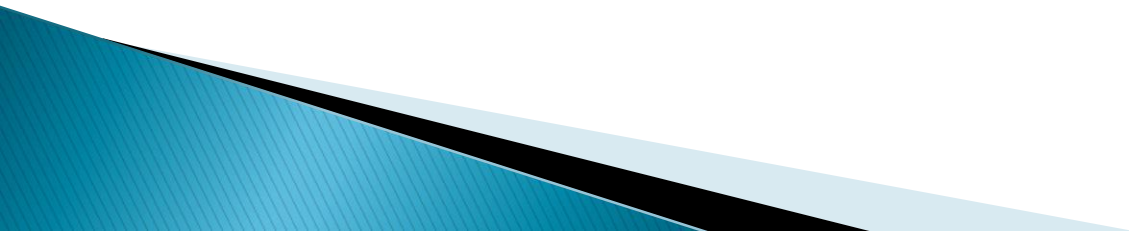
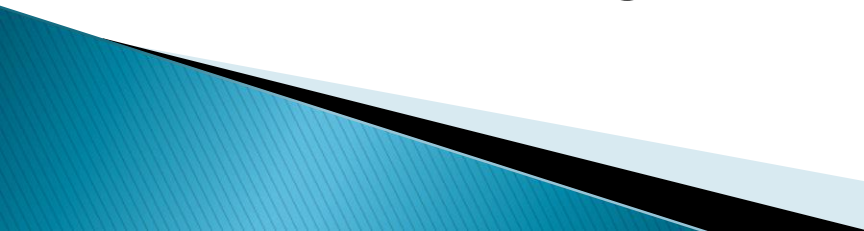



INTRODUCTION TO INDIAN GEOGRAPHY



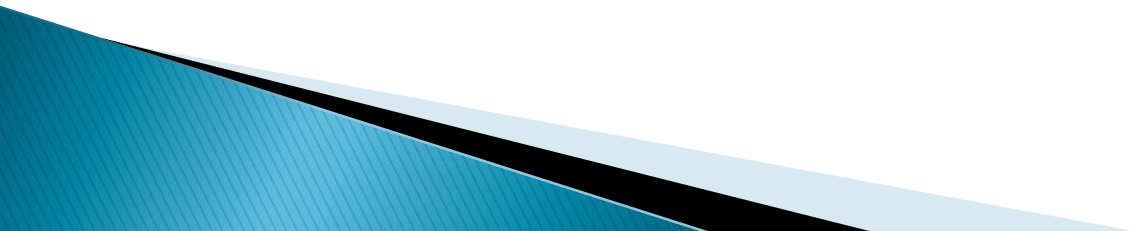
- ▶ India lies on the Indian Plate, the northern part of the Indo–Australian Plate, whose continental crust forms the Indian subcontinent.
- ▶ The country is situated north of the equator between $8^{\circ}4'$ north to $37^{\circ}6'$ north latitude and $68^{\circ}7'$ east to $97^{\circ}25'$ east longitude

- ▶ On the south, India projects into and is bounded by the Indian Ocean—in particular, by the Arabian Sea on the west, the Lakshadweep Sea to the southwest, the Bay of Bengal on the east, and the Indian Ocean proper to the south

- The northern frontiers of India are defined largely by the Himalayan mountain range, where the country borders China, Bhutan and Nepal.
 - Its western border with Pakistan lies in the Karakoram range, Punjab Plains, the Thar Desert and the Rann of Kutch salt marshes.
 - In the far northeast, the Chin Hills and Kachin Hills, deeply forested mountainous regions, separate India from Burma.
 - On the east, its border with Bangladesh is largely defined by the Khasi Hills and Mizo Hills, and the watershed region of the Indo–Gangetic Plain.
- 

