

World Sustainability Foundation Report

Why are forests so important?

Forests, amongst all other ecosystems, are responsible for the maintenance of life on Earth. It's known that forests are an indispensable part of rain cycles, help purify the air, filter water, and cover a large amount of substances that can be used in human health.

Forests are important for both humans and animals, offering nutrition and protection, avoiding the exodus to urban environments which can lead to a series of zoonoses being wildly spread across towns.



Forests are also one of the most critical parts of the carbon cycle, hence cutting, and burning down forests not only means that there will be more carbon in the atmosphere but also means that there will be fewer trees to absorb that carbon. The Green House Effect would increase and consequentially, speed up global warming. Nevertheless, deforestation keeps happening.



WORLD
SUSTAINABILITY
FOUNDATION



Deforestation

Deforestation happens for many reasons, most often to allow rural and urban areas to expand, for agricultural territory to spread, for livestock, and also mineral exploitation. This process can be seen all over the world but mostly happens in sub-developed countries, where we can find large rainforests, as well as their economy being based on exporting primary goods, such as ores, grains, and meat, and to obtain these, forests and rivers will be doomed.

Deforestation alters the climate and the patterns of rain; making animals run away towards cities, increasing conflicts between humans, cattle, and pets. **The large fires kill endangered species of animals, fungi, and plants**, some of which may even not be known to humans.

Deforestation leads to an increase in the world's temperature, which not only affects land but also the bodies of water and all kinds of life. These can be seen as an impact on wildlife, but also affects human life, each year there are more and more reports of people losing their houses and family members to wildfires and floods; as well as incredible heat waves.



As mentioned above, deforestation alters the patterns of rain, causing floods and droughts, this year (2023), there was a monetary loss of approximately US\$3 million in one month in plantations in the South of Brazil due to floods, the same floods that killed 50 people and led to



WORLD
SUSTAINABILITY
FOUNDATION



the disappearance of other 50 people. It's worth emphasizing that these floods happened in September, which normally tends to be a rather dry month (evident climate change).

Another example of the impact of deforestation is in Africa; African savannahs are known for their well-distinguished seasons of drought and rain, but what is not so known is that what keeps the plants alive, and therefore the animals alive as well, is the capacity of the soil to store water from the rain, and these storages are used throughout the drought season by trees, bushes and some animals, like frogs and other amphibians, to escape the heat.

Also, in Africa, it's common to see the Baobab trees, or "tree of life" that are fundamental for the maintenance of life in the savannahs, these species are responsible for keeping the soil humid, promoting nutrient recycling, and preventing erosions, the loss of the surface layer of soil, the richest one in nutrients that allow the seeds to grow.

Baobabs can shelter birds, reptiles, and insects; can store water in their hollow trunks, and the water inside is not only used by animals but also by the locals. Baobabs also can bear fruits, flowers, and bark the entire year, saving the lives of people and animals, like monkeys, warthogs, bats, and elephants.



Why should we reforest?

Reforestation is the process of replanting trees in areas once affected by human actions, such as logging, agriculture, and the development of human occupations, and in areas affected by natural disasters like wildfires, drought, and disease infestations.



WORLD
SUSTAINABILITY
FOUNDATION



Reforestation is a way of helping the environment by accelerating/guaranteeing the re-establishment of a once-healthy forest structure, **preserving the biodiversity of ecosystems**.



Reforestation is not only important for biodiversity but also for reducing the effects of deforestation: preventing soil erosion, filtering water, and rearranging the carbon cycle and the climate.

Did you know that...

- 1.6 billion people rely on forest resources for their livelihoods.
- Indigenous occupations are where you can find the native forest mostly preserved.
- 80% of the terrestrial biodiversity inhabits forests, this includes mammals, birds, reptiles, insects, amphibians, and many more.
- There are more than 60.000 known species of tree around the world.
- More than 58% of the known species are single-country endemic, Brazil, Colombia, and Indonesia have the highest total of endemic trees.
- Sharks are older than trees. Trees have been around for 470 million years, while sharks have been around for more than 500 million years;
- The oldest trees still alive are around 4.000 to 5.000 years old, the Persian Cypress (*Cupressus sempervirens*) in Iran, a *Pinus longaeva* in the United States, and *Fitzroya cupressoides*, or Patagonian Cypress in Chile.



WORLD
SUSTAINABILITY
FOUNDATION

