

ENVIRONMENTAL CHALLENGES TODAY:

# GLOBAL PERSPECTIVE



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## Environmental Impact of Amazon Forest Fires

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### INTRODUCTION

The Amazon rainforest it is the world's largest forest. It grows in the tropical basin of the Amazon River. It is a moist broadleaf forest which covers seven million square kilometers (1.7 billion acres). Of this, five and a half million square kilometers (1.4 billion acres) are covered by the rainforest. This region includes territory belonging to nine nations.

Most of the forest is in Brazil, with 60% of the rainforest, followed by Peru with 13%, and Colombia with 10%. Venezuela, Ecuador, Bolivia, Guyana, Suriname and French Guiana have just a small amount of rainforest.

### AMAZON RAINFOREST FIRE

Amazon rainforest is at the risk of getting burned out completely, the rainforest which contributes almost 20 percent of the earth's oxygen has been burning for over 16 days resulting in a major loss of trees and biodiversity. It will get completely burned out if it is not put out soon.

Hundreds of tributaries and streams contain the largest number of freshwater fish species in the world. Biodiversity of Amazon forest including endemic and endangered species of different flora and fauna. In the Amazon rainforest 5,336 animals are known to live along with 40,000 species

of plants and 100,000 invertebrates and over 3,000 different species of animals in the Amazon Rainforest. The 3,000 types of animals consist of birds, monkeys, panthers, and many others. The majority of the fires are because of deforestation.

Most fires observed in the region are caused by humans. Many are set in previously cleared lands in order to quickly remove any excess vegetation that has popped up. Others are set in land that is still in the process of being cleared, in order to make more open land for crops or cattle. The forest which remains is threatened. People who care for the environment warn about the loss of biodiversity. They also point out that releasing the carbon which is stored in the trees will increase global warming. The Amazon did not evolve to burn, but for centuries, fire has been used to clear space in the rainforest for agricultural crops. Deforestation often leads to fire. In Brazil—which controls the majority of the vast forest—regulations were put into place over a decade ago to curb the expanse of deforestation, but these rules have been loosened by the new Brazilian administration.

Forest fires are common in any forests. These were common in Amazon too but purposeful and concerted effort from the Brazilian government after the mid-2000s, as well as coordinated international pressures, led to changes in the management of the forest and agricultural land. The efforts were largely successful: By 2012, the annual deforestation rate bottomed out at about 80 percent lower than the average rate between 1995 and 2006.

But last year, Brazil elected a new president, Jair Bolsonaro, who pledged to increase agricultural activity in the Amazon and smooth the way for more development in the region. Under the new administration, many scientists, indigenous leaders, and environmental advocates worried that deforestation rates were likely to shoot up again.

### AMAZON RAINFOREST FIRE CAUSE

Though forest fire are common in the Amazon during this period as it is a dry season in the southern Amazon, in the year 2019 has been unprecedented rise in the number of the fires and their intensity. According to environmentalists 99% of the forest fire are a result of human action, farmers and ranchers are use fire to clear the land for further utilization and fires also fit perfectly into the established seasonal agricultural pattern and other human settlement. this time in the year 2019 is the most suitable to burn because the vegetation is dry. Farmers generally wait for the dry season to start burning and clearing areas so that cattle can graze however, peck of the dry season.

### IMPACT OF AMAZON FOREST FIRE

The fire in Brazils Amazon rainforest has been burning at the highest rate. There have been around 72,843 fires in Brazil in 2019 itself, with more than half in the Amazon rainforest. This shows an 80% increase in fires during the same period in 2018.

According to scientists the Amazon rainforest fire has delivered a huge blow to the global fight against climate change. The fire has not only resulted in a major loss of trees and biodiversity but also release excess  $\text{CO}_2$  into the atmosphere. The forest fires also release pollutants including particulate matter and toxic gases such as carbon monoxide, nitrogen oxides and non-methane organic compounds into the atmosphere. The World Meteorological Organization tweeted about the smoke that has spread across Brazil stating, "Fires release pollutants, including particulate matter & toxic gases such as carbon monoxide, nitrogen oxides and non-methane organic compounds into the atmosphere." So, in a perverse chain of events, the fires are both generating large amounts of carbon dioxide, while at the same time destroying

millions of trees that would be taking in the carbon dioxide and protecting the environment. It's a double-whammy.

The added carbon dioxide will then also trap heat within our atmosphere due to the greenhouse effect and could change the atmospheric circulation that causes the melting of large ice sheets and many other catastrophic effects of climate change.

Amazon rainforest considered to be as the planets lungs as it contribute about 20% of the earths oxygen is vital to slow down global warming. The rainforest is currently home to uncountable species of fauna and flora. While the immediate impact of the fire would be changes in the heating of the regional atmosphere in the long term it is expected to lead to a potential decline in natural carbon.

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