

CHAPTER-5

NATURAL VEGETATION AND WILDLIFE

Natural vegetation

- ❖ Natural vegetation refers to a plant community which has grown naturally without human aid & has been left undistributed by humans for a long time.
- ❖ This is termed as a virgin vegetation.
- ❖ Thus, cultivated crops and fruits, orchards form part of vegetation but not natural vegetation

Some Facts

- India is one of the 12 mega diversity countries of the world.
- Four Biodiversity Hotspots are present in India
16 major forest groups are present in India.
- India is also very rich in agro diversity.

ECOSYSTEM

- All the plants & animals in an area are interdependent & interrelated to each other in their physical environment, thus, forming an ecosystem.
- Human beings are also integral part of the ecosystem .
- The human beings utilize the vegetation and wildlife.
- A very large ecosystem on land having distinct types of vegetation & animal life is called a biome.
- The biomes are identified on the basis of plants.

TYPES OF VEGETATION

The following major types of vegetation may be identified in our country-

- TROPICAL EVERGREEN FORESTS
- TROPICAL DECIDUOUS FORESTS
- TROPICAL THORN FORESTS AND SCRUBS
- MONTANE FORESTS
- MANGROVE FORESTS

TROPICAL EVERGREEN FORESTS

- TROPICAL EVERGREEN FORESTS OCCUR IN REGIONS OF VERY HEAVY RAINFALL [MORE THAN 200CM PER YEAR] .
- THESE FORESTS ARE VERY DENSE.
- THEY HAVE MAINLY EVERGREEN TREES, WHICH DO NOT SHED THEIR LAVES ACROSS SEASONS .
- HENCE THEY REMAIN GREEN THROUGHOUT THE YEAR.
- THE WESTERN GHATS AND THE WESTERN COAST , PARTS OF WEST BENGAL AND ORRISA , THE NORTH-EASTERN STATES AND THEANDAMAN AND NICOBAR ISLANSHANE SUCH VEGETATIONS.
- MAHOGANY, CINCHONA AND WILD RUBBER ARE SOME OF THE COMMERCIALLY IMPORTANT HARDWOOD TREES THAT GROW IN THESE AREAS . BAMBOO ALSO GROW HERE.

Tropical deciduous forests

- Tropical Deciduous Forest is also known as monsoon forest.
- It is the most common type of forest in India.
- It occurs over a large part of the country where the annual rainfall varies between 100cm and 200cm.
- Deciduous trees shed their leaves in the beginning of summer.
- Forests of teak, sal, palash, peepal, rosewood, sandalwood, ebony and shisham occur in the wetter parts of the Deccan plateau and the northern plains, right upto the foothills of the Himalyas. Bamboo, too, grows in these regions

TYPES OF DECIDUOUS FORESTS

- Dry deciduous forests
- Moist deciduous forests

THE THORN FORESTS AND SCRUBS

In regions with less than 70 cm of rainfall, the natural vegetation consists of thorny trees and bushes. This type of vegetation is found in the north-western part of the country, including semi-arid areas of Gujarat, Rajasthan, Madhya Pradesh, Chhattisgarh, Uttar Pradesh and Haryana. Acacias, palms, euphorbia's and cacti are the main plant species. Trees are scattered and have long roots penetrating deep into the Soil in order to get moisture. The stems are succulent to conserve water. Leaves are mostly thick and small to minimize evaporation. These forests give way to thorn forests and scrubs in arid areas.

MANGROVE FORESTS

- MANGROVE FORESTS ARE **found** in swampy areas that are constantly washed by seawater during high tides.
- Such vegetation is found almost all along the eastern coast, especially in the large deltas formed by river life the Ganga, Mahanadi , Godavari , Krishna and kaveri.
- The most extensive MANGROVE forest is in the Ganga –Brahmaputra delta .
- it is called the sundarbans after the sundari, the tree that grow more abundantly in this region.
- The wood of this tree is durable and is used to make boats. Mangroves are also found in the Andaman and Nicobar islands.

MONTANE FORESTS

- The vegetation in the mountains varies with altitude.
- In the Himalayas, it ranges from tropical deciduous to coniferous.
- Coniferous trees such as cedars, pines, and silver fir are generally found at heights between 1500m to 2500m. Coniferous trees are often conical in shape.
- Also, most of them bear cones and have needle-shaped leaves.
- At heights of about 3,000m and above, trees give way to what is known as alpine vegetation of shrubs and grasses.

IMPORTANCE OF FORESTS

- FORESTS ARE RENEWABLE RESOURCES.
- THEY PLAY A MAJOR ROLE IN ENHANCING THE QUALITY OF ENVIRONMENT.
- IT CONTROL SOIL EROSION, REGULATE STREAM FLOW, SUPPORTS A VARIETY OF INDUSTRIES, PROVIDE LIVELIHOOD FOR MANY COMMUNITIES .
- IT CONTROL WIND FORCE AND TEMPERATURE AND CAUSES RAINFALL.