- The Ganga is the longest river originating in India.
 - The Ganga–Brahmaputra system occupies most of northern, central, and eastern India, while the Deccan Plateau occupies most of southern India.
 - Kangchenjunga, in the Indian state of Sikkim, is the highest point in India at 8,586 m (28,169 ft) and the world's third highest peak.
 - The climate across India ranges from equatorial in the far south, to alpine and tundra in the upper regions of the Himalayas.
- 

LOCATION AND LANDSCAPES



A vintage-style world map with a magnifying glass over India and a compass rose in the bottom left corner. The map is aged and yellowed, with a grid of latitude and longitude lines. The magnifying glass has a wooden handle and a brass frame, focusing on the Indian subcontinent. The compass rose is circular with a black face and white markings, showing cardinal and intercardinal directions. The text 'Geographical Features of India' is overlaid on a black banner at the bottom of the map.

Geographical Features of India

Geographical features of India

- The Northern Mountain Region
- The North Indian plains/Great plains
- The Peninsular Plateau
- Central Highlands
- The Coastal Plains
- The Great Indian desert
- The islands

1. THE NORTHERN MOUNTAIN REGION



It includes mountain ranges and plateaus of Kashmir, the Himalayas and hill ranges of northeast

The Himalayan Ranges

Himalayas consist of three parallel mountain ranges

☀️ **The great Himalayas (Himadri)- 6000mtr**

- Asymmetrical in nature
- Core of this part of Himalayas is composed of granite

☀️ **The Lesser Himalayas (Himachal)- 3,700 -4,500mtr**

- Rugged mountain system
- Composed of highly compressed and altered rocks

☀️ **Shiwaliks –Outermost – 900-1100mtr**

- Outer most range
- Composed of unconsolidated sediments



- **The word Himalaya means “Abode of snow”**
- **Himalaya starts from Pamir knot**
- **Large Indian perennial rivers like Indus, Ganga, Brahmaputra are originate from the Himalayas**
- **It is the natural boundary separating India from other countries in north**



- **Highest and youngest mountain range in the Planet. -**
- **Mount Everest is the Highest Peak (7200mtr)**
- **It is the home for various flora and fauna includes endangered snow leopard, red panda, Himalayan tahr, goral, musk deer etc.**



