

Geography

Basic Geographical Facts

Physical geography:

(A) Planets:

As per the International Astronomical Union (IAU), the planet is a celestial body which-

1. is in orbit around the sun.
2. has sufficient mass to assume hydrostatic equilibrium (a nearly round shape) and
3. has 'cleared the neighbourhood' around its orbits.

According to the definition, there are currently eight planets and five dwarf planet in the solar system.

- (1) Mercury (Closest to the Sun and is the fastest planet to revolve around the Sun)
- (2) Venus (The Brightest and hottest planet in all)
- (3) Earth (Only known planet to possess life)
- (4) Mars (Known as the Red planet. Explored for life by astronomers now, as it is having similarities with Earth)
- (5) Jupiter (The largest planet of the solar system)
- (6) Saturn (System of rings are the characteristic feature of this planet)
- (7) Uranus
- (8) Neptune

* Please note that Pluto used to be a planet but recently has been discarded as a planet and is no longer counted as a planet.

(B) Comets:

Comets are cosmic snowballs of frozen gases, rock and dust roughly the size of a small town. When a comet's orbit brings close to sun, it heats up and spews dust and gases into a joint glowing head larger than most planet. The dust and gases form the tail that stretches away from the sun for millions of kilometers. Two famous comets known, are as follows:

- (i) **Halley's comet:** Discovered by British astronomer Edmond Halley, takes 76.1 years to encircle the Sun. It was last seen in February 9, 1986.
- (ii) **Smith-Tuttle comet:** It's a huge comet heading on a collision course with Earth on August 17, 2116.

(C) Satellites:

A satellite is a moon, planet or machine that orbits a planet or star. For example, Earth is a satellite because it orbits the sun. Likewise, the moon is a satellite because it orbits the Earth. Usually, the word 'satellite' refers to a machine that is launched into space and moves around Earth or another body in space.

Earth and moon are examples of natural satellites. Satellites are mainly used for communication such as beaming TV signals, Phone calls etc. A group of 20 satellites makeup the Global Positioning System (GPS).

These are the bodies which revolve around the planets. Mercury and Venus have no satellites. Earth has only one satellite (natural), i.e. Moon. Jupiter has the maximum number of satellites.

Moon: The first planet of our solar system visited by man. On July 20, 1969, Neil Armstrong and Edwin Aldrin were the first to set foot on the Moon, and between them, Neil Armstrong is the first person to have set foot on the Moon.

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(D) Earth:

It is the fifth largest planet in the solar system. It is the third closest planet to the sun. Its shape is oblate spheroid, like a ball which is flattened at the poles.

Important facts about Earth:

- (i) Mean distance from the Sun: 1,49,407,000 km.
- (ii) Time taken by Earth to revolve around the Sun: 365 days, 5 hours, 48 minutes and 45.51 seconds.
- (iii) Time taken by Earth for rotating on its own axis: 23 hours 56 minutes and 4.09 seconds.
- (iv) Earth is covered 70% by water and 30% by land.

Movements of Earth:

- (i) **Revolution:** The Earth revolves around the Sun in an elliptical orbit. One complete revolution is called a year and this revolution of Earth causes change of seasons.
- (ii) **Rotation:** Earth rotates on its own imaginary axis also, simultaneously revolving around the Sun. It moves from west to east. This causes day and night.

**Notes:**

Duration of days and nights is equal at the equator.

(E) Eclipses:

An eclipse is an astronomical event that occurs when an astronomical object is temporarily obscured, either by passing into the shadow of another body pass between it and the viewer.

- (i) **Solar eclipse:** It occurs when the Moon comes between the Sun and the Earth, and this causes hindrance in Sun's light, when viewed from the Earth.
- (ii) **Lunar eclipse:** When the Earth comes between the Moon and the Sun, the shadow cast by the Earth on the Moon causes lunar eclipse.

(F) Atmosphere:

The Earth is surrounded by a gaseous cover called the atmosphere. There are many gases in the atmosphere like Oxygen, Nitrogen, Carbon Dioxide, Helium, Argon, Xenon, etc. The maximum percentage of gas present in the atmosphere is Nitrogen and that comprises 78.09%.

