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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