

2. India State of Forest Report 2021

Prelims Syllabus: National Conservation & Mitigation

Mains Syllabus: GS-III Conservation, environmental pollution and degradation, Environmental Impact Assessment.

Why in News?

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

Highlights of the Report:

- The biennial report by the Forest Survey of India (FSI) is an assessment of the country's forest resources.
- India's forest and tree cover has risen by 2,261 square kilometers in the last two years with Andhra Pradesh growing the maximum forest cover of 647 square kilometers.
- The total tree-and-forest cover in the country includes an increase of 1,540 square kilometres of forest cover and 721 sq km of tree cover compared to the 2019 report.
- India's total forest and tree cover is now spread across 80.9 million hectares, which is 62 per cent of the geographical area of the country.
- The top five states in terms of increase in forest cover are Andhra Pradesh (647 sq km), Telangana (632 sq km), Odisha (537 sq km), Karnataka (155 sq km) and Jharkhand (110 sq km).
- The Gain in forest cover or improvement in forest canopy density may be attributed to better Conservation Measures, Protection, afforestation activities, tree plantation drives and Agroforestry.
- Among the mega cities in the country, Ahmedabad has been the biggest loser when it comes to forest cover.

States with Maximum Forest Cover:

- Area-wise, Madhya Pradesh has the largest forest cover in the country followed by Arunachal Pradesh, Chhattisgarh, Odisha and Maharashtra.
- 17 states/UTs have above 33 per cent of the geographical area under Forest Cover.
- Out of these states and UTs, Lakshadweep, Mizoram, Andaman & Nicobar Islands, Arunachal Pradesh and Meghalaya have more than 75 per cent forest cover.

Mangrove Cover in the Country:

- There is an increase of 17 sq km in mangrove cover in the country as compared to the Previous Assessment of 2019.
- Total mangrove cover in the country is 4,992 sq km.
- Top three states showing mangrove cover increase are Odisha (8 sq km) followed by Maharashtra (4 sq km) and Karnataka (3 sq km).

Carbon Stock:

- The total carbon stock in the country's forest is estimated to be 7,204 million tonnes and there is an increase of 79.4 million tonnes in the carbon stock of the country as compared to the last assessment of 2019.
- The annual increase in the carbon stock is 39.7 Million Tonnes.

Concerns:

- The north-east did not show positive results as the current assessment showed a decrease of forest cover to the extent of 1,020 sq km in the region.
- Arunachal Pradesh lost the maximum forest cover of 257 sq km, followed by Manipur which lost 249 sq km, Nagaland 235 sq km, Mizoram 186 sq km and Meghalaya 73 sq km.
- In total 140 hill districts of the country, the forest cover reduced by 902 sq km in the last two years. In the 2019 report, the forest cover in the hill regions had increased by 544 sq km.

Efforts by Government to Increase Forest Cover in the Country:

- To achieve India's aim of increasing additional carbon sink of 2.5 to 3 billion tonnes CO₂ equivalent by 2030, Nagar Van Yojna has been introduced to increase the tree cover and joined with the second phase of Green Mission in the next five years.

Significant features of ISFR 2021:

- In the present ISFR 2021, FSI has included a new chapter related to the assessment of forest cover in the Tiger Reserves, Corridors and Lion conservation area of India.
- A new initiative of FSI has also been documented in the form of a chapter, where the 'Above Ground Biomass' has been estimated. FSI, in collaboration with Space Application Centre (SAC), ISRO, Ahmedabad, initiated a special study for estimation of Above Ground Biomass (AGB) at pan-India level, using L- band of Synthetic Aperture Radar (SAR) data.

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- FSI in collaboration of with Birla Institute of Technology & Science (BITS) Pilani, Goa Campus has performed a study based on ‘Mapping of Climate Change Hotspots in Indian Forests’. The collaborative study was carried out with the objective to map the climatic hotspots over the forest cover in India, using computer model-based projection of temperature and rainfall data, for the three future time periods i.e. year 2030, 2050 and 2085.
 - The Report also contains information on various parameters State/UT wise. Special Thematic Information on forest cover such as hill, tribal districts, and north eastern region has also been given Separately in the report.