Atmosphere is divided mainly into four layers:

- (i) **Troposphere:** It is the nearest layer to the Earth's surface and is up to 15 km of height from the Earth's surface.
- (ii) **Stratosphere:** From the end of 15 km of troposphere, stratosphere is present till 50 km of the atmosphere.
- (iii) **Mesosphere:** It lies between 50 km and 80 km above the surface of the Earth.
- (iv) **Ionosphere:** It lies above the mesosphere and extends from 80 km to 400 km above the Earth's surface. Radio communication takes place because of this layer.

**Note:**

Ozone Layer: The ozone layer is situated in the stratosphere belt of earth's atmosphere. The basic Ozone gas structure consists of three oxygen atoms. Ozone gas is present in the stratosphere in the form of a layer, which extends from 12 km to 30 km above the earth's surface. The main function of Ozone is that it protects mankind from harmful radiations which comes from outer space i.e.; Ultra Violet radiations (UV- radiations) from the Sun. Now-a-days this Ozone layer is getting depleted which can cause skin cancer and damage vegetation. The main reason behind the depletion of Ozone layer is pollution and pollutants present in the atmosphere like Chlorofluorocarbons (CFC's, also known as Freons), which comes from refrigeration systems, aerosols, air conditioners and solvents.

To minimize the Ozone layer depletion the governments of many countries are now replacing the CFC's with simple hydrocarbons.

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(G) Continents:

It is defined as any of the world's main continuous expanses of land (Europe, Asia, Africa, North and South America, Australia, Antarctica)

The surface of the Earth is made up of big land masses which are divided into seven continents. The seven continents are as follows:

- (i) Asia: The largest continent (covers approximately. 30 per cent of the world land and hosts 59 per cent of the world population)
- (ii) Africa: (The largest desert—Sahara—is there.)
- (iii) North America
- (iv) South America
- (v) Antarctica: Covered with ice (coldest)
- (vi) Europe (Comprises of western most peninsula of Eurasia)
- (vii) Oceania (Australia): The smallest continent (The only continent with capital. i.e., Canberra)



Note:

Antarctica and Oceania are island continents.

(H) Oceans:

- (i) There are five oceans on the Earth: (i) Pacific, (ii) Atlantic, (iii) Indian, (iv) Arctic, (v) Antarctic. Pacific being the largest, occupies 35.25% of the Earth's surface.
- (ii) South China Sea has the maximum area among all the seas of the world.

(I) Rocks:

These are naturally occurring solid aggregates of one or more minerals or mineraloids.

These form the crust of the Earth. They are classified into three categories:

- (i) **Igneous rocks:** It is the product of cooled solidified magma/lava and it constitutes 90% of the Earth's crust.
- (ii) **Metamorphic rocks:** Original igneous or sedimentary rocks when subject to change due to pressure or temperature, metamorphose into metamorphic rocks, i.e. slate, marble, etc.
- (iii) **Sedimentary rocks:** As the name suggests, these rocks are formed from the sedimentary deposits on the ocean beds, i.e. gypsum, limestone, etc.

(J) Important Mountain Ranges and Mountain Peaks of the World:

(i) **Mountain ranges:**

| Name | Continent |
|--------------------|---------------|
| Himalaya-Karakoram | Asia |
| Rockies | North America |
| Alps | Europe |
| Andes | South America |

(ii) **Mountain peaks:**

| Name | Continent | Height (In metres) |
|--------------------|-----------|--------------------|
| Everest | Asia | 8848 |
| K2 (Godwin Austen) | Asia | 8,610 |
| Kanchenjunga | Asia | 8,590 |
| Lhotse | Asia | 8,500 |
| Makalu 1 | Asia | 8,470 |
| Dhaulagiri | Asia | 8,170 |
| Nanga Parbat | Asia | 8,130 |
| Nanda Devi | Asia | 7,820 |



Note:

Everest is the highest mountain peak of the world, situated in Nepal and extended to Tibet and K2 is India's highest mountain peak, but it is situated in POK. Therefore, Kanchanjunga is the highest peak within India.