Himalayan Tahr

2.THE NORTH INDIAN PLAINS



Fertile plains encompassing most of northern and eastern India

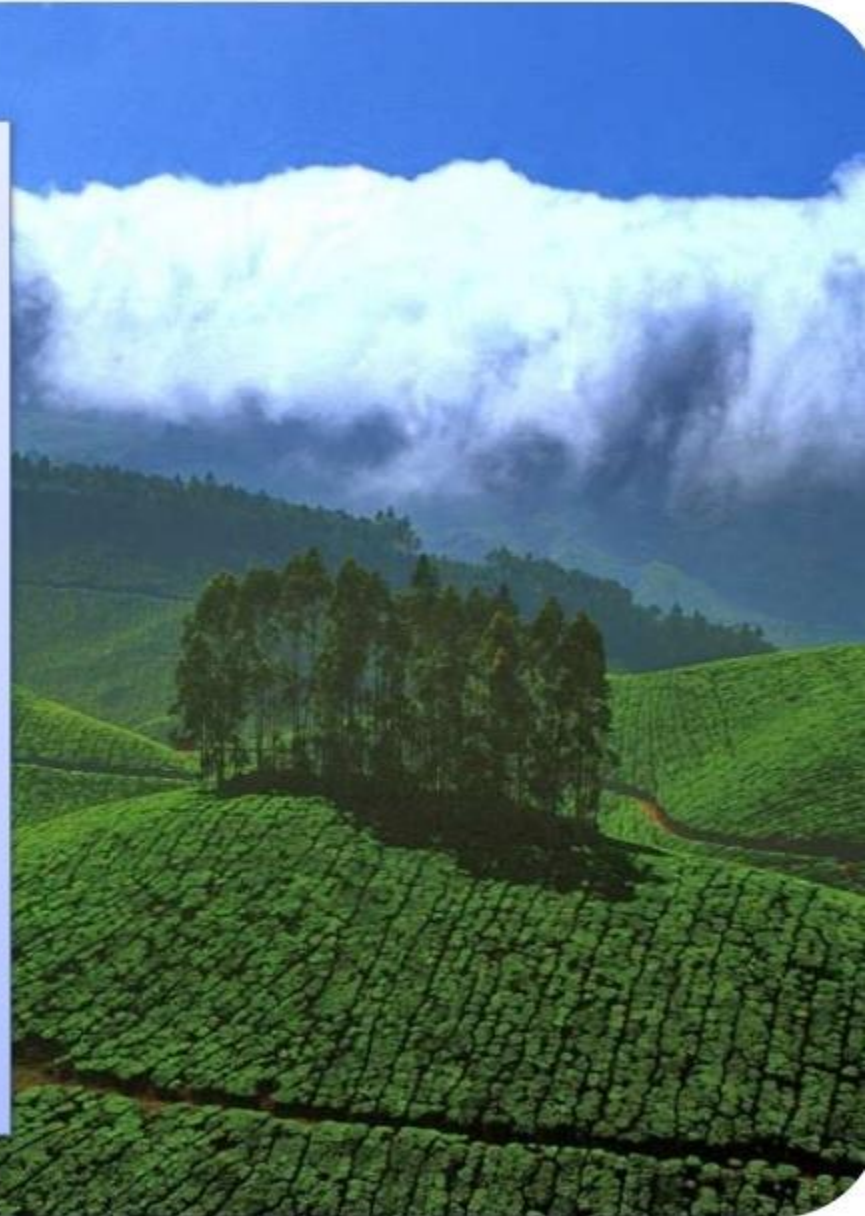
FACTS ABOUT NORTH INDIAN/GREAT PLAINES

- Formed by the interplay of three major river systems, namely– the **Indus**, the **Ganga** and the **Brahmaputra**
- **2400**km long
- One of the densely populated region in the world
- This open plains were home to large number of herbivorous like Rhinoceros, Elephants, Buffalo, Hippo etc.
- Fertile agricultural land due to the huge quantity of silt brought by Himalayan rivers
- The Ganga along with Brahmaputra has formed a vast delta, called “**Sunder bans**”



3.The Peninsular Plateau

- ◆ The plateau is surrounded by Western Ghats in the west Eastern Ghats in the east and Satpura range to north
- ◆ Contains Old, Hard Crystalline rocks
- ◆ It is triangular shaped
- ◆ The Narmada river valley divides the peninsular plateau into Malwa Plateau and Deccan Plateau



Deccan Plateau



● The **Deccan Plateau** is a large plateau in southern India

● The plateau is located between two mountain ranges, the Western Ghats and the Eastern Ghats

● The northwestern part of the plateau is made of lava flows known as the Deccan Traps

● This Plateau is home to grazing animals like Four-horned antelope, Chinkra, Blackbuck, Wild water buffalo.

● The major tourism attractions in deccan plateau are Badami, Belgaum, Bidar, Hampi etc



MALWA PLATEAU



- The plateau comprises central Madhya Pradesh and southeastern Rajasthan .
- Elevation from about 1,650 to 2,000 feet.
- Malwa has mostly agrarian economy, where oilseeds, cotton, legumes and cereal grains are the main cash crops.
- Important tourist attractions in this region are **Mandu Valley, Maheshwar Fort, Mahakal Temple, Kanch Mandir, Shipra River.**



Sinhastha Fair (KUMBH-MELA)

