

# Complex Issues of Global Warming: Causes, Effects and Solutions a Geographical Study

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**Abstract** - Global Warming occurs when Carbon Dioxide (CO<sub>2</sub>) and other air pollutants collect in the atmosphere and absorb sunlight and solar radiation that have bounced off the earth's surface. Normally due radiation would escape into space, but these pollutants, which can last for years to centuries in the atmosphere, trap the heat and cause the planet to get hotter. Global warming can also refer to climate change that causes an increase in the average of temperature. Greenhouse gases are carbon monoxide and Sulphur Dioxide it traps the solar heats rays and prevent it from escaping from the surfaced of the earth. This has cause the temperature of the earth surge. Now climate scientists have concluded that we must limit global warming to 1.5 degree Celsius by 2040 if we are to avoid a bleak future in which everyday life around the world is marked by its worst, most shocking effect that is the extreme droughts, wildfire, floods, tropical storms and other disasters that we refer to collectively as climate modification or climate disaster.

**Index Terms** - Atmosphere, Pollutants, Greenhouse, Climate, Global Warning

## INTRODUCTION

Global Warming is the average temperature of Earth has increased since 1950 until now the temperature continuously swelling. Global Warming can also be referred to climate change that causes an increase in the average of temperature of the earth. However global warming is caused by natural events and humans that are believed to be contribute to increase in average temperatures. Since the Industrial Revolution, the global annual temperature has increased in total by a little more than 1 degree Celsius, or about 2 degrees Fahrenheit. Between 1880 the year that accurate record keeping began and in 1980 the year that accurate recordkeeping began and 1980, it rose on average by 0.07 degree Celsius every

10 years. Since 1981, however the rate of increase has more than doubled. For the last 40 years, we have seen the global annual temperature rise by 0.18 degrees Celsius or 0.32 degree Fahrenheit, per decade. The result of this increase is that our planet has never been hotter. Nine of the 10 warmest years since 1880 have occurred since 2005 and the 5 warmest years on record have all occurred since 2015.

## STATEMENT OF THE PROBLEM

Now climate Scientists have concluded that we must limit global warming to 1.5 degrees Celsius by 2040 if we are to avoid a future in which everyday life around the world is marked by its worst, most devastating effects that is extreme droughts, wildfires, floods, tropical storms, and other disasters that we refer to collectively as climate change. These effects are felt by all people in one way or another but are experienced most acutely by the underprivileged, the economically marginalized and people of color, for whom climate change is often a key driver of poverty, displacement hunger and social unrest. Global warming occurs when Carbon Dioxide (CO<sub>2</sub>) and other air pollutants collect in the atmosphere and absorb sunlight and solar radiation that have bounced off the earth's surface. Normally this radiation would escape into space, but these pollutants, which can last for years to centuries in the atmosphere, trap the heat and cause the planet to get hotter. These heat-trapping pollutants, especially carbon dioxide, methane, nitrous oxide, water vapor and synthetic fluorinated gases are known as greenhouse gases and their impact is called the greenhouse effect. Though natural cycles and fluctuations have caused the earth's climate to change several times over the last 800,000 years, our current era of global warming is directly attributable to human activity, especially to our burning of fossil fuels such

as coal, oil, gasoline, and natural gas, which results in the greenhouse effect. Global warming is the average temperature of Earth has increases since 1950 until now the temperature continuing increasing. Global warming can also refer to climate change that causes an increase in the average of temperature. However global warming are causes by natural events and human that are believed to be contribute to increase in average temperatures.

#### OBJECTIVES OF THE PAPER

1. To understand the greenhouse effects on the earth.
2. To discover the reasons for the global warming.
3. To evaluate the damage caused by the global warming.
4. To know the devastating effects of the global warming.
5. To find out the measures to contain the surge of global warming.

#### METHOD OF STUDY

The research paper is based on both Primary and Secondary Data. Primary data were collected after visiting Forest Office of Kollegal and Mysore region collected information about the climate deterioration caused by illegal felling of trees. Impact of deforestation also collected from the respective offices. Secondary data collected from the Environmental Science Books, Journals, magazines published.

#### CAUSES OF GLOBAL WARMING

Global warming is a serious issue and is not a single issue but it is mixtures of number of environmental issues. Global warming is a rise in the surface temperature of the earth that has changed various life forms on the earth. The issues that because global warming are divided into two categories include natural and human effects of global warming. Hence it can be classified into two main categories:

##### NATURAL CAUSES FOR GLOBAL WARMING

The climate has continuously changing for centuries. The global warming happens because the natural rotation of the sun that changes the intensity of

sunlight and moving closer to the earth. The natural causes for global warming is as follows:

1. Greenhouse gases: Greenhouse gases are carbon monoxide and Sulphur Dioxide it traps the solar heats rays and prevent it from escaping from the surface of the earth. This has cause the temperature of the earth surge.
2. Volcanic eruptions: Volcanic Eruptions are another issue that causes global warming. For instance, a single volcanic eruption will release amount of carbon dioxide and ash to the atmosphere. Once carbon dioxide increase, the temperature of earth increase and greenhouse trap the solar radiations in the earth.
3. Methane issue: Methane is also a greenhouse gas. Climate Scientist defines Methane is more effective in trapping heat in the atmosphere that carbon dioxide by 20 times. Usually methane gas can release from many areas. For instance, it can be from cattle, landfill, natural gas, petroleum systems, coal mining, mobile explosion, or industrial waste process.

