



**KAMARAJ IAS ACADEMY**  
Only IAS Academy by Grandson of "Perunthalsivam Kamarajar"

# Deforestation

Published On: 10-08-2023

**Why is in news?** Amazon nations to jointly fight deforestation

## About the alliance:

Eight South American countries agreed to **launch an alliance to fight deforestation in the Amazon**, vowing at a summit in Brazil to **stop the world's biggest rainforest from reaching "a point of no return"**.

The closely watched summit of the **Amazon Cooperation Treaty Organisation (ACTO)** adopted what **host country Brazil** called a "**new and ambitious shared agenda**" to save the rainforest, a crucial buffer against climate change that experts warn is being pushed to the brink of collapse.

The group's members — **Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela** — signed a joint declaration in **Belém, at the mouth of the Amazon River**, laying out a nearly 10,000-word roadmap to promote sustainable development, end deforestation and fight the organised crime that fuels it.

But the summit stopped short of environmentalists' and Indigenous groups' boldest demands, including for all member countries to adopt **Brazil's pledge to end illegal deforestation by 2030** and **Colombia's pledge to halt new oil exploration**.

It is the **first summit in 14 years** for the eight-nation group, set up in 1995 by the South American countries that share the Amazon basin.

## Deforestation:

**Indiscriminate felling of trees** as a result of urbanization, industrialization, mining operations, and use of wood for domestic and other purposes have caused heavy depletion of forests. This is called deforestation.

Deforestation results in **conversion of forest land to non-forest use**.

## Causes of Deforestation:

**Agriculture:** As per UNFCCC, **agriculture is the direct cause of deforestation**. Subsistence farming, commercial agriculture, shifting cultivation and industrial logging all cause deforestation.

**Developmental Projects** like hydroelectric projects, reservoirs etc. require immense deforestation.

Raw Material requirements

Overgrazing by cattle

Other causes like mining, overpopulation and urbanization, floods, forest fires due to climate change etc.

## Significance of Forests for India:

**Kamaraj IAS Academy**

Plot A P.127, AF block, 6 th street, 11th Main Rd, Shanthi Colony, Anna Nagar, Chennai, Tamil Nadu 600040

Phone: **044 4353 9988 / 98403 94477 / Whatsapp : 09710729833**

**Ecosystem Services:** Forests in India provide a range of important ecosystem services, such as water regulation, soil conservation, and carbon sequestration. For example, forests in the Western Ghats help to regulate the water cycle of southern states and protect against soil erosion.

**Hub of Biodiversity:** India is home to a wide variety of plant and animal species, many of which are found only in the country's forests. For example, the Sundarbans mangrove forests in the Bay of Bengal are home to the Royal Bengal tiger.

**Economic Value:** Forests in India provide a range of economic benefits, including timber, non-timber forest products, and tourism. For example, the bamboo forests of the Northeast are a major source of livelihood for local communities, while the country's national parks and wildlife sanctuaries attract millions of tourists each year.

**Cultural value:** Forests in India also have significant cultural and spiritual value for many communities, who depend on them for their livelihoods and cultural practices. For example, Gond tribes of Madhya Pradesh.

### Effects of Deforestation:

Deforestation will have severe consequences threatening the very existence of living creatures in the long run.

Loss of trees results in an **increasing amount of carbon dioxide in the atmosphere**, which, being a greenhouse gas, enhances global warming.

Deforestation also **leads to desertification** in plains **and landslides** in hilly areas.

It **elevates soil erosion and loss of fertility** in the soil, further onsets the agricultural production problem.

The **disturbance in the hydrological cycle** due to the reduction in the number of trees influences rainfall patterns.

There is a **loss of biodiversity of plants and animals** as the wildlife species lose their natural habitat. Forests are the repositories of invaluable gifts of nature in the form of biodiversity, and by destroying these, we will lose many species even before knowing them.

The dam-building activities **break the ecological balance** by large-scale destruction of the region's forests, and disasters like floods and landslides become common. Example:- A total of 1,44,731 hectares of land is submerged by the Sardar Sarovar Dam in Gujarat, out of which 56,547 hectares is the forest land.

### Solutions to deforestation:

Banning of Clear-Cutting of Forests

Launching **new reforestation campaigns** to restore deforested lands.

**Intensive development schemes for afforestation** should be adopted. High yielding varieties should be planted in suitable areas.

The latest techniques of **seasoning and preservation** are necessary to avoid wastage.

Proper arrangements to **save forests from fires and plant diseases** can go a long way to solve several problems.

A thorough **inventory of forest resources** is necessary to make an accurate assessment of our forest resources and make plans for their proper use.

Shifting cultivation should be discouraged and tribals depending on this type of cultivation should be provided with alternative sources of livelihood.

People associated with forest protection should be **properly trained**.

Carefully **planning the construction of infrastructure** (roads, dams, etc.) in order to **minimize the loss** of forest area.

**Investing in new technologies** in the agricultural industry (such as hydroponics) and helping farmers implement eco-friendly agricultural practices (such as cyclic agriculture).

An individual can contribute to the prevention of deforestation by implementing the **3R (Reduce, Reuse, and Recycle) principle** in their daily lives.

### **Government Initiatives:**

A **full-fledged ministry** named the Ministry of Environment, Forests (MoEF) was **established in 1986** to look after all the environment related issues and framing guidelines, policies, and legislation for environmental protection.

It has introduced the **concept of ecomark and eco clubs** and monitors the forest cover area in the country.

**Article 48A** states that: “The state shall endeavour to protect and improve the environment and safeguard forests and wildlife of the country,” while **Article 51A** provides: “It shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers, and wildlife.”

The **Forest Conservation Act, 1980**, deals with the conservation of forests and related aspects. It considers any non-forest activity within a forest area as illegal and makes provision for punishment. There were some amendments made in this act in the year 1990, which further strengthened the law.

**Survey and inventorisation of floral and faunal resources** are carried out by Botanical Survey of India (BSI) and Zoological Survey of India (ZSI). The **Forest Survey of India** assesses the forest cover to develop an accurate database for planning and monitoring purposes.

**Biological Diversity Act 2002** has been enacted and **Biological Diversity Rules 2004** have been notified, which aim at the conservation of biological resources of the country and regulation of access to these resources to ensure equitable sharing of benefits arising out of their use.

**Sacred groves** comprise patches of forests or natural vegetation – from a few trees to forests of several acres – that are usually dedicated to local folk deities or tree spirits (Vanadevatais). These spaces are protected by local communities because of their religious beliefs and traditional rituals that run through several generations.

The **National Mission for a Green India** for enhancing quality of forest cover and improving ecosystem services from 4.9 million hectares (MHA) of predominantly forest lands, including 1.5 MHA of moderately dense forest cover, 3 MHA of open forest cover, 0.4 MHA of degraded grasslands.

**Eco-restoration/afforestation** to increase forest cover and ecosystem services from 1.8 m ha forest/non-forest lands, including scrublands, shifting cultivation areas, abandoned mining areas, ravine lands, mangroves, and sea-buckthorn areas.

Enhancing tree cover in 0.2 MHA **Urban and Peri-Urban areas** (including institutional lands).

**Adoption of cleaner technologies** and the use of improved fuel quality.

Regular **monitoring of industrial units** for environmental compliance.