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# **Environmental Crises and Impacts of Climate Change on Health**

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### Abstract

Already, the rising temperatures are indeed being seen, and the outlook for the future is gloomy as a result. Global warming is no longer a topic of debate merely a potential danger. The WHO projects that there will be additional 250000 excess deaths each year between the years 2030-2050 as a direct result of the effects that are currently understood. Regarding the changing climate. Morbidity and mortality associated with heat, as well as increases in vector-borne diseases, are some of the effects (e.g. Dengue fever, malaria) higher cases of respiratory disease as well as mortality death toll attributed to harsh weather conditions. Changes in the climate that are incremental, including rising temperatures and sea level, and sporadic drought all have the potential to alter natural environments and cause widespread disruption. including climate warming and sea level, Change land use, agricultural conditions, deteriorate infrastructure and cause financial and interpersonal strain, and increase the likelihood of a variety of adverse health effects. Hostility, violence, and the uprooting of entire villages are all examples. Bringing about a shift in climate relevant at the local level by establishing connections to prominent local concerns and benefits. Comprises a crucial move toward closing the gap between increased worldwide awareness and the increasing importance of the topic locally, and especially for populations that are vulnerable. If we are to avoid the dangers that come with climate change: We need to change, and change drastically, in the ways that we think about things, the ways that we behave, and the ways that we allocate and deploy our resources, whether they be economic, human, or institutional. The essential part civil redesign is one of the greatest issues of our day; the environmental catastrophe, as a result, has an Anthropological dimension. This indicates that we will be required to re-examine both our cultural and types of social organization that are moving away from a culture that is center on consumerism and possessions. The environmental imperative requires us to rethink what it means to be an individual and what it means to be a community. According to the Global Environmental Outlook, even though humans have always had an impact on their environment, local environment, the ever-evolving character of human society, and the magnitude of the impact that these factors have on ecological systems have created a burden that is too great for the atmosphere, land, and water of the planet to bear.

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# Introduction

Since the 1970s, researchers have been attempting to comprehend the environmental processes and variables that are responsible for climate change. The climate on Earth is shifting, which is having unmistakable repercussions on local weather patterns, including heat waves, floods, and droughts. The composition of the atmosphere has been altered as a result of human activity, which has resulted in a greenhouse effects and consequently, global warming(gw). They're result in a constant stream of complicated variation, with drawbacks also relating to one's mental health. The climate is changing even faster than we had anticipated, making it the most significant threat that our generation faces. But despite what it may seem, we do not stand helpless in the face of this worldwide danger. Temperature increases are contributing to the degradation of the environment, the occurrence of natural catastrophes and extreme weather, the insecurity of food and water supplies, economic disruptions, and acts of violence

and terrorism. The oceans are becoming more acidic, sea levels are rising, the Arctic is melting, coral reefs are being killed off, and forests are being burned. Global warming has quickly becoming one of the most pressing problems of our day. Many lines of evidence point in the same direction, making it more likely than ever before those humans are altering the climate of Earth. Warming atmosphere and oceans have led to an increase in sea level, a decrease in Antarctic peninsula, and other climate changes. The consequences of climate change on people and the environment are growing. Floods, warmer temperatures, wildfires have harm billions. Due to variable temperatures and rain patterns, ecosystems are changing quickly. A crisis of consciousness lies behind the surface of the environmental issue. The majority of people are aware that the natural world is currently experiencing significant difficulties and degradation; however, very few people are aware of the true extents of the changes and deprivation that the environment is currently experiencing, as well as its far-reaching effects on human welfare and all other forms of life on Earth. The environment has already begun to show signs of damage as a result of global warming. There is an overall environmental catastrophe that can be seen in a variety of different domains due to the fact that there is something that is fundamentally out of balance in the relationship between human activity and the environment. It is commonly used to refer to particular regions that are facing significant environmental issues (deforestation, nuclear waste, climate change, etc.)

## **Causes of the Environmental Disaster**

### Pollution in the atmosphere

1. Burning fossil fuels: Fossils fuels are coal, oil, natural gas. Simply put, these are extremely valuable mineral resources that are found in each country and have the potential to serve as a source of fuel for human activity. However, the widespread abuse and use of such fuels has led to their transformation into a possible threat to the environment. The primary offenders that are responsible for this are autos and electricity stations. Burning coal, oil, and natural gas produces mostly carbon dioxide, which contributes to greenhouse effects. It was said in the article "Global warming, emphasis on the future" that was published in 1997 that there are currently over 600 million motor cars on the road throughout the world. If the current rate of growth continues for another 30 years, the total number of cars on the planet will have increased by a factor of two. Because there are so many people and cars on the planet today, the average passenger capacity of a car is around ten persons. The fact of the matter is that the typical amount of carbon dioxide emissions produced each driven kilometre is 180 gm. Therefore, the sum total of the carbon dioxide levels in all of the world's streets would be an amount that is incomprehensible. In addition, the combustion of such fuels results in the emission of sulphur dioxide and oxides of nitrogen, both of which contribute to the formation of acid rain.

