

## Takeaways from Forest Report

### Why in news?

The Ministry of Environment, Forests and Climate Change (MoEFCC) has released the India State of Forest Report (ISFR) 2021.

### What is the India State of Forest Report?

- It is an assessment of India's forest and tree cover
- It is published every 2 years by the Forest Survey of India under the MoEFCC.
- The first survey was published in 1987. ISFR 2021 is the 17th.
- Data is computed through wall-to-wall mapping of India's forest cover through remote sensing techniques.
- ISFR is used in planning and formulation of policies in forest management as well as forestry and agro forestry sectors.

### What are the key findings?

*Total forest and tree cover of the country is 80.9 million hectare, which is 24.62% of the geographical area of the country.*

#### Increase in forest cover

- The forest and tree cover continues to increase over the past two years.
- India's forest cover -
  - o 21.7% in 2020
  - o 21.6% in 2019.
- The states with highest increase in forest cover is in order - Andhra Pradesh, Telangana, Odisha.
- Tree cover has increased by 721 sq km.
- Mangroves have increased by 17 sq km.
- Bamboo forests have grown from 13,882 million culms (stems) in 2019 to 53,336 million culms in 2021.
- The total carbon stock in country's forests is estimated at 7,204 million tonnes, an increase of 79.4 million tonnes since 2019.

#### Decrease in forest cover

- Five states in the Northeast - Arunachal Pradesh, Manipur, Meghalaya, Mizoram and

Nagaland have shown loss in forest cover.

- 35% of the forest cover is prone to forest fires.

## How the growth varies across different kinds of forests?

TYPE OF FOREST	CANOPY DENSITY	Change
<b>Very dense forests</b> (protected and reserve forests)	Over 70%	increased by 500 sq km.
<b>Moderately dense forests.</b> (natural forests)	40-70%	declined by about 1600 sq km
<b>Open forest</b>	10-40%	increased by about 2600 sq km
<b>Scrub area</b> (not categorised as forests)	Less than 10%	increased by 5,320 sq km

- **Inference** - Natural forests has degraded to less dense open forests.
- Complete degradation of forests where scrubs has increased.

## What explains the decline in the North eastern states?

- Forested areas of Mizoram is 84.5% of its total geographical area.
- For Arunachal Pradesh it is 79.3%.
- The two states have respectively lost 1.03% and 0.39% of their forest cover
- Manipur has lost 1.48 %, Meghalaya 0.43%, and Nagaland 1.88%.
- The decline is due to

- o a spate of natural calamities, particularly landslides and heavy rains

- o anthropogenic activities such as shifting agriculture, pressure of developmental activities and felling of trees.

## What is the concern?

- North eastern states are repositories of great biodiversity.
- Declining forests will in turn increase the impact of landslides
- Impact water catchment in the region
- Challenges due to different ownership pattern - community ownership and protected tribal land.

## What else does the report cover?

- ISFR 2021 has some new features.
- For the first time forest cover in tiger reserves, tiger corridors and the Gir forest which houses the Asiatic lion has been assessed
- Between 2011-2021 forest cover in

- o tiger corridors has increased by 37.15 sq km (0.32%),

- o tiger reserves has decreased by 22.6 sq km (0.04%).

- Forest cover has increased in 20 tiger reserves in these 10 years, and decreased in 32.
- Buxa, Anamalai and Indravati reserves have shown an increase in forest cover while the highest losses have been found in Kawal, Bhadra and the Sunderbans reserves.
- Pakke Tiger Reserve in Arunachal Pradesh has the highest forest cover (nearly 97%).

## What will be the impact due to climate change?

- By 2030, 45% of forests will experience the impact.
- **Vulnerable Forests** - except Assam, Meghalaya, Tripura and Nagaland all states will be highly vulnerable climate hot spots.
- Ladakh (forest cover 0.1-0.2%) is likely to be the most affected.
- **Shifting Trends Of Vegetation Types** - India's forests are already showing shifting trends of vegetation types, Sikkim has shown a shift in its vegetation pattern for 124 endemic species.
- **Forest Fire Hotspots** detected by the SNPP\_VIIRS sensor -
  - o In 2019-20 - 1.2 lakh
  - o In 2020-21 - 3.4 lakh.
- The highest numbers of fires were detected in Odisha, Madhya Pradesh and Chhattisgarh.

## What are the shortcomings in the survey?

- Plantations - such as coffee, coconuts or mango are included under forest cover.
- Forest survey is carried out as an assessment of India's biodiversity. Such an overarching survey does not meet that objective, experts say.

### Reference

1. <https://indianexpress.com/article/explained/takeaways-from-india-state-of-forest-report-7722163/>