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Role of human Activities in climate change: A Review

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Abstract

Global warming is an ever-expanding danger to the life and existence of all species, including the Earth and the environment. There is also no question that human actions are the main cause for this impact. In addition, human actions contribute further to the problem. And if the situation is not changed soon, the whole human and other animals may suffer an environmental disaster. Global warming is an important consequence, and the human community should abandon the destructive and disgraceful human behaviours which contribute to this problem. The article includes an essay about the role of human activities in global warming to make pupils aware of the important problem and its serious cause. This is an important source to inform students of what they should do and what they can't do to preserve the environment and prevent the increasing impact on global warming.

Kew Words: Global, Warming, human, activities, environment, climate, change etc.

Introduction

Global warming refers mostly to the climate change induced by different human activities. Human actions contribute to various consequences such as pollution, which leads to climate change and global warming instantly. Other environmental variables, such as natural forest fires, also contribute to the cause of global warming, but human actions have major impact. Increase this significant problem in industrialisation, agricultural operations, environmental contamination via different human activities and other energy production processes such as combustion. Pollutants, commonly known as greenhouse gases, collect in the Earth's atmosphere cause climate change and global warming. Greenhouse gases like hydrogen, methane, carbon dioxide and others are released as a consequence of various measures such as use of harmful products that produce CFCs (e.g. air conditioners), fossil fuels burning, and others leading to excess greenhouse effects which eventually increase global warming. These gases produce hazardous radiation absorption and emission, primarily via thermal infrarot rays. As the ozone layer also becomes depleted because of the poisonous gases, the climate changes

are detrimental. In addition, greenhouse gases in the environment result in an excess of unfiltered and untreated emission from factories and industry. The greenhouse gases in the atmosphere cause the greenhouse effect following the disintegration of the atmospheric layer. In addition, when the ozone layer is destroyed, the radiation penetrates the Earth without any intensity restriction. Also, when the warmer radiations are in the earth's atmosphere, the global temperature of the earth increases, which may potentially lead to survival hazards for life on earth because of severe weather.

The climate is changing

Human activity has resulted in significant quantities of carbon dioxide and other heat captured greenhouse gases to modify the atmosphere's composition, leading to the buildup of heat inside the Earth's system, often known as 'global warming.' The Earth's climate has reacted to increasing temperatures in the atmosphere, land and ocean, ice melt, sea level and severe weather (heat waves, wildfires, heavy rains and flooding). The 2016 calendar year is by far the hottest for global average surface temperatures (GMSTs). It comfortably defeated 2015, which in turn defeated the previous record holder of 2014. In the meanwhile, 2017 is currently third (or second, depending on dataset). There is no question that the earth is warming and has significant repercussions for other climatic elements. However, the GMST record also shows significant natural variability; the greatest changes from year to year are linked to the occurrences of El Niño. Decadal changes have led to a warming hiatus between 2000 and 2013.

How global warming affects extreme events

Besides the global heating of the globe mostly due to human alterations in the atmosphere, which lead to rises in general temperatures in the atmosphere, seas and ice, there are also significant effects on severe events. In fact, severe shifts have the greatest effects of climate change on society and the environment. The weather systems are realised every day, which naturally generate enormous diversity at all time periods and over many different geographical scales. Accordingly, by accident, severe temperature values, precipitation, wind and so forth arise from strong weather systems. Some of these extremes are pushed beyond prior levels, setting new records with global warming. In addition, global warming frequently pushes the values beyond different design thresholds: whether for the heat, for the rain, for the wind or for the sea level, and thus

things fail. The occurrences and the new records are also episodic. The values do not vary significantly, since they have always fluctuated with natural weather patterns, instead. This also implies that records are broken at one place in one month, while records are broken elsewhere in the following month and then again elsewhere. Due to the fact that extremes occur in various locations throughout time, the public frequently doesn't connect them with climate change and many have grossly underestimated their cumulative impact. It also implies that the inherent fluctuation of climate from year to year makes it frequently difficult to identify effects from climate change — a signal to noise problem, as addressed more recently.

Heat waves

The most evident forecast is an increase in short-term heat waves and their effects as average temperatures climb. Heat waves occur with a powerful slow-moving anticyclone almost invariably. In the summer of 2003, the big European thermal wave was one of the first to be properly recorded both as it was detected as very rare and as a consequence of the human climate change in terms of climate models. In terms of wildfires and loss of life there were significant repercussions. The severe Russian heatwave of 2010, which once again caused extensive fires, smoke, agricultural damage and deaths, is a more recent example. In the scientific literature there has been some misunderstanding and dispute regarding this occurrence concerning the reason of rare meteorological conditions as opposed to the influence of human-induced warming.

Tropical Storms and Hurricanes

In the summer tropical storms and hurricanes/typhos occur in combination with higher sea surface temperatures (SSTs) over 27°C most of them in the deep tropics. In turn, they reflect a high ocean heat content (OHC) under the surface, and the heat energy is evaporated and moistured to the atmosphere through evaporative cooling in the ocean. The fuel for tropical storms and hurricanes comes when heavy rainfall releases latent warmth when moisture is collected and condensed into the storm.

Human Activity in climate change

The release of carbon dioxide and other greenhouse gases into the air is responsible for climate change. There is now more carbon dioxide in the atmosphere than in the previous

two million years or so. Carbon dioxide increased by 40% throughout the 20th and 21st centuries.

Fossil fuels burning – Fossil fuels like petroleum, gas, and coal contain carbon dioxide 'shut off' the ground for millions of years. We release the stored carbon dioxide into the air when we pull it out of the land and burn it.

Deforestation - Forests extract and store atmospheric carbon dioxide. Cutting it down means carbon dioxide builds up faster since no trees absorb it. Not only that, when we burn them, trees release carbon that they stored.

Agriculture - Planting plants and animal raising emits into the air many different kinds of greenhouse gases. For example, animals are producing methane, which is 30 times as strong as greenhouse gas as carbon dioxide. The nitrous oxide used for fertilisers is 10 times higher and over 300 times higher than carbon dioxide!

Cement - Cement production is another contributor to climate change, which causes 2% of our total emissions of carbon dioxide.

Conclusion

It is usually fair to argue that severe occurrences that break records and exceed thresholds would not have occurred without global warming, otherwise it would have been very well in the past. Thus, thresholds are passed and records broken due to the human shift in climate. In addition, each event is distinct. Events take happen in various locations and develop quite differently, whether inundation, wildfire or heat waves, but they all have one element in common, they would not have been as severe without the impact of humans. In view of this, it might be argued that the whole expense may be allocated to climate change. Certainly, the harm caused by climate change is probably already far over $10B per year. As a result, the rising ocean temperatures and increasing water vapour have led to severe changes that have an enormous effect on civilization, ecosystems and the environment. Climate extremes, aggravated by human-induced climate change, are therefore already a significant danger of further damage to people's lives, personal security and property. The causes of global warming are known and future

predictions are more similar but growing. In a decade or two, what are today severe and uncommon phenomena, enhanced by the proper type of conditions (the weather system). Without rapid emissions reductions of fossil fuel, agriculture may become impossible unless there is substantial evolution (new crops) and many plants and ecosystems are no longer sustainable where they are now by the mid-century.

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