

**Are Human Activities the Principal Drivers of Climate Change?**

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## **Are Human Activities the Principal Drivers of Climate Change?**

The evidence of climatic transformation is a critical global concern because of its adverse environmental conditions. Climate change is visible in shifting precipitation patterns, rising sea levels, and the retreat of glaciers in temperate regions due to global warming effects (Talchabhadel & Karki, 2019). Human activities have resulted in the release of pollutant gases that block radiation rays from escaping the environment, raising the earth's temperatures (Nwankwo & Ukhurebor, 2019). The climatic changes are attributed to natural and human activities. Therefore, it is indispensable to determine whether the leading causes of climate alterations are natural or related to human activities. The discussion in the paper argues that human activities are the main drivers of climate change because they increase the greenhouse gasses that result in climatic change through global warming.

The first human activity that contributes to climatic change is the clearing of bushes and forests. The current increase in population raises the demand for land to gain space for domestic use, leading to vegetation clearing (Eise & Foster, 2018). The plants play an essential role in reducing carbon IV oxide, which is a greenhouse gas. The plants consume carbon IV oxide during photosynthesis, thus reducing the quantity of carbon IV oxide in the environment (Agegnehu et al., 2016). However, clearing bushes and forests minimizes the rate of carbon dioxide consumption from the environment, increasing its quantity in the atmosphere. Excess carbon dioxide reacts with the ozone layer. This makes the ozone layer porous, allowing more ultraviolet rays to get in the air. Consequently, the earth's temperatures are increased (Chen et al., 2020). Besides, carbon dioxide also forms a blanket that blocks radiation rays from the surface from penetrating the atmosphere, increasing the earth's temperatures and, in turn, causing climatic change.

Additionally, agricultural activities create climatic change because the chemicals used in farming emit greenhouse fumes, increase heating on the earth, leading to climatic adjustment. The current use of nitrogenous fertilizers in agriculture discharges nitrogen gases into the environment (Australian Academy of Science, n.d). Nitrous oxide forms a blanket that blocks the radiation rays from escaping from the atmosphere, raising the temperature in the atmosphere. Aerosols also produce greenhouse gasses in the environment. Some aerosols contain nitrogenous content, hence releasing nitrous oxide that leads to global warming (Fagodiya et al., 2020). Typically, agriculture is a human activity that increases global warming resulting in climatic change.

Moreover, industrial activities increase greenhouse gasses' emissions and contribute to climatic changes resulting from global warming. The construction of industries reduces vegetation from the environment, increasing the quantity of carbon IV oxide because the plants that absorb it reduce (Arneth et al., 2017). Besides, the gasses discharged from the industries during processing also increase global warming, leading to climatic change. Most processing industries use organic fuels that produce carbon dioxide as a waste product (Mikulčić et al., 2016). Carbon dioxide increases the rate of global warming as it reacts with the ozone layer and allows more ultraviolet rays to pass. Furthermore, carbon dioxide blankets the radiation rays, preventing them from escaping the atmosphere and increasing atmospheric temperatures. In essence, human industrial activities increase global warming that leads to climatic change.

Moreover, combustion activities liberate greenhouse gases into the air. The burning of coal, oil, and gasses produces carbon dioxide and nitrous oxide into the environment (Kweku et al., 2017). The greenhouse gasses increase the earth's temperatures, resulting in global warming.

Typically, industrial activities increase greenhouse gasses that cause global warming and lead to climatic change.

In conclusion, human activities on earth have significant contributions to climatic change because they contribute to greenhouse gasses that increase global warming. Human activities reduce the earth's forest cover. Forests are important for reducing the quantity of carbon dioxide in the air. Cultivation and industrial activities also increase greenhouse gasses' emissions into the environment and increase global warming.

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