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Topic :- Climate Change : Causes and consequences

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The Essay

"The real problem is not climate change itself, but human greed and irresponsibility" says George Monbiot. Climate change refers to the long term alterations in climatic patterns leads to destruction in various aspects. According to NASA, natural events are occurring too slowly as their influence is so small to explain these devastating climate change in recent decades. Scientists believe that the humans are primary drivers of climate change. The human induced activities that lead to climate change encompass of burning of fossil fuels, deforestation, agricultural practices and rapid industrialization resulting in devastating climate change. These may cause various consequences such as environmental consequences followed by social, economic, and health impacts. Therefore, Government and world organizations should follow strategies for making the future sustainable.

To begin with, the main drivers

of climate change is burning of fossil fuels. Firstly, fossil fuels are the organic compounds that were buried thousands of years ago in the Earth (Land) or in ocean. Fossil fuels are the old plants and living things that were buried many years ago. These are generating energy from those organic compounds. Fossil Fuels release energy when burning. Burning of fossil fuels causing various damages to climate, for instance, release of Carbon dioxide (CO_2) in the atmosphere leads to global warming. Moreover, the array pollutants released from combustion of fossil fuels damaging air quality which leads to various respiratory diseases. In addition, It has altered the snow and ice melting cycle by releasing many small particulate that increase the capturing of sunlight. Furthermore, the chemicals released by the burning of fossil fuels such as carbon dioxide (CO_2) and nitrous oxides (N_2O), when mixed with water vapours or oxygen in the atmosphere can lead

to formation of acid rain. These are the factors that caused by the burning of fossil fuels and leads to climate change.

The other cause of climate change is deforestation. As Forests are the lungs of planet 'Earth' and they play an significant role in making planet sustainable. Forests are covered 30% of the Earth's land area and are used in reducing global warming but the removing of forests leads to the deforestation, thus causing climate change. For about 8000 years, humans have removed half of the forests from this planet. The research says that in 2024, almost 300 million hectares of forests were removed leads to 4.1 giga tonnes of CO₂ emissions in the atmosphere, mostly caused by wild fires and logging. The forests are used to reduce green house gas CO₂ by absorbing it and has made fresh air in the atmosphere. However, the less deforestation in an area leads to increase of green house gas. For example, the deforestation

in America is the reason of many heat wave in their areas.

The causes of climate change also include agricultural practices. Agriculture is the main source of economic stability or development of a country. Agricultural practices also lead to devastating climate change by releasing more potent gases in atmosphere. For instance, pesticides and chemical fertilizers releases nitrous oxide (N_2O) that is 300 times more potent than carbon dioxide. It leads to more capturing of sun rays that results in global warming. In addition, livestock activities including cattle releases methane (CH_4) in their digestion process that is 25% more potent than CO_2 and is also a main factor leads to the global warming. Furthermore, the technologies that are used now releasing many harmful gases that leads to the air pollution.

In modern era, industrialization has increased so fast that this rapid industrialization has caused the catastrophe climate. Hence,

it has caused various destruction in climate of the world. Industrialization has caused 70% of climate change. Therefore, leads to deforestation for further agriculture, infrastructure and modern ~~at~~ urbanization. Industrialization leads to damage of climate by producing dangerous chemicals that caused the air, water and land pollutions. It is a vital cause of climate change because industrialization has increased so fast in this century that every country just increasing it by decreasing the forestation and natural places to make factories. The areas where industrialization is so fast than others, then the air quality there, will also ^{cause} much damage, water has polluted that their climatic changes has changed so fastly includes global warming, acid rain, mosquitoes related disease has enhance. In this way, rapid industrialization acts as double-edge sword such as driver of economy of a country and also a factor causing climate change.