

GEOGRAPHY – MODULE 3.1

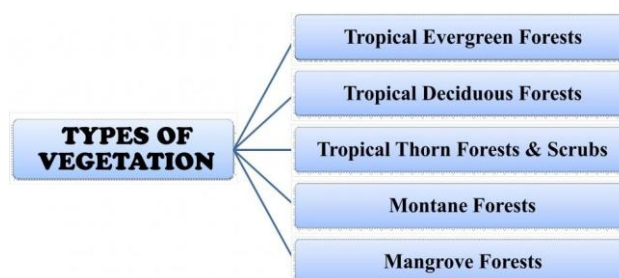
NATURAL VEGETATION

- Refer to a plant community – naturally grown without human support.
- India is a land of great variety of natural vegetation.
- Himalayan heights are marked with temperature, vegetation, western ghats and the Andaman Nicobar Islands have tropical rainforest, the Deltaic regions have tropical forest and mangroves, desert and semi desert area of Rajasthan are known for Cacti – the wide variety of bushes and thorny vegetation.

Constitutional Provision:

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| Forest is included in – Concurrent List – 7 th schedule of the Indian Constitution. |
| Through the 42 nd Amendment Act – 1976 forest and protection of wild animals and birds – transferred from State to Concurrent list. |
| Article 51 A(g) – it shall be the fundamental duty of every citizen to protect and improve the natural environment including forest and wild life. |
| Article 48 A – Directive Principles of State Policy – mandates that the State shall endeavour to protect and improve the environment and to safeguard the forest and wildlife of the country. |
| India’s forest is currently governed by the National Forest Policy, 1988 – which has governmental balance and livelihood at its centre. |
| According to India State of Forest Report, 2019 – tree and forest cover together made up 24.56% - 8,07,276 sq. km. of India’s area. |
| The country is pursuing a long-term goal of having 33% of its under-forest cover. |

Based on Average Annual Rainfall – in India the forest can be categorized into five:



TROPICAL EVERGREEN FOREST:

| MOIST EVERGREEN FOREST | SEMI EVERGREEN FOREST | DRY EVERGREEN |
|--|---|---|
| <p>Region – southern India Along with western ghats. Andaman and Nicobar Islands. North eastern region.</p> <p>Climatic Condition – warm and humid areas. Annual precipitation of over 200 cm. Mean temperature above 22-degree C.</p> <p>Trees – reach great the height up to 60m and above. Nor definite time to shed their leaves, flowering and fruiting. Appears green whole year. Spices – Rosewood, Mahogany, Aini, Ebony. Common trees – jackfruit, betel nut</p> | <p>Region – western ghats. Andaman and Nicobar Islands. Eastern Himalayas.</p> <p>Climatic Condition - Less rainy part regions where moist evergreen forest is found.</p> <p>Trees – moist evergreen and moist deciduous trees. Under growing climbers. Main species – White Cedar, Hollock, Kail.</p> | <p>Region – Shivalik Hills and Foothills of the Himalayas up to the height of 1000m in the north. Andhra Pradesh and Karnataka.</p> <p>Climatic Condition – prolonged hot. Dry season and cold winter.</p> <p>Trees – hard leaved evergreen trees with fragrant flowers. With few deciduous trees. Varnished look. Common ones are pomegranate, olive.</p> |

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| palm, jamun, mango, Hollock. | | |
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TROPICAL DECIDUOUS FOREST – MONSOON FOREST

| MOIST DECIDUOUS FOREST | DRY DECIDUOUS FOREST | THORN FOREST |
|---|---|--|
| <p>Region – North eastern states. Foothills of Himalayas. Eastern slopes of Western Ghats and Odisha.</p> <p>Rainfall – between 100 - 200 cm.</p> <p>Trees – broad, branched trunks. Teak, Sal, Shisham, Hurra, Mahua, Amia,</p> | <p>Region – Northern part of the country. Except North East. Madhya Pradesh, Gujarat, Andhra Pradesh, Karnataka, Tamil Nadu.</p> <p>Rainfall –70 – 100 cm.</p> <p>Trees – trees shed their leaves in the dry season. Appears like a vast grassland with naked trees.</p> | <p>Region – areas with black soil. North west, Central and South India. Semi – arid south west Punjab, Haryana, Rajasthan, Gujarat, Madhya Pradesh, Uttar Pradesh.</p> <p>Rainfall – annual rainfall less than 50 cm.</p> <p>Trees - do not grow beyond 10metres. Grasses and shrubs. Spurge, Capre, Cactus.</p> |

