

Issue: Sustainable conservation of global afforestation

Forum: United Nations Environment Assembly

Position: Chair

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Introduction

30% of the world's land area is covered with forests¹. They are essential to life on Earth, due to benefits such as the sustain of biodiversity, protection of local communities, restraint of global warming, and containing the ecological balance of the world².

Despite the importance of forests to life on Earth and human well-being, deforestation takes place in many regions, mostly in the tropics. Rapid population growth as well as rising per capita income, creates a global demand for and consumption of forest products and services and puts pressure on forests³. Through afforestation, new forests are established in order to mitigate deforestation.

Definition of Key Terms

Afforestation

Establishment of forest through planting and/or deliberate seeding on land that, until then, was not classified as forest⁴.

Carbon

Chemical element. Carbon dioxide or other gaseous carbon compounds release into the atmosphere, is associated with climate change⁵.

Climate change

A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods⁶.

Deforestation

The conversion of forest to other land use or the permanent reduction of the tree canopy cover below the minimum 10 percent threshold⁷.

Greenhouse gas

See carbon.

Paris Agreement

An agreement within the United Nations Framework Convention on Climate Change (UNFCCC), dealing with greenhouse-gas-emissions mitigation, adaptation, and finance, signed in 2016.

General Overview

Deforestation occurs to make way for agriculture or grazing. The majority of tropical deforestation is driven by four commodities: beef, soy, palm oil and wood products⁸. We all use these materials in our daily life. For instance, palm oil is found in half of all supermarket products⁹.

Although natural catastrophes are intense when they occur, they are not very common. Most forest fires are lit by human activities¹⁰.

Forests provide a home for a diverse collection of living things; they are the habitat of 80% of terrestrial biodiversity, containing a wide array of trees, plants, animals and microbes¹¹.

They are also an important resource for many around the world. In countries like Uganda, people rely on trees for firewood, timber and charcoal¹².

Three-quarter of the Earth's freshwater comes from forested watersheds, and the loss of trees effects water quality¹³.

Trees also absorb carbon dioxide, and play an important role in the capture and storage of excess carbon dioxide produced by human activity. They are needed to offset climate change¹⁴. In fact, forests do not only mitigate climate change¹⁵, the process of deforestation also produces greenhouse gas emissions. It is the second leading cause of climate change. All these consequences of deforestation are the basis of many initiatives to re-establish forests through global afforestation. The United Nations strives to promote sustainable forest management and the contribution of forests and trees outside forests to the 2030 Agenda for Sustainable Development, including by strengthening cooperation, coordination, coherence, synergies and political commitment and actions at all levels¹⁶.

Major Parties Involved

Africa

According to the United Nations Environment Programme (UNEP), Africa suffers from the second largest loss in forests. Nigeria and Sudan lose the most natural forest every year. This is troubling as these countries are more dependent on bush meat as a source of food.¹⁷

Brazil

Brazil's Amazon forest had been cleared for many years now. In the period 2000-2005 it lost 4,3 million hectares annually. The ground is then used for cattle ranches and soybean plantations. Furthermore, it often had problems with forest fires which cause more deforestation.¹⁷

Forest 500

A list and ranking of the most influential companies and financial institutions in forest risk commodity supply chains.¹⁸

History

Historically, urban demand and agricultural exports have always been increasingly important drivers of deforestation. Technological changes allow mankind to worsen the situation¹⁹.

There are two main causes that underlie the initiatives to combat deforestation. First of all, a scarcity of forest products and the growing demand for food and timber for the industrial, mining and construction sectors led to growing (economic) concerns. Secondly, the perception of an ecological crisis related to alleged links between deforestation and catastrophic floods, soil erosion, and landscape denudation, made modern nation-states seek control over land and forest resources as well²⁰. Thomas Rudel called this “the economic development path” and “the forest scarcity path” in his forest transition theory.

Kathleen Farley proposed a third path, “the reverse economic development path,” by which afforestation, funded through forestry programs and carbon sequestration initiatives, “seeks” rather than responds to economic development. Between 2000 and 2005, afforestation and reforestation lowered the global forest loss from 13 million ha/year to 7.3 million ha/year.²¹

This leads to the current situation: As a result of the Upper/Middle Yangtze River Valley afforestation program and the Great Green Wall initiative in Inner Mongolia, afforestation rates are rather high in China²². The US follows China as second biggest country to afforest. This has been driven by state-led efforts to bring new life to former mining areas, as well as by charities aiming to reduce CO2 levels and restore natural habitats.²³

Previous attempts to resolve the issue

The United Nations Framework Convention on Climate Change was signed in 1992 at Rio de Janeiro, where the Earth Summit took place.

The Kyoto Protocol emerged as a major international agreement and an advance in the history of climate-change negotiations. The Protocol recognized that developed countries have been principally responsible for the high levels of greenhouse gas concentrations in the atmosphere and grouped countries into two categories: industrialized countries and

developing countries. Under the Protocol, no binding limits were placed on developing nations.

The international community developed the United Nations Collaborative Programme on Reducing Emissions from Deforestation and Degradation in Developing Countries, a mechanism of financial incentives for reduction of emissions from deforestation and forest degradation. This idea was agreed upon in Montreal at the Fifth Session of the Conference of the Parties to the UNFCCC in 2005.²⁴

The Paris Agreement was signed in 2016. Article 5 of the Paris Agreement entails that Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases, including forests²⁵. Although the Agreement is binding, no sanctions can be imposed.²⁶

Possible Solutions

Developing alternatives to deforestation can help decrease the need for tree clearing. For example, the desire to expand the amount of land used for agriculture is an attractive reason to deforest an area. Forests can also be restored, through replanting trees in cleared areas or simply allowing the forest ecosystem to regenerate over time.

The need for afforestation can be reduced through the recycling of wood and paper products on a large (global) scale.

Appendix/Appendices

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