

Deforestation, a serious threat to public health

Tropical forests are of vital importance for human well-being, as they play an important role in health, as they purify air and water, prevent diseases and reduce natural disasters. However, deforestation affects fauna and flora and becomes a threat to people. Not only forest dwellers, but also those who live in urban environments.

Nutrition and food security

Tropical forests contribute to the food security and nutrition of the communities that inhabit them, but also of urban populations, helping children to have better cognitive and physical development, and lower risk of getting sick or dying.



Infectious and non-communicable diseases

Tropical forests purify air and water by absorbing carbon dioxide and other nitrogenous compounds from the atmosphere, and by retaining heavy metals, radionuclides, and other soil pollutants. In this way, they help reduce the threats of infectious and non-communicable diseases related to pollution, such as diarrheal or respiratory diseases.

Extreme weather events and natural disasters.

Tropical forests act as a great air conditioner that cools the environment, which helps prevent diseases related to extreme weather events such as heat waves. They also prevent diseases caused by floods, since they act as a natural barrier against rainfall.

1

Tree branches prevent the sun's rays from touching the ground.

2

Thanks to the process of evapotranspiration, they extract water from the soil and exhale it in the form of water vapor through their leaves.

COOLING PROCESS



3

Water vapor forms fog and clouds, which act as a barrier that reflects light and prevents the sun's rays from touching the ground.

4

Water vapor condenses and as it falls as precipitation, it also helps to cool the environment.

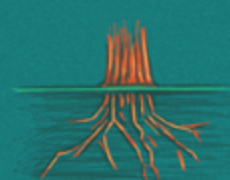
FLOODS AND LANDSLIDES



The trees act like a giant umbrella, intercepting rain with their leaves and holding it back, slowing the flow of water to the ground. In this way, it prevents flash floods due to overflowing watercourses.



Fallen leaves and organic matter accumulated on the forest floor absorb large amounts of water that it releases slowly. Thus, it reduces the pressure on rivers and streams and reduces the risk of overflowing.



The roots of the trees work as anchors that intertwine and compact the soil, keeping the soil fixed, providing greater resistance and preventing erosion. This prevents landslides and floods, because it protects watercourses from rising sediments.

Forests prevent the emergence and spread of zoonotic infectious diseases

Tropical forests are home to thousands of animals, plants, and microorganisms. They maintain a series of relationships that allow them to self-regulate their functioning; However, factors such as deforestation or urban expansion reduce their habitat – in terms of area – breaking that balance and forcing them to move and adapt to other spaces, promoting interaction between humans and wild species that can lead to the appearance of new zoonotic diseases.



The living component of the forest – flora, fauna and microorganisms – carries out a series of ecological interactions such as food chains, pollination or dispersal, in which microorganisms share.



Deforestation and urban sprawl reduce the area of forests, forcing organisms to move to other areas.



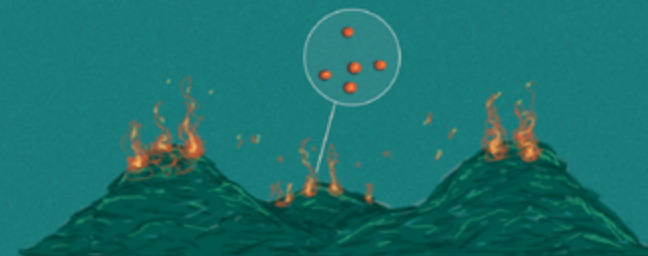
The reduction of their habitat increases the possibility of interaction between wild species and humans. This increases the possibility of microorganism exchange and the appearance of zoonotic diseases.

What are zoonotic diseases?



They are infectious diseases caused by parasites – bacteria, fungi, microorganisms or protozoa – that have the ability to be transmitted between animals of different species.

Wildfires



Increasingly intense and frequent due to climate change, forest fires not only affect forests and the biodiversity that compose them, but also represent a danger to humans. Fires emit particulate matter and other pollutants that degrade air quality. Fine particles can remain in the atmosphere for up to a week and be carried by the wind to urban areas, affecting the health of people located hundreds of kilometers away. Other particles present in smoke, such as soot and black charcoal, are very toxic and can affect the appearance of lung cancer.

Mercury Contamination



Another serious threat to public health in forest areas is mercury contamination, resulting from legal and illegal mining. Communities living in forests are exposed to high concentrations of this mineral, released during gold mining and discharged into waterways, soils and the atmosphere. Even at low doses, mercury exposure can affect the nervous, digestive, kidney, and cardiovascular systems.