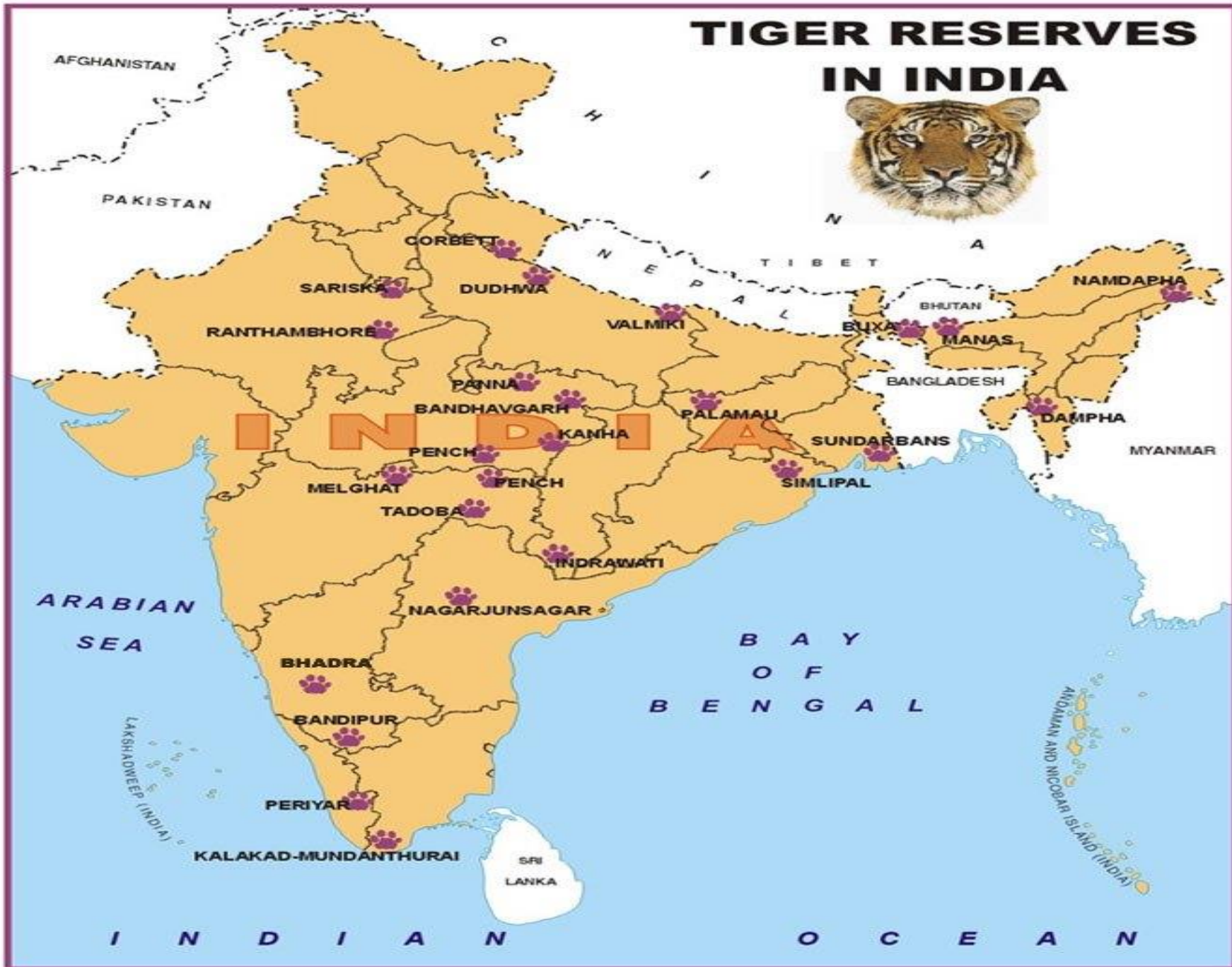
CONSERVING FORESTS

- Forests are the natural wealth of a country, and need to be protected.
- At one time forests in india covered a large area.
- But cutting down trees for wood and clearing the forests for cultivation have reduced this cover.
- The loss of forests is called deforestation.
- India needs not only maintain its existing forest cover but also to increase it.
- This can be done by planting a large number of trees.

WILDLIFE

- India is also rich in its fauna. It has more than 89,000 of animal species .
- The country has more than 1200 species of birds.
- The constitute 13% of the world's total. There are 2500 species of fish, which account for nearly 12% of the world's stock.
- It also shares between 5 & 8 percent of the world's amphibians, reptiles & mammals.

TIGER RESERVES IN INDIA



WHAT GOVERNMENT HAS DONE?

- Financial and technical assistance is provided to many botanical gardens since 1992.
- Project Tiger , Project Rhino, Project Great Indian Bustard and many others Eco-developmental Projects have been introduced.
- 89 National Parks, 490 Wildlife Sanctuaries have been set up to take care of Natural Heritage
- 14 biosphere reserves have been set up in the country to protect flora and fauna.
- Financial and technical assistance is provided to many botanical garden

MEDICINAL PLANTS IN INDIA

- INDIA HAS SOME 2,000 SPECIES OF PLANTS DESCRIBED IN AYURVEDA.
- ABOUT 500 OF THE PLANTS ARE IN REGULAR USE.
- THE COMMONLY USED PLANTS ARE:
 - SARPAGANDHA
 - JAMUN
 - ARJUN
 - BABOOL
 - NEEM
 - TULSI PLANT
 - KACHNAR

CONCLUSION

- All of must realize the importance of the natural ecosystem for our own survival.
- We should end indiscriminate destruction of natural environment .