

The Effect of Global Warming on the Earth and its Inhabitants

The debate regarding global warming is long-standing one and scientists have now proven that the earth is, in fact, warming up each year to the point that some of the biggest cities on the planet could become unlivable in the future. As such, it is apparent that global warming is a threat to this earth and those who inhabit it but the species that are most affected by this problem are not in fact humans. While it is true that global warming has had serious impacts on the human population, it has been even more devastating for the flora and fauna of the planet, particularly the wildlife species. This paper will discuss the history of global warming, its causes, effects and the possible solutions that can be implemented to mitigate the effect of this problem.

History

First and foremost, in order to understand the impact of global warming, it is important to have a look at the history of the problem. It is curious to note that the issue of climate change has been under discussion since the ancient times with Aristotle's pupil, Theophrastus claiming that draining marches had made a particular constituency more vulnerable to freezing. More importantly, he also claims that when forests are cleared, the land becomes exposed to direct sunlight and that makes a region warmer. Further discussions were carried out in the Renaissance era but it was Svante Arrhenius who raised the issue in the 19th century. Arrhenius was a Swedish scientist who claimed that fossil fuel combustion can lead to enhanced levels of global warming. Thus, Arrhenius can be considered as the pioneer of the global warming theory as he was the first scientist who spoke of global warming in the terms that are discussed nowadays. For instance, he highlighted the greenhouse effect by forming a relationship between temperature and the concentration of carbon dioxide (Arrhenius). Arrhenius along with the famous Thomas

Chamberlin then proposed that the activities of humans will increase the carbon dioxide in the atmosphere which will lead to global warming.

Causes

Now that the history of the problem is clear, it is of significance to look at the causes of this problem. As discussed by Arrhenius in his paper, the main cause of global warming is the greenhouse effect. The greenhouse effect occurs when carbon dioxide gets combined with the various types of pollutants in the air and is collected in the atmosphere of the earth. This is problematic as this combination of gases and pollutants absorb the radiations from the sun which naturally makes the planet warmer. The longer this goes on, the more radiation is absorbed and the warmer the planet becomes. This is why the planet is becoming warmer every year without a fail. According to the National Resources Defense Council, Inc., the United States of America produced millions of tons of carbon dioxide each year in order to produce electricity. The transport sector of the country only comes second in the production of carbon dioxide but still manages to produce about 1.7 billion tons of carbon dioxide (MacMillan).

This rapid rate of the production of carbon dioxide is due to the fact that human beings consume fossil fuel in almost every facet of their lives. The reason the United States produces 2 billion tons of carbon dioxide is that it burns fossil fuel to produce electricity. The power plants that burn coal produce the greatest amount of carbon dioxide but the concern is that these power plants are great in number and tend to produce a great deal of electricity which makes them hard to replace. Another factor that should be considered is the huge factories that are set up by the various industries. These factories are responsible for producing the raw material necessary to make good but they also contribute a great deal in global warming. In the United States, 22% of the greenhouse emissions came from the industries (US EPA). This includes the factories

burning huge amounts of fossil fuel to generate energy and certain chemical reactions that produce greenhouse gases. These reactions are necessary for creating raw materials but have proven to be troublesome for the planet.

Effects

It is obvious that the huge production of carbon dioxide and the subsequent global warming has to have a toll on this planet and particularly on the wildlife species that inhabit the earth. First of all, the planet itself is affected by global warming as scientists have noted a change in the heat content of the oceans. This means that circulation patterns of the oceans can also be changed which can lead to further changes in the pattern of tropical storms (Union of Concerned Scientists). Hence the human ability to predict the weather can be affected. Additionally, temperatures of air over the ocean have risen which means that the air on land also becomes warmer but more importantly, the absorption of more water into the air means an increase in precipitation events such as hurricanes (Union of Concerned Scientists). Temperatures on a rise on land as well and scientists have predicted that by the year 2100, many of the world's largest cities such as Beijing or New Delhi will become unlivable due to high heat temperatures (Bendix).

However, the earth is not the only thing that is suffering from the effects of global warming. The animals and plants of the planet have become a victim of global warming and suffer drastically. According to WWF, "Longer, more intense droughts threaten crops, wildlife and freshwater supplies" (WWF). Thus, the changing weather patterns affect the flora of the planet but the fauna is also in danger. The life of polar bears, walruses, seals and other creatures that live in the artic has been threatened as temperatures continue to drop and the ice caps melt. Many of these creatures cannot survive in an environment with high temperatures and as the ice

melts, the temperatures around the habitat of these species drop significantly. Studies have now predicted that polar bears can become extinct by the year 2100 if the pattern of carbon dioxide production continues on the trajectory it currently follows (Konyn). Moreover, even if they do not become extinct, they will face reproductive problems that will significantly reduce their numbers and make them highly endangered.

Solutions

Now that it is clear that the planet and its species are threatened because of global warming, it is high time to have a look at the efforts that can be made to lessen the impact of global warming. There are a few short-term measures that can be considered to mitigate the impact of this threat. For one, human beings will have to change the way they live and travel. In this case, traveling is a huge problem and it produced a great deal of carbon dioxide. Hence, the use of personal cars must be lessened and bicycles must be used for close travel. If the distance is too short then walking can also be considered. For long-distance travel, it is best to use public transport as much as possible which includes buses and subways. Lastly, the elite sector must quit the use of private jets and helicopters to reduce their carbon footprint.

While these measures must be adopted, the only long-term solution for this problem is to lessen and eventually replace the fossil fuel industry. For this purpose, it is of the utmost importance to move towards renewable energy sources such as solar panels and windmills. Since the energy sector is responsible for the increased production of carbon dioxide, it is this sector that must be tackled first and the best way to do this is to move towards sources of energy that do not harm the planet. Additionally, the industry sector needs to be kept under strict surveillance and there is a need for new policies that restrict the use of fossil fuel among industries. While the problems with chemical reactions cannot be helped, the industries should also move towards

producing energy in a sustainable manner. Lastly, investing in electric cars and making them cheaper can be of big help as this will reduce the carbon footprint of the second largest industry of carbon production.

Conclusion

Conclusively, it can be seen that global warming has a direct and devastating impact on the planet and its species. While the concept of global warming and climate change has existed since the olden days of Aristotle, the scientists of the 19th century are the ones responsible for bringing it to light in the modern world. They recognized the devastating impact of greenhouse emissions and published papers on it. They stated that the combination of carbon dioxide and pollutants in the air makes the planet a warmer place to live in. This rapid emission of carbon dioxide has had a distressing impact on the plants and animals of the planet, particularly the arctic wildlife who is in danger of extinction. In order to lessen the impact of this problem, humans need to lessen their carbon footprint which can be done on both an individual and larger scale.

Works Cited

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