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(K) Important Water bodies of the World:

(i) Lakes (Natural):

| Name | Location |
|------------------------------------------------------|----------------------------------------------------|
| Caspian (also called the Caspian Sea) | Iran, Azerbaijan, Russia, Turkmenistan, Kazakhstan |
| Superior (largest fresh water lake of North America) | USA/Canada |
| Victoria | Kenya and Tanzania |
| Baikal (deepest lake of the world) | Russia |
| Titicaca (highest lake of the world) | South America |

(ii) Canals (Shipping):

- Panama Canal:** It links the Pacific and the Atlantic Ocean. It is located in Central America and is 58 kilometres long.
- Suez Canal:** It links the Red Sea and the Mediterranean Sea. It is in Egypt and is 169 kilometres long.
- Kiel Canal:** It lies between Baltic Sea and North Sea ports. It is in Germany and is 98 kilometres long.

**Note:**

Angel Waterfall which is in Venezuela, is the highest waterfall in the world having a height of about 979 metres.

(iii) Important Rivers of the world:

| Name | Length (km) | Country/Continent |
|----------------------|-------------|-----------------------------------------|
| Nile | 6,690 | Egypt, Africa |
| Amazon | 6,570 | Brazil, South America |
| Mississippi-Missouri | 6,020 | USA, North America |
| Yangtze-Kiang | 5,980 | China, Asia |
| Hwang Ho | 4,840 | China, Asia |
| Niger | 4,800 | Nigeria, Africa |
| Congo | 4,800 | Zaire, Africa |
| Murray | 3,720 | Australia |
| Volga | 3,700 | Russia, Asia |
| Indus | 3,180 | India and Pakistan, Asia |
| Brahmaputra | 2,960 | India, Asia |
| Danube | 2,820 | Austria, Hungary and Yugoslavia, Europe |

**Note:**

The longest river in the world is Nile (6,690 km). The largest river of the world (in terms of volume of water it carries) is Amazon river.

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(L) New names of certain cities and countries

| | Old Names | New Names |
|----|-------------------------|------------------|
| 1 | Abyssinia | Ethiopia |
| 2 | Baroda | Vadodara |
| 3 | Burma | Myanmar |
| 4 | Calicut | Kozhikode |
| 5 | Congo | Zaire |
| 6 | Constantinople | Istanbul |
| 7 | Dacca | Dhacca |
| 8 | Formosa | Taiwan |
| 9 | Gold Coast | Ghana |
| 10 | Irish Free State (Eire) | Ireland |
| 11 | Kampuchea | Cambodia |
| 12 | Mesopotamia | Iraq |
| 13 | Panjim | Panaji |
| 14 | Peking | Beijing |
| 15 | Siam | Thailand |
| 16 | South Rhodesia | Zimbabwe |
| 17 | Trivendrum | Thiruvanthapuram |
| 18 | Rangoon | Yangoon |
| 19 | Madras | Chennai |
| 20 | Calcutta | Kolkata |
| 21 | Pondichery | Puduchery |
| 22 | Bangalore | Bengaluru |

(M) Important world cities on river banks

| | City | River |
|---|----------|--------|
| 1 | London | Thames |
| 2 | Rome | Tiber |
| 3 | Paris | Siene |
| 4 | Vienna | Danube |
| 5 | Budapest | Danube |
| 6 | Belgrade | Danube |
| 7 | Baghdad | Tigris |

(N) Important Indian Cities On river banks

| City | River |
|-----------|------------------|
| Delhi | Yamuna |
| Agra | Yamuna |
| Kolkata | Hoogly |
| Kanpur | Ganga |
| Allahabad | Ganga and Yamuna |
| Nasik | Godavari |
| Indore | Narmada |
| Lucknow | Gomti |
| Srinagar | Jhelum |

