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Global Warming: Causes and Effects

Since the beginning of the 20th century, the average global temperature has increased by 1.6 degrees Celsius (J Rogelj). The world is facing an existential crisis as glaciers melt, polar ice caps shrink and the temperature of the seas rises significantly, melting the icebergs within them. The scientists have named this anomaly as "Global Warming". It is now one of the most serious environmental issues that have divided the world into two camps: one that takes it seriously and one that believes that it is a fantasy. The latter is headed by the current US government whose intentions were cleared when it withdrew from the Paris Climate Agreement of 2015. But setting all political debates aside, the question arises that how did things come to this point that we are under this set of serious environmental issues that are threatening our existence.

Two types of causes have led to this epidemic: Natural causes and Man-made causes. Let us first discuss the natural ones. Firstly, we can attribute this problem to the changing patterns of the rotation of the sun. Photos taken from the Hubble telescope suggest that the sun is slowly coming closer to Earth. Therefore, it is only natural that the sun would give off more and more heat as it itches closer. The second most active contributor to this problem is the access to greenhouse gases in the earth's atmosphere. These gases are chiefly composed of Carbon monoxide and Sulphur dioxide, which trap the excess solar heat reflected from the earth's surface. As this heat cannot escape the Earth’s atmosphere, therefore the temperature of the environment is increased significantly.

Volcanic eruptions are also a contributor to the issue of Global Warming. These are indirectly linked to the increase in greenhouse gases. This is since a single volcanic eruption releases a high amount of carbon dioxide, heat and ash into the atmosphere. This increase in carbon dioxide further trap the greenhouse gases in the atmosphere. Lastly, one of the chief natural culprits of global warming is Methane. This gas is highly flammable and therefore used in households on a large scale. This contributes to the overall heat of the environment. In addition to that, Methane is also more effective in trapping the heat released by many sources in the atmosphere. There are many natural sources of Methane present in the world as natural gas reserves, coal mines, petroleum reserves, industrial waste or cattle. The latter is being classified as a contributor to the highest greenhouse emission gases in the world.

In addition to nature, humans are also responsible for making this problem as serious as it is today. According to some scientists, humans have caused more damage to the environment due to our modern way of life. Since the 19th century, the leaps and bounds of the industrial sector have contributed tenfold to this epidemic. This is due to our excessive use of fossil fuels in just about everything in life. Let us focus on the sudden boom of the smartphone industry and how it contributes to global warming. The raw materials included in making a mobile phone, its transportation, its marketing, and its use all require energy that is obtained by burning fossil fuels in one way or another. Besides creating indecomposable waste, every section that involves the smartphone reaching our hands increase the levels of carbon dioxide in our atmosphere. This industrial-age boom has also contributed to another manmade cause of global warming, which is deforestation (Gupta). We have ruthlessly cut down trees and cleared forests for establishing their industries. Trees act as a natural filter absorbing the excess carbon dioxide in the atmosphere and replaces it with oxygen.

The Effects of global warming are steady emerging. These include warmer seas and oceans. Larger and more fierce hurricanes, new diseases like dengue, accelerated melting of the polar ice caps and frequent earthquakes. Not only these effects are damaging to humans directly but they force governments to incur large expenses in the shape of rehabilitation programs after natural disasters. Let us take the example of the melting of polar ice caps. Once they melt, there would be a significant rise in the sea levels by about two hundred and thirty feet. Many low areas like the state of Netherlands will be submerged, as well as the island state of the Maldives in the Indian Ocean. These will create the world's first climate refugees (II Berchin). Also, the animals depend on the cold weather like polar bears will go extinct. The next effect will be a series of huge hurricanes that will cause unprecedented damage to states, killing people and destroying infrastructure. The disease will spread a lot faster as the natural ecosystem that keeps them in check will vanish.

However, there is still hope for Humankind. States and their population can come forward to contain the damage done and hopefully start a rollback of this crisis. First, we can help make a difference by reducing the using of gasoline and other fossil fuels by using hybrid cars. We can also recycle a lot of materials that we normally waste after a single use like plastic bottles or glass jars. We can also play our part by using less electricity and avoiding unnecessary use of personal transportation means. These measures can significantly reduce the excess of greenhouse gases in the environment, seeing that the US alone contributes to more than half of these emissions (Squalli).

# Works Cited

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