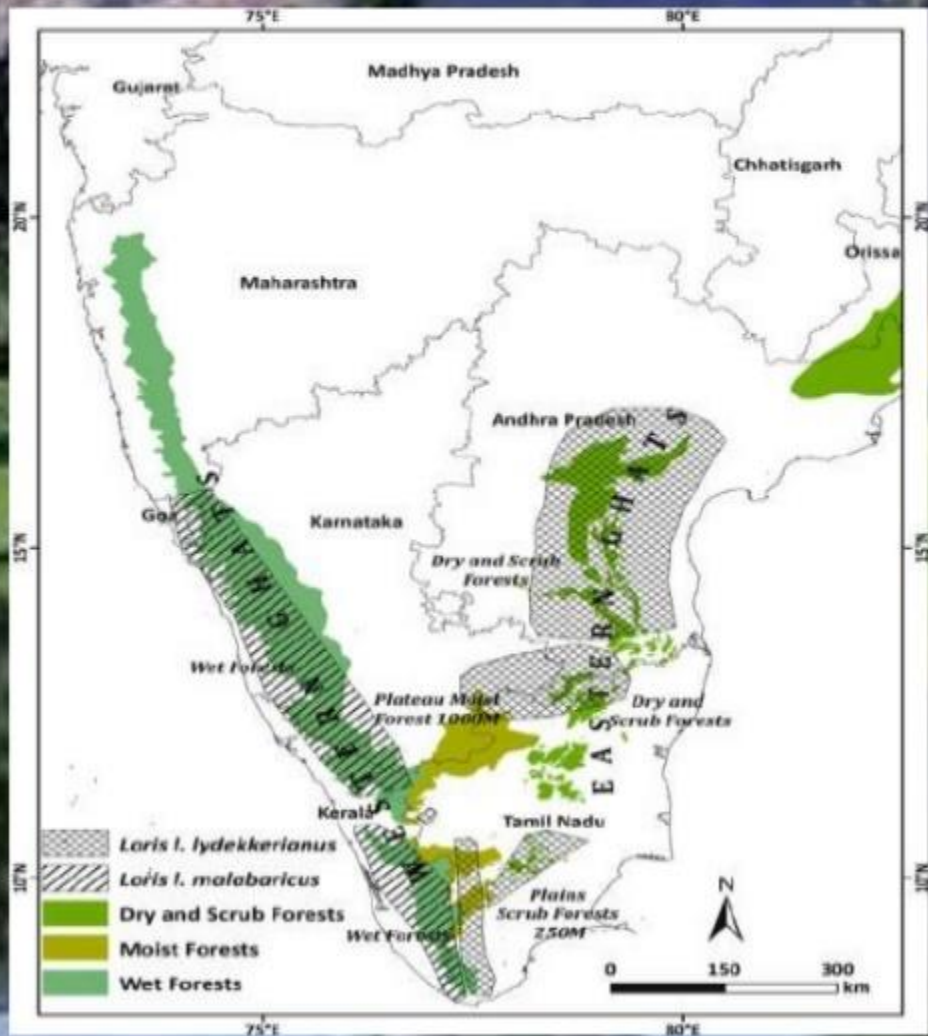
Western Ghats (Sahyadri)

- It is a UNESCO World Heritage Site
- Home to more than 325 globally threatened flora, fauna, bird, amphibian, reptile and fish species
- Western ghats passing through Maharashtra, Goa, Karnataka, Kerala and TamilNadu
- This range is home to many hill stations like Matheran, Lonavala, Mahabaleshwar, Kodagu etc



Western Ghats

Eastern Ghats



- The Eastern Ghats passes through states Odisha, Andhra Pradesh, Tamil Nadu and passing some parts of Karnataka
- The mountain ranges run parallel to the Bay of Bengal
- The Eastern Ghats are not as high as the Western Ghats.
- The prominent hills stations in eastern ghats are Araku valley, kolli hills, Pachaimalai, etc



Eastern Ghats

Satpura Range

- The range rises in eastern Gujarat state running east through the border of Maharashtra and Madhya Pradesh to the east till Chhattisgarh
- Pachmarhi, Kanha National Park, Bori Wildlife Sanctuary are the prominent attractions in Satpura range
- **Mount Dhupgarh** is the highest point in the Satpura Range and in Madhya Pradesh