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Important Countries, Capitals and Currencies

| Country | Capital | Currency | Continent |
|------------------------------|------------------------------------------|-------------------|---------------|
| Afghanistan | Kabul | Afghani | Asia |
| Algeria | Algiers | Algerian Dinar | Africa |
| Angola | Luanda | New Kwanza | Africa |
| Argentina | Buenos Aires | Peso | South America |
| Australia | Canberra | Australian Dollar | Australia |
| *Austria | Vienna | Schilling/Euro | Europe |
| Azerbaijan | Baku | Manat | Europe |
| Bahrain | Manama | Bahrain Dinar | Asia |
| Bangladesh | Dhaka | Taka | Asia |
| Barbados | Bridgetown | Barbados Dollar | North America |
| *Belgium | Brussels | Belgian Franc | Europe |
| Bermuda | Hamilton | Bermuda Dollar | North America |
| Bhutan | Thimphu | Ngultrum | Asia |
| Bolivia | La Paz (administrative) Surce (legal) | Boliviano | South America |
| Bosnia and Herzegovina | Sarajevo | Convertible Mark | Europe |
| Botswana | Gaborone | Pula | Africa |
| Brazil | Brasilia | Cruzeiro Real | South America |
| Bulgaria | Sofia | Lev | Europe |
| Burundi | Bujumbura | Burundi Franc | Africa |
| Cambodia | Phnom Penh | Riel | Asia |
| Cameroon | Yaounde | CFA Franc | Africa |
| Canada | Ottawa | Canadian Dollar | North America |
| Chad | N'djamena | CFA Franc | Africa |
| Chile | Santiago | Chilean Peso | South America |
| China | Beijing (Peking) | Renminbi Yuan | Asia |
| Colombia | Bogota | Colombian Peso | South America |
| Democratic Republic of Congo | Kinshasa | Zaire | Africa |
| Costa Rica | San Jose | Costa Rican Colon | North America |
| Cote d'Ivoire | Yamoussoukro | CFA Franc | Africa |
| Croatia | Zagreb | Kuna | Europe |
| Cuba | Havana | Cuban Peso | North America |
| *Cyprus | Nicosia | Cyprus Pound/Euro | Europe |
| Czech Republic | Prague | Koruna | Europe |
| Denmark | Copenhagen | Danish Krone | Europe |

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| Country | Capital | Currency | Continent |
|--------------------|------------------|-------------------------|---------------|
| Ecuador | Quito | Sucre | South America |
| Egypt | Cairo | Egyptian Pound | Africa |
| El Salvador | San Salvador | Colon | North America |
| Ethiopia | Addis Ababa | Ethiopian Birr | Africa |
| East Timor | Dili | US Dollar | Asia |
| Fiji | Suva | Fijian Dollar | Australia |
| *Finland | Helsinki | Markka/Euro | Europe |
| *France | Paris | French Franc/Euro | Europe |
| Gambia, The | Banjul | Dalasi | Africa |
| Georgia | Tbilisi | Lari | Europe |
| *Germany | Berlin | Deutsche Mark/Euro | Europe |
| Ghana | Accra | Cedi | Africa |
| *Greece | Athens (Athinai) | Drachma/Euro | Europe |
| Guatemala | Guatemala City | Quetzal | North America |
| Guyana | Georgetown | Guyana Dollar | South America |
| Haiti | Port-au-Prince | Gourde | North America |
| Hungary | Budapest | Forint | Europe |
| Iceland | Reykjavik | Krona | Europe |
| India | New Delhi | Indian Rupee | Asia |
| Indonesia | Jakarta | Indonesian Rupiah | Asia |
| Iran | Teheran | Iranian Rial | Asia |
| Iraq | Baghdad | Iraqi Dinar | Asia |
| *Ireland | Dublin | Irish Pound/Punt/Euro | Europe |
| Republic of Israel | Jerusalem | New Israeli Shekel | Asia |
| *Italy | Rome | Italian Lira | Europe |
| Jamaica | Kingston | Jamaican Dollar | North America |
| Japan | Tokyo | Yen | Asia |
| Jordan | Amman | Jordan Dinar | Asia |
| Kenya | Nairobi | Kenyan Shilling | Africa |
| Korea, North | Pyongyang | Won | Asia |
| Korea, South | Seoul | Won | Asia |
| Kuwait | Kuwait City | Kuwaiti Dinar | Asia |
| Laos | Vientiane | Kip | Asia |
| Lebanon | Beirut | Lebanese Pound/Livre | Asia |
| Libya | Tripoli | Libyan Dinar | Africa |
| *Luxemburg | Luxemburg | Luxemburgish Franc/Euro | Europe |

