Western Ghats

पश्चिमी घाट

The Western Ghats

Introduction:

The Western Ghats are a prominent mountain range along the western coast of India. Rich in biodiversity, they are recognized as a global biodiversity hotspot and are home to numerous endemic species.

1. What are the Western Ghats?

- The Western Ghats are a chain of mountains that run parallel to the western coast of India.
- They are ancient mountains, formed around 150 million years ago during the breakup of the supercontinent Gondwana.
- The Western Ghats are considered one of the world's ten "Hottest biodiversity hotspots."

2. Where are they located?

 The Western Ghats extend over 1,600 km from the state of Gujarat in the north to Kerala in the south, passing through Maharashtra, Goa, Karnataka, and Tamil Nadu.

3. **Area**:

• The Western Ghats cover an area of approximately 164,000 square kilometers.



4. Why are they so important?

- The Western Ghats are home to a rich variety of flora and fauna, many of which are found nowhere else in the world.
- They are vital for the ecological balance of the region and serve as a significant water catchment area.
- The Ghats influence the Indian monsoon weather patterns that mediate the warm tropical climate of the region. They act as a barrier to rain-laden monsoon winds that sweep in from the south-west.
- The Ghats play a crucial role in regulating the climate and supporting the livelihoods of millions of people who depend on the region's natural resources.

5. World Heritage Site status:

 In 2012, UNESCO designated the Western Ghats as a World Heritage Site due to its exceptional biodiversity and endemism.

6. Vegetations and forests:

- The Western Ghats host a variety of vegetation types, including tropical evergreen forests, semi-evergreen forests, moist deciduous forests, and unique grasslands known as "shola."
- The region is home to over 7,500 species of flowering plants, including several endemic species.

7. Wild animals present in the Western Ghats:

- The Western Ghats are home to a diverse array of wildlife, including Indian elephants, Bengal tigers, lion-tailed macaques, Indian bison, and several species of deer.
- The region also supports a rich avifauna, with over 500 species of birds, including the endemic Malabar grey hornbill and Nilgiri flycatcher.

8. Iconic and endemic species of the region:

- Iconic species: Indian elephant (Elephas maximus indicus), Bengal tiger (Panthera tigris tigris)
- Endemic species: Nilgiri tahr (Nilgiritragus hylocrius), Malabar civet (Viverra civettina)

9. Major national parks and biosphere reserves in the Western Ghats:

- National parks: Periyar National Park, Silent Valley National Park, Bandipur National Park
- Biosphere reserves: Nilgiri Biosphere Reserve, Agasthyamalai Biosphere Reserve, Seshachalam Biosphere Reserve

10. Tiger and elephant population in the Western Ghats:

- The Western Ghats are home to an estimated 2,000 Bengal tigers, making it one of the most significant tiger habitats in India.
- The region also supports around 11,000 Indian elephants, which are vital for maintaining the region's ecological balance.

11. Threats to the Western Ghats:

- Deforestation and habitat loss due to urbanization, agriculture, and infrastructure development
- Pollution from industries and agricultural runoff
- Climate change and its impacts on the region's biodiversity
- Poaching and illegal wildlife trade

12. Why we must protect the Western Ghats:

- To preserve the region's unique biodiversity and endemic species
- To maintain the ecological balance and support the livelihoods of millions of people who depend on the region's natural resources
- To safeguard crucial water catchment areas that provide water to major rivers and cities
- To mitigate the impacts of climate change and maintain the region's role as a carbon sink

14. Gadgil Committee

Formation: The Gadgil Committee, officially known as the Western Ghats
 Ecology Expert Panel (WGEEP), was established in 2010 by the Indian Ministry
 of Environment and Forests. The panel was led by eminent ecologist Dr.
 Madhav Gadgil.

- Objective: The committee's objective was to assess the ecology and biodiversity of the Western Ghats and provide recommendations for their conservation, sustainable development, and management.
- Main recommendations:
 - The entire Western Ghats should be declared as Ecologically Sensitive Areas (ESA).
 - The Western Ghats should be divided into three zones (ESZ I, II, and III)
 based on their ecological sensitivity, with ESZ I being the most sensitive.
 - No new mining, dams, or polluting industries should be allowed in the most sensitive zones.
 - Existing polluting industries in these zones should be phased out within a stipulated time frame.
 - Local communities should be involved in decision-making related to the development and conservation of the Western Ghats.
 - Establishment of Western Ghats Management Authority
- Criticisms: The Gadgil Committee report faced opposition from various stakeholders, particularly state governments, as it was perceived to be too restrictive and could hinder economic development in the region.

15. Kasturirangan Committee

- Formation: The Kasturirangan Committee, officially known as the High-Level Working Group (HLWG), was constituted in 2012 by the Indian Ministry of Environment and Forests in response to the criticisms faced by the Gadgil Committee. The panel was led by former Indian Space Research Organisation (ISRO) chief, Dr. K. Kasturirangan.
- Objective: The committee's objective was to review the Gadgil Committee
 report and provide an alternative approach to strike a balance between
 development and environmental protection in the Western Ghats.
- Main recommendations:
 - Instead of declaring the entire Western Ghats as ESA, only 37% of the area (consisting of 60,000 sq. km) should be classified as ESA.

- The ESA should be demarcated into two categories: Natural Landscapes (with very limited development) and Cultural Landscapes (with regulated development).
- A complete ban on mining, quarrying, and sand mining should be imposed in ESA.
- A strict regulation on activities like construction, mining, and industrial development in the identified ESA.
- Encourage ecotourism and sustainable agriculture in the region.
- Criticisms: The Kasturirangan Committee report was criticized for diluting the
 recommendations of the Gadgil Committee and allowing more development
 activities in ecologically sensitive areas. Some environmentalists also raised
 concerns about the accuracy of the satellite data used for demarcating the
 ESAs.

16. **2022 challenge to the two reports**

- The Supreme Court in September 2022 rejected a legal case against two committees focused on the Western Ghats Ecologically Sensitive Area (ESA).
- ESAs are special zones designated by the Ministry of Environment to protect ecosystems around National Parks and Wildlife Sanctuaries.
- The legal case aimed to stop the implementation of the recommendations from the Gadgil Committee and the Kasturirangan Committee.
- It also asked the court to declare a 2018 notification as invalid, arguing it could violate citizens' Right To Life in the Western Ghats, especially Kerala.
- The case urged the court to follow a 2014 report by an expert committee from Kerala, which suggested changes to Environmentally Fragile Land (EFL) rules.
- The Supreme Court dismissed the case, noting that a newer draft notification was issued in July 2022, which addressed the concerns raised.
- This new notification restricts harmful activities like mining, thermal power plants, and polluting industries in the ESA.

17. Other Steps taken to protect the Western Ghats:

- Implementation of conservation policies and laws, such as the Wildlife Protection Act (1972) and the Forest (Conservation) Act (1980)
- Establishment of protected areas, including national parks, wildlife sanctuaries, and biosphere reserves
- UNESCO World Heritage Site designation to encourage conservation and sustainable management of the region
- Collaborative efforts between government agencies, non-governmental organizations, and local communities to promote conservation and sustainable development
- Initiatives to combat poaching and illegal wildlife trade, such as increased patrolling and stricter penalties for offenders
- Promotion of ecotourism to generate revenue for conservation efforts and raise awareness about the region's biodiversity
- Research and monitoring programs to study the Western Ghats' ecosystems and inform conservation strategies
- Reforestation and habitat restoration projects to counter deforestation and habitat loss
- Education and awareness campaigns to engage local communities in conservation efforts and promote sustainable use of natural resources

