INDIA STATE OF FOREST REPORT (ISFR) 2023 – REPORT

NEWS: India's green cover has increased by 1,445.81 sq km since 2021, covering a geographical area of 25.17 per cent, as per the 2023 India State of Forest Report.

WHAT'S IN THE NEWS?

- 1. Net Increase in Forest Cover (2021–2023):
 - The total forest cover in India increased by **156.41 sq km** between 2021 and 2023, as per the ISFR 2023.
 - The total geographical area under forest cover now stands at **7,15,342.61 sq km**, which constitutes **21.76%** of the country's total geographical area.
 - This reflects a marginal rise of **0.05%** in forest cover compared to the 2021 assessment.
- 2. Green Cover (Forest and Tree Cover Combined):
 - Tree cover increased by 1,285.4 sq km, contributing to an overall rise in green cover of 1,445.81 sq km.
 - The combined forest and tree cover now extends over 25.17% of India's total geographical area.

Changes in Forest Cover by Density

- 1. Very Dense Forests (VDF):
 - Forest areas with a canopy density of 70% or more saw an increase of **2,431.50** sq km, marking the largest gain among the three density categories.
- 2. Moderately Dense Forests (MDF):
 - Forest areas with a canopy density of 40% to 70% experienced a decline of 1,234.95 sq km, indicating a reduction in these medium-density forests.
- 3. Open Forests (OF):
 - Forest areas with a canopy density of 10% to 40% decreased by **1,189.27 sq km**, showing a notable loss in sparsely forested regions.
- 4. Western Ghats Forests:
 - The eco-sensitive areas of the Western Ghats lost **58.22 sq km** of forest cover since 2013.
 - While **VDF** in the region increased by **3,455.12 sq km**, there were significant reductions in **MDF** (**1,043.23 sq km**) and **OF** (**2,480.11 sq km**).

Forest Cover Outside Recorded Forest Areas (RFAs)

1. Net Increase in Non-RFA Areas:

- A significant portion of the forest cover increase, totaling **149.13 sq km**, occurred outside RFAs.
- These areas include lands that are not classified as reserved or protected forests.

2. Minimal Increase in RFAs:

• Only **7.28 sq km** of the net forest cover increase was recorded within RFAs, highlighting limited growth in protected areas.

3. States with Maximum Increase in RFAs:

• Mizoram recorded the highest increase in RFA forest cover with 192.92 sq km, followed by Odisha (118.17 sq km), Karnataka (93.14 sq km), West Bengal (64.79 sq km), and Jharkhand (52.72 sq km).

Mangrove Cover

1. Total Mangrove Area:

• India's mangrove cover now spans 4,991.68 sq km, constituting 0.15% of the country's total geographical area.

2. Net Decline in Mangrove Cover:

- There was a reduction of **7.43 sq km** in mangrove cover compared to 2021.
- The largest decrease was recorded in Gujarat (36 sq km), followed by the Andaman and Nicobar Islands (4.65 sq km).

Regional Analysis of Forest Cover

1. Northeastern States:

- The northeastern region recorded a collective decline of 327.30 sq km in forest cover.
- Mizoram was the only northeastern state to report an increase in forest cover, gaining 178 sq km.
- The highest declines were observed in Nagaland, Tripura, Meghalaya, and Assam.

2. Top States with an Increase in Green Cover:

- Chhattisgarh witnessed the largest rise in forest and tree cover, adding 683.62 sq km.
- Other major contributors include Uttar Pradesh (559.19 sq km), Odisha (558.57 sq km), and Rajasthan (394.46 sq km).



3. States with the Largest Decline:

- Madhya Pradesh reported the highest loss in forest and tree cover, with a decrease of 612.41 sq km.
- Significant losses were also observed in Karnataka (459.36 sq km), Ladakh (159.26 sq km), and Nagaland (125.22 sq km).
- 4. States with the Largest Forest and Tree Cover (Area-Wise):
 - Madhya Pradesh leads with 85,724 sq km, followed by Arunachal Pradesh (67,083 sq km) and Maharashtra (65,383 sq km).

Carbon Stock

- 1. Increase in Carbon Stock:
 - India's carbon stock increased by **81.5 million tonnes** compared to the 2021 assessment, reflecting the role of forests in carbon sequestration.

Classification of Forest Cover

- 1. **Definitions by Canopy Density**:
 - Very Dense Forests (VDF): Areas with canopy density $\geq 70\%$.
 - Moderately Dense Forests (MDF): Areas with canopy density $\geq \frac{40}{\%}$ but $\leq 70\%$.
 - Open Forests (OF): Areas with canopy density $\geq 10\%$ but < 40%.

Mapping Methodology

- 1. Forest Cover Mapping Process:
 - Forest cover mapping is conducted using satellite data to identify all lands with a tree canopy density ≥ 10% over areas larger than 1 hectare.
 - These areas include orchards, bamboo, and palm plantations, regardless of ownership or legal status.
- 2. Expanded District Coverage:
 - The 2023 ISFR mapped forest cover across **751 districts**, an increase from the **636** districts mapped in the 2021 report.

Source: https://indianexpress.com/article/india/india-forest-tree-cover-govt-report-9737617/