coasts, has swollen up and it has been proved from the observation of satellite pictures.

Due to the worldwide temperature rise the environment scientists have already predicted that various natural calamities like drought, flood, cyclone, flow-tide, tornado, and so on will increase. In recent years, the recurrence of different storms has increased in Bangladesh. For example, Ayla, Sidr, Nargis, and Tornado have recently swept over south-west Bangladesh and Brahmanbaria and Naogaon leaving approximately 10000 death tolls; millions of people have been affected as well.

Sandy place will increase all over the world because of excessive heat. It was foreshadowed in the UN 1977 and 1984 Convention on Desert that nearly two-thirds area of the world is confronted with the dreadful potential of being turned into desert land. Worth mentioning that every year nearly 200000 sq.m. area is turning to desert. Satellite picture shows that 53% of Africa and 34% of Asia

are attacked with desert land of this or that magnitude. According to the UN report, due to desert land 15 crore farmers of China, India, and south-east Asia will be deprived of the production of crops.

Conclusion

The Earth is a small planet in a vast and mysterious solar system. This Earth is majestic with plenty of lives on its bosom. So, she must be saved for the happy living of all the components of nature harmoniously; the eco-system of nature must be kept balanced, and for this purpose, the World Climate Conference agenda must be ratified. Industrially developed countries must come forward first and they must lessen carbon emission. To conclude, to keep the Earth at her moderate temperature first the people of the world should be alert of the effect of greenhouse gases first, and then they must thwart the emission of these gases, and the first and foremost step for this purpose is to show respect to the Kyoto Protocol, that is, climate change conference.