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| Country | Capital | Currency | Continent |
|---------------------|---------------------------------------------------------------------------------|--------------------------|---------------|
| Malaysia | Kuala Lumpur | Malaysian Dollar/Ringgit | Asia |
| Maldives | Male | Rufiyaa | Asia |
| Mauritius | Port Louis | Mauritian Rupee | Asia |
| Mongolia | Ulanbaatar | Tugrik | Asia |
| Morocco | Rabat | Moroccan Dirham | Africa |
| Myanmar (Burma) | Naypyidaw | Kyat | Asia |
| Namibia | Windhoek | Namibian Dollar | Africa |
| Nepal | Kathmandu | Nepalese Rupee | Asia |
| *Netherlands | Amsterdam | Guilder | Europe |
| New Zealand | Wellington | New Zealand Dollar | Oceania |
| Nigeria | Abuja | Naira | Africa |
| Norway | Oslo | Norwegian Krone | Europe |
| Oman | Muscat | Omani Rial | Asia |
| Pakistan | Islamabad | Pakistan Rupee | Asia |
| Peru | Lima | New Sol | South America |
| Philippines | Manila | Philippine Peso | Asia |
| Poland | Warsaw | Zloty | Europe |
| *Portugal | Lisbon | Escudo | Europe |
| Qatar | Doha | Qatar Riyal | Asia |
| Romania | Bucharest | Leu | Europe |
| Russia | Moscow | Rouble | Asia/Europe |
| Rwanda | Kigali | Rwanda Franc | Africa |
| Saudi Arabia | Riyadh | Soudi Arabian Riyal | Asia |
| Seychelles | Victoria | Seychelles Rupee | Africa |
| Singapore | Singapore City | Singapore Dollar/Ringgit | Asia |
| Slovak Republic | Bratislava | Slovak Koruna | Europe |
| South Africa | Cape Town (Legislative) Pretoria (Administrative) Bloemfontein (Judicial) | Rand | Africa |
| South Sudan | Juba | South Sudanese Pound | Africa |
| *Spain | Madrid | Peseta | Europe |
| Sri Lanka | Sri-Jayawardenapura (since 1983); former capital, Colombo | Rupee | Asia |
| Sudan, The | Khartoum | Sudanese Dinar | Africa |
| Suriname | Paramaribo | Suriname Guilder Florin | South America |
| Swaziland | Mbabane | Lilangeni | Africa |

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| Country | Capital | Currency | Continent |
|----------------------------|------------------------------------|----------------------|---------------|
| Sweden | Stockholm | Swedish Krona | Europe |
| Switzerland | Berne | Swiss Franc | Europe |
| Syria | Damascus | Syrian Pound | Asia |
| Taiwan | Taipei | New Taiwan Dollar | Asia |
| Tanzania | Dodoma (formerly Dar es Salam) | Tanzanian Shilling | Africa |
| Thailand | Bangkok | Baht | Asia |
| Tunisia | Tunis | Dinar | Africa |
| Turkey | Ankara | Tunisian Lira | Asia |
| Uganda | Kampala | Uganda Shilling | Africa |
| Ukraine, The | Kiev | Hryvna | Europe |
| United Arab Emirates (UAE) | Abu Dhabi | United Arab Emirates | Asia |
| United Kingdom (UK) | London | Pound Sterling | Europe |
| United States of America | Washington, DC | US Dollar | North America |
| Uruguay | Montevideo | New Uruguayan Peso | South America |
| Uzbekistan | Tashkent | Som | Asia |
| Venezuela | Caracas | Bolivar | South America |
| Vietnam | Hanoi | Dong | Asia |
| Yemen | Sana (Political) Aden (Commercial) | Yemeni Riyal | Asia |
| Yugoslavia | Belgrade (Serbia) | Yugoslav Dinar | Europe |
| Zambia | Lusaka | Kwacha | Africa |
| Zimbabwe | Harare | Zimbabwe Dollar | Africa |



Note:

The asterisk mark above represents the member states of European Union that participate in Euro. Please note that Euro is the official currency of 19 out of 27 member states of the European Union as on January 2021. In addition to the above 13 countries (marked as bold) 6 more countries viz. Malta, Slovakia, Slovenia, Estonia, Latvia and Lithuania are part of Eurozone.

