

Student's Name

Professor's Name

Course Name and Number

Assignment Due Date

The Causes and Effects of Global Warming on Biodiversity

Biodiversity refers to the enormous variety of life on earth, including variety in ecosystems, genetic resources, and species (Patil et al. 21). The varieties are essential in creating stability and supporting the existence of all organisms (Dubey 33). Human beings benefit from the biodiversity of species that provide helpful resources. Biodiversity is a source of medicine, food, and raw materials for human beings. However, global warming has decreased biodiversity in a drastic way leading to irreversible effects. Global warming is characterized by the rising average surface temperatures resulting from greenhouse effects. Therefore, the earth warms up at a high rate with limited intervention measures and low adaptation abilities by ecosystems (Saklani & Khurana 24). Global warming is linked to numerous causes, such as the burning of fossil fuels, deforestation, and farming activities, which have massive effects on diversity.

A common cause of global warming is the burning of fossil fuels. The burnt fossil fuels are from cars and coal, emitting carbon dioxide into the atmosphere and increasing its concentration. Carbon dioxide released from burnt fossils is among the greenhouse gases like methane and nitrous oxide that increase earth temperatures, raising the chances of global warming (Saklani & Khurana 24). Plant species face more significant challenges as atmospheric temperatures rise. For example, precipitation rates increase, which leads to low productivity and poor growth.

Another possible cause of global warming is deforestation for settlement or agricultural purposes, which accounts for about 15% of the greenhouse effect (Saklani &

Khurana 25). As trees and other vegetation are cleared, carbon dioxide is released into the air, raising their concentration. Therefore, the changing environment makes some animals unlikely to cope with the rising atmospheric temperatures leading to migration, while others that cannot adapt end up dying. Animals in terrestrial regions are estimated to migrate at a rate of 16.9 km to high latitude environments per decade (Patil et al. 23-24). On the other hand, human-animal conflicts have increased due to alterations of migratory routes of animals due to temperature changes. Commercial fertilizers and herbicides used in farming emit greenhouse gases, further enhancing global warming (Saklani & Khurana 25).

Various effects are expected, such as changing atmospheric conditions that alter life cycle events such as flowering. Altered life cycles affect reproduction, leading to the extinction of species that cannot adapt (Patil et al. 23). In the case of animals, a typical example is an increase in melting rates at the arctic, which is double the global average and has affected polar bears that prey on sea ice for food. Additionally, rising sea temperatures due to the emission of greenhouse gases from farming activities affect marine life, such as breeding grounds for fish, among other species.

There are numerous causes of global warming that result in significant effects on biodiversity, as identified above. Leading causes of global warming are linked with activities like burning fossil fuels, leading to greenhouse gas emissions that raise the earth's atmospheric temperature. Therefore, carbon dioxide and other greenhouse gases are released into the air. In addition, deforestation and agricultural activities like the use of commercial fertilizers cause global warming. Global warming alters the life cycle events of plants, increases precipitation which consequently affects growth and productivity, and forest fires that destroy species. Moreover, animals are forced to migrate while others die as they fail to adapt to changes in their environments. Therefore, according to Patil et al., as one species is

affected, the overall ecosystem is altered because it influences interactions in the environment, interfering with biodiversity (24).

Works Cited

- Dubey, Ashwani Kumar. "Impact of Global Warming on Biodiversity." *Advances in Agricultural and Life Sciences*, edited by Zhanibek Yessimbekov, Weser Books, 2020, pp. 31-47.
- Patil, J. R., et al. "Global Warming Induced Stress and Its Impact on Biodiversity." *Journal of Science and Technology*, vol. 6, no. 3, June 2021, pp. 21–24., <https://doi.org/https://doi.org/10.46243/jst.2021.v6.i3.pp21-29>.
- Saklani, Nikita, and Ashli Khurana. "Global Warming: Effect on Living Organisms, Causes and Its Solutions." *International Journal of Engineering and Management Research*, vol. 09, no. 05, 2019, pp. 24–26., <https://doi.org/10.31033/ijemr.9.5.4>.
-

WritingElites.net

The Custom Writing Experts

Need an Original, High-Quality, Plagiarism-Free Cause and Effect Essay Like This One?

Order Now
