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
Very dense forests (protected and reserve forests)	Over 70%	increased by 500 sq km.
Moderately dense forests. **(**natural forests)	40-70%	declined by about 1600 sq km
Open forest	10-40%	increased by about 2600 sq km
Scrub area (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/