2. CFCs, also known as chlorofluorocarbons, are substances that can be found in polystyrene foam, refrigerators, and other appliances that use air conditioning. They are a significant contributor to the thinning of the ozone layer. The increasing ozone hole raises the global average surface temperature. More people use air conditioners when it's hot. But air conditioners give off CFCs, which are harmful to the ozone layer and should be avoided. We will have to cope with global warming because of our use of CFCs, which allow UV rays to reach the earth's surface and cause skin cancer in people.

3. The use of lead in gasoline the use of lead in gasoline is a source of air pollution. Lead is one of the most toxic chemicals, and it is a major contributor to air pollution. It has a negative impact on people's health, particularly their nervous systems. It should come as no surprise that burning fresh gasoline also pollutes the air. However, the combustion of leaded gasoline even causes a hundred times more damage.

4. Deforestation: Our nation's land has been cleared of most of its forest cover at this point. Now, many less developed tropical nations are engaging in the same practice in order to harvest timber and clear land for agricultural use. In the meantime, widespread deforestation continues in many affluent countries due to overharvesting, insufficient regeneration, land clearing for agriculture and urbanisation, and pollution in the air. As if the extinction of so many species wasn't bad enough, this also results in a significant rise in the concentration of the greenhouse gas carbon dioxide (CO2). The trees that are not suitable for timber are burned, which releases CO2 directly into the sky. This is one of the ways that deforestation contributes to a rise in atmospheric levels of CO2. Microbes also produce CO2 as a byproduct of the decaying process that occurs in the remaining felled trees. Because photosynthesis requires the presence of carbon dioxide (CO2), cutting down living trees results in a net decrease in the amount of CO2 that is taken from the atmosphere.

# Greenhouse Gases Impact the Energy Expenditure and Climate of the Earth:

The sun is the most important contributor to the temperature and moisture levels of the Earth's atmosphere. Ice and clouds reflect some incoming sunlight back into space. Earth's surface and atmosphere absorb leftover sunlight. A significant portion of the solar energy that is taken in is released as heat (longwave or infrared radiation). The heat that is absorbed and reradiated by the atmosphere is, in turn, some of the heat that is lost to space. Any disruption to the equilibrium between the amount of energy that enters and leaves an area will have an effect on the climate. For instance, even minute shifts in the amount of energy that the sun produces will have a direct impact on this equilibrium. If all of the heat energy emitted from the surface of the Earth went through the atmosphere and straight into space, the average temperature of the Earth's surface would be several degrees cooler than it is right now. Because greenhouse gases in the atmosphere absorb and emit heat energy in all directions (including downwards), they keep the Earth's surface and lower atmosphere warm. Vapour, co2, methane, and nitrous oxide are greenhouse gases. These gases warm the surface. Without the greenhouse gases, life as you know it wouldn't exist on Earth. Human activities emit greenhouse gases, disrupting the planet's energy balance and temperature. Humans also alter land surfaces and release emissions to the atmosphere, which affects the number and composition of particles in the atmosphere.

### Sources of Human-Emitted Greenhouse Gases:

Carbon dioxide comes from natural and human-made sources, but CO<sub>2</sub> concentrations in the atmosphere are rising due to human activities such as burning fossil fuels, manufacturing cement, habitat destruction (which reduces the amount of CO<sub>2</sub> taken up by trees and increases the amount released by decomposing tree debris), and other land use changes. Rising CO<sub>2</sub> levels accelerate global warming. Human activities such as animal rearing, paddy rice cultivation, landfill filling, and natural gas consumption have elevated methane (CH<sub>4</sub>) levels since prehistoric times. Methane is natural and manmade. Raising cattle, cultivating paddy rice, filling landfills, and using natural gas have boosted methane levels. Nitrous oxide (N<sub>2</sub>O) concentrations have raised due to agricultural activities such nitrogen fertiliser use and land use changes. Refrigerants and flame retardants are made from halocarbons, which include chlorofluorocarbons. CFCs contribute to ozone depletion and

