



## Study on Eastern Ghats

### Why in News?

University of Hyderabad has studied historical maps and satellite images of Eastern Ghats from 1920 to 2015 to understand the changes in land use and land cover.

### Why Eastern Ghats is important?

- The Eastern Ghats is spread across Odisha, Andhra Pradesh, Karnataka and Tamil Nadu.
- It plays important role in modulating climate, fostering biodiversity, providing sustenance and storing energy in trees.
- They play a significant role in the monsoon break of both North-East and South-West Monsoon.
- Many animals, including tigers and elephants, 2600 plant species and some 400 bird species are found in these discontinuous forests.
- New research findings arguing that the Ghats face a serious threat from climate change, and temperature variations are a cause for worry.
- Another study shows that it has lost almost 16% of its forest area over a span of 100 years.

### What does the study reveal?

- **Forest cover** - The forest cover was 43.4% of the total geographical area in 1920 and has reduced drastically to 27.5% in 2015.
- **Forest area** - Over the years, 8% forest area was converted into agricultural fields, while 4% converted into scrub or grassland.
- They also found that the number of patches of land had increased indicating fragmentation.
- Eastern Ghats being home to many plant species, this fragmentation and destruction can pose a serious threat to the endemic plants.

### What does the study reveal about the threats to species?

- The sampling points are found across the four States where the plants are

monitored regularly.

- The study has found that there is fragmentation in areas where several rare, endangered, threatened and endemic species are found.
- It has also found that the best suitable habitats for the plant species have decreased in the Eastern Ghats.
- While agriculture was the main reason for deforestation during the early years, post 1975, mining and other developmental activities such as the construction of dams, roads were the culprits.

### **What is the international commitment?**

- India is committed to the Paris Agreement on Climate Change.
- Under this agreement, it should create an additional carbon sink of 2.5 to 3 billion tonnes through enhanced forest and tree cover.
- Yet, forest protection policies have often failed dismally.
- Schemes for restoration of forest peripheries through indigenous plant and tree species that match the national commitments could be done.
- These schemes could qualify for international climate finance and must be pursued.

### **What could be done?**

- Relieving the pressure on forests can be done through policies that reduce extraction of scarce resources and incentivise settled agriculture.
- Decisive steps need to be taken for mitigating carbon emissions.
- Improving tree cover will confer benefits like monsoon modulation, improved air quality and wider spaces for biodiversity to persist.
- There are many tribal communities in this region and the government needs fund more studies and monitoring programmes in this region.

**Source: The Hindu**



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