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Important Countries and their Parliaments

| Country | Name of the Parliament |
|------------------|-------------------------------------------------------------------|
| Afghanistan | Shura |
| Argentina | National Congress |
| Australia | The Parliament of the Commonwealth of Australia |
| Bahamas | General Assembly |
| Bangladesh | Jatiyo Sangsad |
| Bhutan | Tshogdu |
| Brazil | National Congress |
| Bulgaria | Narodno Sabranieye(National Assembly) |
| Myanmar | Pyithu Hluttaw |
| Cambodia | National Assembly |
| Canada | Parliament of Canada |
| China (Mainland) | National People's Congress |
| China (National) | Li fa Yuan (Legislative Yuan) |
| Colombia | Congress of the Republic |
| Cuba | National Assembly of People's Power |
| Denmark | Folketinget |
| Ethiopia | Shergo |
| Egypt | Consultative Council and People's Assembly |
| Finland | Eduskusta/Riksdagen |
| France | Parlement |
| Germany (United) | Bundestag (Lower House) Bundestrat (Upper House) |
| Greenland | Landstinget |
| Hungary | National Assembly |
| Iceland | Althingi |
| India | Sansad [Lok Sabha (Lower House) and Rajya Sabha (Upper House)] |
| Indonesia | People's Consultative Assembly and House of Representatives |

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| Country | Name of the Parliament |
|---------------------|--------------------------------------------------|
| Iran | Majles |
| Iraq | National Assembly |
| Israel | The Knesset |
| Japan | The Diet |
| Laos | National Assembly |
| Libya | General People's Congress |
| Maldives | Majlis |
| Mongolia | Great Hural |
| Nepal | Sansad |
| Netherlands, The | Staten-Generaal |
| New Zealand | House of Representatives |
| Norway | Stortinget |
| Papua New Guinea | National Parliament |
| Poland | Sejm |
| South Africa | House of Assembly |
| Spain | Cortes Generales (General Courts) |
| Surinam | Staten |
| Sweden | Riksdagen |
| United Kingdom (UK) | Parliament (House of Commons and House of Lords) |
| United States | Congress (House of Representatives and Senate) |

Geographical Facts of India

(A) Geographical Location

India lies in the Asian continent and Northern Hemisphere between parallels of latitude 8° 4' and 37° 6' North and between the meridians of longitude 68° 7' and 97° 25' East.

1. In the **west**, India shares its boundary with Pakistan.
2. In the **south**, Sri Lanka is India's neighbouring country.
3. In the **north**, Nepal and China are the neighbouring countries.
4. In the **east**, Bangladesh and Myanmar are the two major countries which surround India.

In south-east of India, there is Bay of Bengal, in south-west it is Arabian Sea and in south, it is the Indian Ocean and in the north, it is surrounded by the Himalayan range of mountains.

Important dimensions of India

1. **India covers 2.4 per cent of the Earth's surface.**
2. Total land area of India is 32,87,263 sq.km.

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3. Distance from east to west is 2,933 km.
4. Distance from north to south is 3,214 km.
5. **The total length of the coastline of the mainland, Lakshadweep Islands and Andaman and Nicobar Islands, is 7,516.6 km. The coastline of only mainland is about 6300 km.**

(B) Important Geographical Structures of India

Major rivers of India: The longest Indian river is Ganga, its length is 2,640 km. The other major rivers of India are Indus (has five major tributaries: Sutlej, Chenab, Jhelum, Ravi and Beas), Brahmaputra, Godavari, Krishna, Narmada, Tapi, Cauvery, Damodar, Mahanadi and Periyar.

**Notes:**

The world's largest delta, (in West Bengal) Sundarban, is made by Brahmaputra and Ganga.

Mountains: They are Himalayas (**highest mountains in the world and one of the youngest mountain ranges**), Vindhyas, Satpura, Sahyadri, Aravallis (one of the oldest mountain ranges of the world), Patkai (Purvanchal or Eastern mountains) and the Eastern Ghats.