global warming. Since making most CFCs is prohibited, their impact is lessening. Many CFC alternatives are potent greenhouse gases, and their concentrations and those of other halocarbons are rising. Most research focus on biosphere events caused by climate change. Fossil fuel use, deforestation, and pollution contribute to global warming. Global warming could generate emergencies in the future. This type of emergency occurs when severe weather affects local region. Excessive heat (heat waves), flooding, hurricanes, extreme snow, and severe thunderstorms are examples. Climate change affects all weather events. The earth's average temperature and relative humidity have risen in recent decades. Climate change is unpredictable, and scientists haven't convincingly linked it to the surge in extreme weather yet. Extreme weather occurrences affect ecosystems and societies, say several scholars. Changes in mean temperatures and precipitation correlate to an increase in hurricanes, droughts, heat waves, and heavy precipitation. The US Global Change Research Program produced a report on climate change's implications on U.S. health in 2016. According to the research, climate change can adversely impact human health in two ways: by raising the severity or incidence of health problems currently affected by temperature or weather, and by producing new health problems or dangers in regions or seasons where they have never previously occurred. Overview: Climate change causes a rise in temperature, a shift in precipitation patterns, an increase in extreme weather, and a rise in sea level. These variables threaten our food, water, air, and weather. The severity of these health threats will depend on an individual's behaviour, age, gender, and economic standing, as well as public health and safety organisations' ability to respond to or prepare for these emerging dangers. The severity of the ramifications will depend on an individual's health risks, exposure to climate change, and ability to adapt. Temperature Effects: The average temperature rise will cause hotter days and more severe heat waves. These changes would increase the number of heat-related deaths in the U.S. by hundreds to tens of thousands every year by the end of the century. These deaths won't be offset by the winter's slight decline in coldrelated deaths. Adaptive interventions, such as increasing air conditioning use, may reduce heat-related mortality. Climate changes affect indoor and outdoor air quality. Air quality declines, causing asthma attacks and other respiratory and cardiovascular problems. Warmer temperatures and changing weather can contribute. Wildlife produces dangerous air pollutants, which are expected to rise as the climate changes. Temperature and CO<sub>2</sub> affect airborne allergens. Despite significant advances in air quality in the 1970s, 57 million Americans still lived in non-compliant zones in 2014. Future climate change could make it more difficult for governments to satisfy these goals, exposing more individuals to poor air.

# **Ozone rise**

Scientists predict that climate change will lead to more days with hazardous amounts of ground-level ozone. Toxic ground-level ozone is a smog component. Higher levels of ground-level ozone increase the risk of early death or hospitalisation for respiratory disorders. Ground-level ozone damages lung tissue, impairs lung function, and inflames airways. These include quicker melting glaciers, early river and lake ice breakup, longer droughts, more intense extreme

weather, and plant and animal range shifts. People and animals around the world face an unpredictable and perhaps disastrous future if appropriate actions aren't adopted to stop burning fossil fuels and reduce greenhouse gas emissions. The frequency and severity of floods, storms, droughts, heat waves, rising sea levels, and thawing permafrost will increase. Climate change negatively affects clean air, safe drinking water, enough food, and secure shelter. Many of the deadliest diseases, including diarrhoea, malnutrition, malaria, and dengue, are sensitive to climate change and are expected to worsen. Human activity has caused global warming and climate change. Increasing CO2 and other greenhouse gases have caused a rise in global average temperature, an increase in extreme weather events, a rise in sea level, and other impacts. These changes affect all life, directly or indirectly. These environmental concerns are caused by excessive industrialization, deforestation, and landfill overfilling, which produce carbon dioxide and other greenhouse gases. Solar irradiance and the planet's self-directed activities, such volcanic eruptions, contribute to climate change but aren't caused by people.

#### **Changes in Allergens and Asthma Triggers:**

Upwards of 34 million Americans have been identified with asthma, which affects about a third of the country's population. The impacts of climate change on allergy reactions and respiratory symptoms are possible. Many of the species that generate the most allergenic pollen, like ragweed, have already started their spring pollen season early and for a longer period of time. This is particularly troublesome for persons who suffer from asthma. A rise in the frequency or intensity of certain extreme weather events, such as excessive precipitation, flooding, drought, and storms pose a threat to human health both during and after the event. Those most at danger include youngsters, the elderly, persons with impairments or medical issues, and those who are socially and economically marginalized. The health of humans can be adversely affected in a variety of ways by extreme occurrences, including the following:

1. Reducing the amount of wholesome food and drink that is readily available.

2. Causing destruction to highways and bridges, as well as blocking access to healthcare facilities and drugstores.

3. Interrupting essential services such as communication, utility, and medical care.

4. Contributing to the carbon monoxide poisoning that can result from the incorrect usage of portable power generators during and after a storm.

5. Leading to the development of psychiatric illnesses, such as depression and comment stress disorder.

## Conclusions

In this article, I have made an effort to place the environmental issue and climate change into the perspective of ecological, social, political, economic, and technological realities as well as theological considerations. Everyone ought to be able to see that this crisis is highly complicated in its entirety. Because it affects numerous stakeholder groups, including humans and nonhumans, any strategy that aims to resolve or mitigate the crisis must necessarily be interdisciplinary, collaborative, and dialogical. This is because the crisis affects both human and nonhuman stakeholder groups. Our environmental problem is destroying. Without a doubt, the environmental disaster that we have brought on ourselves is bringing with it some very terrible implications. The uncoordinated and careless actions of the community have a negative impact on the world. For a considerable amount of time, the bulk of potential remedies and policies to the environmental problem were available. However, humans are the key to the answer. People have a responsibility to take stock of their actions and work toward improving the state of the environment. Our very lives are in our own hands. As a result, each and every one of us needs to take responsibility for the worrying influence that we are having on the ecosystem that we live in. There is the potential for direct as well as indirect effects, as well as both short-term and long-term impacts. Acute experiences can function through mechanisms that are comparable to those of traumatic stress, which can lead to psychopathological patterns that are already well understood. Even though climate change could affect human health in the U.S. and around the world, much can be done to prepare and adapt. Reduce population vulnerability, train healthcare professionals, and construct infrastructure to accommodate climate change.

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