#### HUMAN PROVOCATIONS ON GLOBAL WARMING

1. Human Impact: It has been a very serious issue now because human do not take care the earth. Humans cause global warming are more than natural causes global warming. The earth has been changing for many years until now it is still changing because of modern lifestyle of human. Human activities include industrial production, burning fossil fuel, mining, cattle rearing or deforestation.
2. Burning of Fossil Fuels: Industrial have been using fossil fuels for power machines. Everything that we use is involved in fossil fuel. For example, when we buy a mobile phone, the process of making mobile phone have involve machines and machines uses fossil fuels, during the process carbon dioxide is releasing to the atmosphere. Besides industrial, transportation such as cars is also releasing carbon dioxide from exhaust.
3. Mining Cause Global Warming: During the process of mining, the methane will trap below the earth. Besides, rearing cattle will also cause methane because cattle released the form of manure. However, cattle are important because it

make the latter equally responsible for the occurrence of global warming

4. Deforestation: Deforestation is a human impact because human have been cutting down trees to produce papers, wood, build houses or more. If human continuing deforestation, carbon dioxide will concentrate in the atmosphere because trees can absorb carbon dioxide from atmosphere. Besides, human also release carbon dioxide when breathe. Therefore, the amounts of millions of people breath have release carbon dioxide to the atmosphere. If human continue deforestation, human breathing that release carbon dioxide will stay at the atmosphere.

#### THE EFFECTS OF GLOBAL WARMING

Global warming is already taking a toll on the United States. And if we aren't able to get a handle on our emissions, here's just a smattering of what we can look forward to:

1. Vanishing of Snow Glaciers: early snowmelt, and severe droughts will cause more dramatic water shortages and continue to increase the risk of wildfires
2. Increasing the Sea Level: will lead to even more coastal flooding Forests, farms, and cities will face troublesome new pests, heat waves, heavy downpours lead to increased flooding. All of these can damage or destroy agriculture and fisheries.
3. Increasing of diseases: Allergies, asthma, and infectious disease outbreaks will become more common due to increased growth of fungus, higher levels of air pollution and the spread of conditions favorable to the growth of pathogens and mosquitoes.
4. Melting of Snow cap mountains and Glaciers: As the temperature surge, the ice at the North Pole will melt. Once the ice melt the first effect will be raise on sea levels. According to the National Snow and Ice Data Center "if the ice melted today the seas would rise about 230 feet". Many low lying countries and areas will be affected and doomed in the flood waters.
5. Extinction of rare mammals, birds and animals: Species that include polar bears and tropical frogs will be extinct due to climate change. Besides, various birds will migrate to other places because

animals are not like humans. They cannot adapt the habitat that changes their living or temperature.

6. Regular occurrence of Hurricanes: Global Warming Cause Hurricanes. When slow mountains melts in a rapid way that may lead to the occurrence of Hurricanes. Hurricane causes damage to houses and both the central and state government need to spend billions of dollars in damage and people need places to stay or have been killed.

#### SOLUTION TO STOP GLOBAL WARMING

1. To reduce global warming we can do to reduce the contribution of greenhouse gases to the atmosphere. Therefore, the solutions that we can reduce global warming are reducing the usage of fuels like petrol, disease, electricity and our activities that cause global warming.
2. To reduce gasoline mean we have a choice to choose a hybrid vehicles that runs on petrol and natural gas. Another way to reduce gasoline is take public transport or carpool to work. It can help reduce carbon dioxide and save cost.
3. Another way to reduce global warming is recycling. Recycle can reduce garbage by reusing plastic bags, bottles, papers or glass. For example, when we to the market, we can use our own reusable plastic bag or cloth bag. If all this is being reuse, human can reduce deforestation and help save environment. Besides, turn off electricity if unused. It can save thousands of carbon dioxide and buy product that have energy saving because it saves cost and save environment.
4. Being responsible citizens people should stop open burning such as burning of dry leafs or burning garbage. Burning of this waste materials will be carbon dioxide and toxic, that too if it burns with plastic.
5. Finally, human should stop open burning such as burning dry leafs or burning garbage. It will release carbon dioxide and toxic if burning garbage with plastic. In some parts of Punjab and Haryana farmers clear their fields of paddy and wheat residues by burning. This is causing huge smog in Delhi and other parts of the Northern India chocking the surrounding areas residents with huge pollutants.

## CONCLUSION

Publications, Department of Economic Affairs,  
Ministry of Finance, Government of India.

Overall of this paper, we have understood that our green earth is sick. We humans need to “heal” the earth. Global Warming have causes many problems for human but we human who make global warming happens. Many people have died because of disease or disasters caused by global warning. It also affects the economic stability of the country. However, we need to be reduce the global warming by using less fossil fuels like petrol and diesel, recycle and human should help to reduce global warming instead of making the earth temperature increased. The present young generation must start doing things that protects the green earth like instead of using petrol and diesel vehicles we should use more and more bicycles and electric based scooters. Hence if we do not use the same the future generation or kids may face huge number of problems. Therefore, global warming is a serious problem now. As a geography student it is my duty to create awareness about this serious issue, thus playing a small part to rescue the green earth.

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