Central Highlands



- Central Highlands are one of the main divisions of Peninsular Plateau
- It covers states like Rajasthan, Chota Naagpur, Gujarat
- Important Rivers in this Region are Champal, Sind , Betwa, Ken
- These highlands have been formed by the disjunct ranges of the Satpura and Vindhya Hills

5. The Coastal Plains

- The mainland of India has coastal plains of **6100kms**
- They are divided into, **Western and Eastern coastal plain**



Western Coastal Plains



- The plains are located between the Western Ghats and the Arabian Sea
- Stretches from Ran of Kutch to Kanyakumari
- The northern portion of the west coast is called Konkan and the southern portion Malabar
- Occurrence of Estuaries brought by Narmada, Tapti, Sabarmati rivers

Eastern Coastal Plains



View of Fields at Biccavolu, Eastern coastal plains, Andhra Pradesh

- ✓ Located between Bay of Bengal and Eastern Ghats
- ✓ It is also known as Coromandal coast
- ✓ Eastern coastal plains stretches from Bengal to Cape Comorin
- ✓ Large rivers like Mahanadi, the Godavari, the Krishna and the Kaveri formed extensive delta on this coast
- ✓ Lakes like Chilika, Kolleru are located in eastern coast

The Great Indian Desert



Thar Desert



- Natural boundary between India(85%) and Pakistan(155)
- Extends between the Aravalli Hills in the north-east, the Great Rann of Kutch along the coast and the alluvial plains of the Indus River in the west
- It is the world's 17th largest desert
- Main occupations of its inhabitants are agriculture and animal husbandry
- Tal Chhapar Sanctuary, Desert National Park, Rann of Kutch Wildlife Sanctuary are the prominent protected areas

INDIAN STATES AND CAPITALS

States Name	Capital
Andhra Pradesh	Hyderabad (Proposed Capital Amara vati)
Arunachal Pradesh	Itanagar
Assam	Dispur
Bihar	Patna
Chhattisgarh	Raipur
Goa	Panaji
Gujarat	Gandhinagar
Haryana	Chandigarh
Himachal Pradesh	Shimla
Jharkhand	Ranchi
Karnataka	Bengaluru (formerly Bangalore)
Kerala	Thiruvananthapuram


Madhya Pradesh	Bhopal
Maharashtra	Mumbai
Manipur	Imphal
Meghalaya	Shillong
Mizoram	Aizawl
Nagaland	Kohima
Odisha	Bhubaneswar
Punjab	Chandigarh
Rajasthan	Jaipur
Sikkim	Gangtok
Tamil Nadu	Chennai
Telangana	Hyderabad
Tripura	Agartala
Uttar Pradesh	Lucknow
Uttarakhand	Dehradun, Gairsain (Summer)
West Bengal	Kolkata

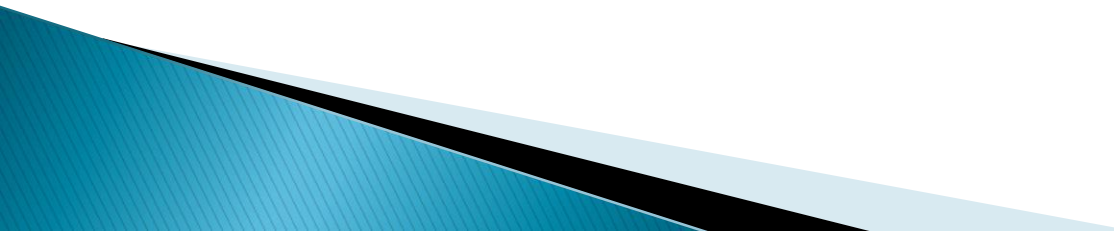
UNION TERRITORIES

Union territories	Capital
Andaman and Nicobar Islands	Port Blair
Chandigarh	Chandigarh
Dadra and Nagar Haveli, Daman & Diu	Daman
Delhi	New Delhi
Lakshadweep	Kavaratti
Puducherry (Pondicherry)	Puducherry (formerly Pondicherry)
Jammu and Kashmir	Srinagar (Summer), Jammu (Winter)
Ladakh	Leh