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| Semul, Kusum, Sandalwood. | | Seems leafless during most part of the year. Babul, Acacia, Kokko, Khajuri, Ber, Neem, Khejri, Palas – species. |
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MONTANE FOREST

| MONTANE WET TEMPERATURE FOREST | MONTANE SUBTROPICAL FOREST |
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| <p>Region – Northern and Southern India. North - East of Arunachal Pradesh. South – Nilgiris and Western Ghats.</p> <p>Climatic Condition – minimum rainfall of 200 cm.</p> <p>Trees – north denser than south. Eucalyptus. Rhododendrons, Champa, Ground flora.</p> | <p>Region – North West Himalayas. Except – Ladakh, Kashmir. Himachal Pradesh, Uttarakhand, Sikkim, Arunachal Pradesh.</p> <p>Climatic Condition – average rainfall of 100-200 cm. Temperature varies between 15 degree C – 22degree C.</p> <p>Trees – Chir or Pine, Oak, Jamun, Rhododendrons.</p> |

| HIMALAYAN MOIST FOREST | HIMALAYAN DRY TEMPERATURE |
|---|---|
| <p>Region – Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Northern hilly parts of Bengal. Altitude varies between 1000 – 2000 meters.</p> | <p>Region – Jammu and Kashmir, Lahaul and Kinnaur district in Himachal Pradesh, Sikkim.</p> <p>Trees – Oak, Mulberry, Willow, Maple, Coniferous, Deodar, Chilogoza.</p> |

Trees – Oak, Chestnut, Chir, Sal,
Shrubs, nutritious grass.

ALPINE AND SUBALPINE FOREST

Region – Kashmir to Arunachal Pradesh.
Altitude of 2,500 – 4000 meters.

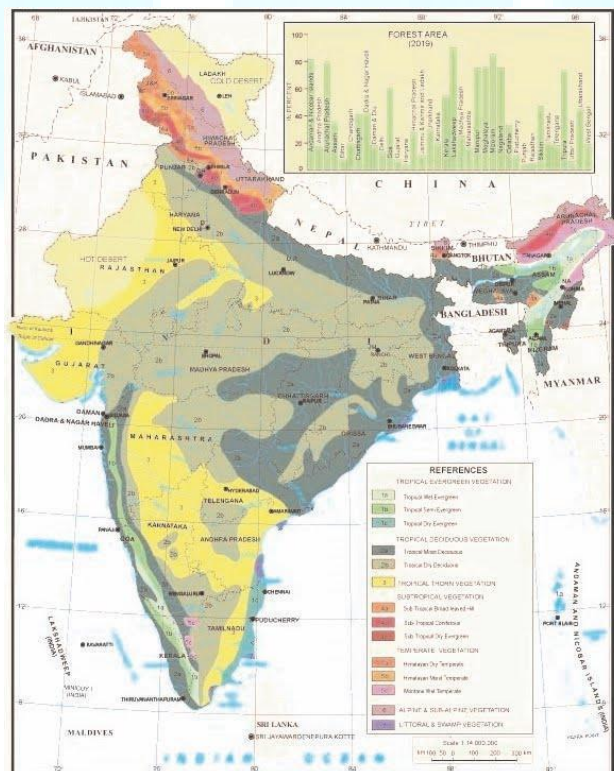
Trees –
Western Himalayas – Juniper,
Rhododendrons, Willow, Black Currant.
Eastern parts – Red fir, Black Juniper, Birch,
Larch.

LITTORAL OR SWAMP FOREST

Region – Andaman and Nicobar
Islands.

Delta area of Ganga and
Brahmaputra.

Trees – dense and impenetrable.
Limited number of plants.
Roots with soft tissue.
Plants can breathe in water.
Whistling Pines, Mangrove Dates,
Palms, Bulletwood.



MANGROVE IN INDIA

In India Mangrove Forest spread over about – 6,740 sq.km.

7% - of the world's mangrove forests.

Shoreline and protect the coastal areas from erosion.

Sunderbans – along with Ganges delta is the largest tidal forest in the world.

