

# India State of Forest Report 2021 [UPSC Notes]

## What is the India State of Forest Report?

India State of Forest Report (ISFR) is a biennial publication of the Forest Survey of India (FSI), an organization under the Ministry of Environment Forest & Climate Change (MoEFCC). ISFR Full Form is the India State of Forest Report.

- The first India State of Forest Report was published in the year 1987.
- The ISFR contains comprehensive statistics regarding the forests and trees that are present within the Indian territory. This report contains data for individual states, zones, and national levels.

## Forest Classification as per Forest Report 2021

The report classifies India's forests into four categories

- **Very dense Forest** – All lands with tree cover (Including mangrove cover) of canopy density of 70% and above.
- Very dense forests account for just 3.04% of the total forest cover.
- **Moderately Dense Forest** –  $40% < \text{Tree canopy density} < 70\%$ .
- Moderately dense forests account for 9.33% of total forest cover.
- **Open Forest** –  $10% < \text{Tree canopy density} < 40\%$
- The open forests currently have the biggest share in the country's forest cover, accounting for 9.34% of the total forest cover.
- **Scrub** – All forest lands with poor tree growth mainly of small or stunted trees having canopy density less than 10%.

## State of Forest Report 2021

The State of Forest Report 2021 is the 17th such report. Go through the important highlights of Forest Report 2021 to better understand the report details.

## Current Forest Cover as per ISFR 2021

According to the India State of Forest Report 2021, the total forest and tree cover was 80.9 million hectares, which amounted to 24.62% of the geographical area of the country.

- Any forested region which represents a legal status of the land in the Government Records is called Forest Area, whereas the term Forest Cover can be any non-government recognized land having forests in it.

- A tree cover is defined as a region of size smaller than one hectare which is found outside the recorded forest area, this region contains trees of varying size and canopy sizes and is scattered everywhere.

In terms of area, the list of top 5 states in terms of Largest Forest Area in India are given below

- Madhya Pradesh
- Arunachal Pradesh
- Chhattisgarh
- Odisha
- Maharashtra

Considering the forest cover as a percentage of total geographical area, the top 5 states are as follows.

- Mizoram (84.53%)
- Arunachal Pradesh (79.33%)
- Meghalaya (76.00%)
- Manipur (74.34%)
- Nagaland (73.90%)

### Increase in Forest Cover

The forest and the tree cover have increased by 2,261 square kilometers in India since the last assessment conducted in 2019. This marks an increase of 0.4%.

- Forest cover has increased by 1,540 sq. km.
- Tree cover has increased by 721 sq. km.

The five states with the largest increase in forest area are as follows.

- Andhra Pradesh
- Telangana
- Odisha
- Karnataka
- Jharkhand

Other important highlights of India State of Forest Report 2021 is

- The total mangrove cover in the country has increased by 17 sq. km.
- Bamboo forests in India have also registered a growth of approximately 26% from 2019 to 2021.
- The area under “Very Dense Forests” has shown an increase of approximately 500 sq. km.
- Notably, 17 States and Union Territories had more than 33% of their area under forest cover.
- The total carbon stock in forests has been estimated to be 7,204 million tonnes. This marks an increase of 79.4 million tonnes compared to 2019.

### New Features of India State of Forest Report 2021

The report and the survey for the first time ever have included Gir Forest (only habitat of Asiatic Lions), Tiger Reserves, and Tiger Corridors.

- Of the total 32 tiger reserves, forest cover has shown a decadal increase in 20 of them, while the rest of the 10 has shown decreased forest cover.
- Among tiger reserves, the Pakke Tiger Reserve of Arunachal Pradesh has the highest forest cover at almost 97%.

## Concerns in India State of Forest Report 2021

The major concerns in the Indian State of Forest Report 2021 include reduction in natural forests, reduction in forest cover of northeastern and Himalayan states, and impact of climate change. Let's talk about these concerns in brief.

### Reduction in natural forests:

- Though there has been an increase in the total forest area, a major point of concern is that the increase in the very dense forest category has been very nominal and there has in fact been a loss of 1,582 sq km under the Moderately Dense Forest category. "Moderately Dense Forests" are also called "Natural Forests". There has been a considerable increase in the area of open forests which are relatively ecologically poorer as compared to dense and moderately dense forests. This is indicative of forest degradation in India

### Reduction in forest cover of north-eastern and Himalayan states:

- The North-eastern states of Arunachal Pradesh, Manipur, Nagaland, Mizoram, and Meghalaya have registered a considerable decrease in total forest areas. Forest cover in the northeast Indian states has shown an overall decrease of approximately 1000 sq. km.
  - It is worth noting that around 8% of total Indian territory is represented by the 7 northeastern states and yet they represent approximately 24% of the total forest cover of India
- Similar trends have been observed in the Himalayan region states as well. The major reason for this is the increase in developmental activities coupled with agriculture.
- This decline is worrying since these states are repositories of great biodiversity. A decline in the forest cover can lead to a further increase in natural disasters like landslides, and also impact water catchment in the area.

### The adverse impact of climate change:

- By 2030, the report estimates that 45-64% of forests in India will be affected by climate change and increasing temperatures. According to the report estimates, forests in all states (excepting Meghalaya, Assam, Tripura, and Nagaland) will be highly vulnerable climate hotspots.
- 35.46 % of the forest cover is prone to forest fires.