

# CLIMATE CHANGE AND BIODIVERSITY

*Mehak Tiwari*

*Shyama Prasad Mukherji College for Women, University of Delhi*

***We are living on this planet as if we had another one to go.***

***- Ms. Terri Swearingen***

This quote stands true nowadays since the way we are disturbing nature, not introspecting and retrospective of our actions, on the journey of development and fulfilling our present needs without thinking of the future and future generations is feeling that this earth has become a bar of "KitKat" for us that let's finish this one and then we have "Munch" to enjoy. But coming back to reality we don't have another "Munch" that is there is no planet B like Earth that can sustain us the way Earth has. It's time to pay back our debts. Hush Hush things about climate change but what is Climate change all about and why should we be concerned about it? Keep reading to unfold the truth and facts about how climate change is impacting biodiversity, and more importantly us.

What do we mean by both? - BIODIVERSITY and CLIMATE CHANGE Biodiversity (from "biological diversity") refers to the variety of life on Earth at all its levels, from genes to ecosystems, and can encompass the evolutionary, ecological, and cultural processes that sustain life. In simple words, if we say it is all the different kinds of life we find in one area. Biodiversity includes not only species we consider rare, threatened, or endangered but also every living thing—from humans to organisms we know little about, such as microbes, fungi, and invertebrates. Climate change refers to long-term shifts in temperatures and weather patterns.

## **Why do we need to be concerned?**

There are two reasons why climate change takes place - (a.) Natural causes and (b.) Man-made causes. Natural causes include: Volcanic Eruptions for instance Mount Pinatubo (Philippines) in 1991 caused a 0.5°C drop in global temperature. The other ones are - Ocean currents, earth orbital changes, and solar variations. The other cause of this climate change is Human induced activities that are Global Warming and the Greenhouse effect. Global warming in itself is causing a rise in sea level, changes in rainfall patterns, melting of the ice caps, bleaching of coral reefs, and many more adverse effects.



A study has revealed a report by a national daily named MINT - Several Indian cities that lie near the sea may get submerged in the next 28 years due to the rise in water level. According to the analysis by RMSI, some critical properties and road networks in Mumbai, Kochi, Mangalore, Chennai, Vishakhapatnam, and Thiruvananthapuram will be drowned by 2050 because of the rise in sea level.

The number of greenhouse gases like CO<sub>2</sub> emitted by the world needs to peak by 2025 followed by a 43% reduction in the 10 years after to limit global warming to 1.5 degrees C by the year 2100, the Intergovernmental Panel on Climate Change (IPCC).

And if this went up to 2°C, there is zero chance of surviving on this planet. Since 1800 through human-induced activities there has been a rise in the temperature and it is still on the continuum.

Almost every year in India we have fancy names for the hurricane and almost every year our coastal regions and states like West Bengal and Assam are suffering from Floods which is causing a huge loss to human life and prop

Recently only 11 pilgrims have died due to the cloud burst in the areas of Amarnath during their pilgrimage. Some species once gone extinct they won't come back such as Polar Bears and Orangutans.

A fine example of climate change can be explained as earlier the species of bears used to have food stay in their habitat and used to hibernate for around half an year but now their sleeping patterns has changed due to lack of food they are now being more attacking towards humans which is not in their tendency.

## EFFECTS OF CLIMATE CHANGE

- **Hotter temperatures:** Higher temperatures increase heat-related illnesses and can make it more difficult to work and move around. Wildfires start more easily and spread more rapidly when conditions are hotter.
- **More severe storms:** Changes in temperature cause changes in rainfall. They cause flooding and landslides, destroy homes and communities, and cost billions of dollars.
- **A warming, rising ocean:** The ocean soaks up most of the heat from global warming. This melts ice sheets and raises sea levels, threatening coastal and island communities. The ocean also absorbs carbon dioxide, keeping it from the atmosphere. More carbon dioxide makes the ocean more acidic, which endangers marine life.
- **Loss of species:** Climate change poses risks to the survival of species on land and in the ocean. Forest fires, extreme weather, and invasive pests and diseases are among many threats. Some species will be able to relocate and survive, but others will not.
- **Not enough food:** Changes in climate and increases in extreme weather events are among the reasons behind a global rise in hunger and poor nutrition. Fisheries, crops, and livestock may be destroyed or become less productive. Heat stress can diminish water and grasslands for grazing.

Earlier there were many places where ice caps could be found but this climate change has now left us with only two places, Antarctica and Greenland. Research has shown that if the ice caps of Antarctica melt it will lead to an increase of 60 meters in sea level and if Greenland ice caps melt it can lead to an 8 meter increase in the sea level.

## Conclusion

Some years back we used to say that we are running short of time but now we are not running short of time but the time is up and now the thing is on survival and more like a Do or Die situation. How we should be serious and cautious is that we are not being that. Miracles don't happen, we have to create them. Nowadays actions against climate change are not just protecting the earth but protecting ourselves as well. So by our lifestyle

modifications like going vegan, carpooling, and ideas like blogging emerged Sweden, a country that is always on top in design thinking to solve anything. Some simple steps such as sustainable architecture, segregation of waste, and afforestation can also be a huge help Some years back we used to say that we are running short of time but now we are not running short of time but the time is up and now the thing is on survival and more like a Do or Die situation. How we should be serious and cautious is that we are not being that. Miracles don't happen, we have to create them. Nowadays actions against climate change are not just protecting the earth but protecting ourselves as well. So by our lifestyle modifications like going vegan, carpooling, and ideas like blogging emerged Sweden, a country that is always on top in design thinking to solve anything. Some simple steps such as sustainable architecture, segregation of waste and afforestation can also be a huge help.

- **More health risks:** Changing weather patterns are spreading diseases such as malaria. Extreme weather events increase diseases and deaths, and make it difficult for health care systems to keep up. Other risks to health include increased hunger and poor nutrition in places where people cannot grow or find sufficient food.
- **Poverty and displacement:** Climate change increases the factors that put and keep people in poverty. Floods may sweep away urban slums, destroying homes and livelihoods. Heat can make it difficult to work in outdoor jobs. Weather-related disasters displace 2.3 crore people a year, leaving many more vulnerable to poverty.