INTRODUCTION TO NATURAL AND MANMADE RESOURCES

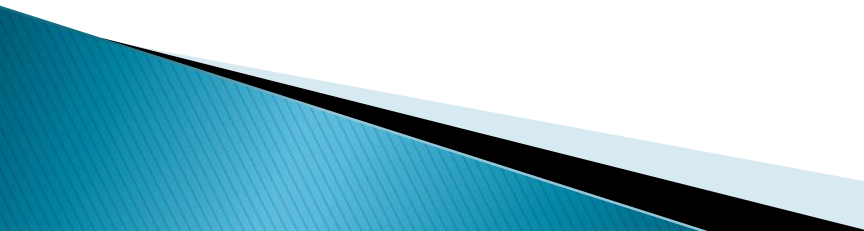
▶ Resources

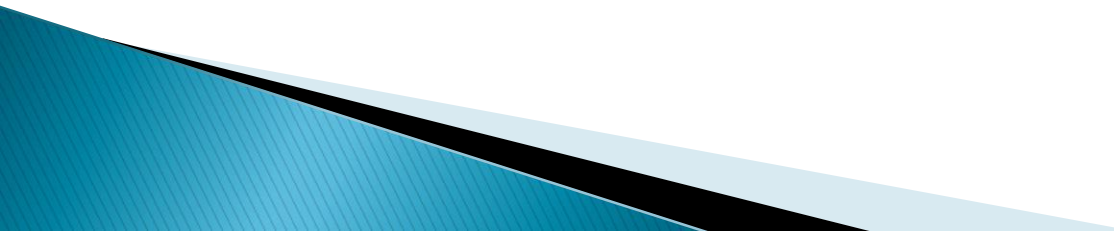
- ▶ Resources are anything that has utility and adds value to life.
 - ▶ Air, water, food, plants, animals, minerals, metals, and everything else that exists in nature and has utility to mankind is a 'Resource'.
 - ▶ The value of each such resource depends on its utility and other factors.
 - ▶ For example, metals are gold, silver, copper or bronze have economic value; i.e. they can be exchanged for money.
 - ▶ However, mountains, rivers, sea or forests are also resources but they do not have economic value.
- 

- ▶ There are two most important factors that can turn any substance into a resource– time and technology.
 - ▶ With the help of technology, innovation humans can transform a natural or man-made substance into a resource.
 - ▶ Like, minerals, fish or other marine creatures sourced from the sea can be used for our food and medicines. Similarly, time also adds to the value of a resource. For example, fossil deposits of organisms over hundreds of years can turn into fossil fuels.
- 

NATURAL RESOURCES



- ▶ Anything and everything that is available naturally on earth is a natural resource. We can further divide them into:
 - ▶ **Biotic & Abiotic**
 - ▶ Any life form that lives within nature is a Biotic Resource, like humans, animals, plants, etc.
 - ▶ In contrast, an abiotic resource is that which is available in nature but has no life; like metals, rocks, and stones.
 - ▶ Both biotic and abiotic resources can be renewable or non-renewable.
- 

- ▶ **Renewable & Non-renewable**
 - ▶ Renewable resources are almost all elements of nature which can renew themselves. For e.g. sunlight, wind, water, forests and likewise.
 - ▶ While, non-renewable resources, are limited in their quantity. Like fossil fuels and minerals.
 - ▶ Though these resources take millions of years to form, they would eventually get over within our lifetime if we use continuously.
- 

Man-Made Resources

- ▶ When humans use natural things to make something new that provides utility and value to our lives, it is called human-made resources.
 - ▶ For instance, when we use metals, wood, cement, sand, and solar energy to make buildings, machinery, vehicles, bridges, roads, etc. they become man-made resources.
 - ▶ Likewise, technology is also a man-made resource. Man-made resources are mostly renewable. One can re-build a building or fixed a broken machine.
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