(C) Soil: The following table shows various types of soils and related information**Types of soil Major areas of presence**

| | |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Black soils: | Most suitable for cotton cultivation and is found majorly in the Maharashtra, Andhra Pradesh, Tamil Nadu, Madhya Pradesh (Western), Gujarat |
| Laterite soils: | Originated from weathering, mainly present in Andhra Pradesh, Deccan, Eastern Ghats, laterite rocks Tamil Nadu, Mysore |
| Alluvial soils: | Very fertile soil, covering majority in West Bengal, Punjab, Bihar, UP. approximately 25% of all the Indian soil |
| Red soils: | Good for cultivating coarse grains , mainly present in Madhya Pradesh, Andhra Pradesh, Odisha and pulses because of high iron content |

(D) Agriculture

Agriculture in India: More than 50 percent of the area of the country is under the cultivation and **about 64% of the Indian population is engaged in agriculture.**

There are two major crop seasons in India, viz.:

1. **Rabi**
2. **Kharif**

Rabi: It is sown in **October or December** and harvested in **April or May**. Major crops are: **barely, wheat, peas, gram and mustard.**

Kharif: It is sown in **June or July** and harvested in **September or October**. Major crops are: **bajra, cotton, jowar, rice and jute.**

Some important facts about Indian agriculture

1. **Green Revolution** White Revolution was launched in India in **1967-68** for **improving agricultural productivity.**
2. **Operation Flood/ White Revolution** was initiated in **1970** and mainly aimed at **improving the milk production** in India.
3. **Yellow Revolution** for improving oil seed production.
4. **Blue Revolution** for fishries

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- (E) Forests: The total forest and tree cover is 80.73 million hectare, which is 24.56% percent of the total geographical area of India. (As per Forest Survey Report 2019). The target as per the national forest policy is to cover 33% of area by forests.

Important National Parks, Wildlife Sanctuaries and Biosphere Reserves of India

| Name | Location |
|-----------------------------|------------------------------------|
| Bandipur National Park | Border of Karnataka and Tamil Nadu |
| Jim Corbett National Park | Nainital, Uttaranchal |
| Dachigam Sanctuary | Dachigam, Kashmir |
| Ghana Bird Sanctuary | Bharatpur, Rajasthan |
| Gir National Park | Junagadh, Gujarat |
| Kanha National Park | Chhattisgarh |
| Kaziranga National Park | Jorhat, Assam |
| Periyar Sanctuary | Idukki, Kerala |
| Ranthambore Tiger Sanctuary | Sawai Madhopur, Rajasthan |
| Sariska Sanctuary | Alwar, Rajasthan |
| Sharavathy Sanctuary | Shimoga, Karnataka |
| Similipal Tiger Sanctuary | Nuvvurbanji, Orissa |
| Sonai Rupai Sanctuary | Tezpur, Assam |
| Sunderbans Tiger Reserve | South 24 Parganas, West Bengal |
| Tungabhadra Sanctuary | Bellary, Karnataka |
| Wild Ass Sanctuary | Little Rann of Kutch, Gujarat |
| Bharatpur Bird Sanctuary | Bharatpur, Rajasthan |
| Jaldapara Bird Sanctuary | Kuch Bihar District, West Bangal |

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Biosphere Reserves of India : In total there are 15 Biosphere Reserver of India which are as follows.

| S. No. | Name of the Biosphere reserve | Location | State |
|--------|---------------------------------|----------------------------------------------------------------------------------------------|----------------------------------|
| 1 | Great Rann of Kutch | Part of Kutch, Rajkot and Surendranagar District | Gujarat |
| 2 | Gulf of Mannar | Indian part of Gulf of Mannar between India and Sri Lanka | Tamil Nadu |
| 3 | Sunderbans | Part of delta of Ganges and Barahamaputra river system | West Bengal |
| 4 | Nanda Devi | Parts of Chamoli District, Pithoragarh District & Almora District | Uttarakhand |
| 5 | Nilgiri Biosphere Reserve | Part of Wynad, Nagarhole, Bandipur and Mudumalai, Nilambur, Silent Valley and Siruvani Hills | Tamil Nadu, Kerala and Karnataka |
| 6 | Dehang Debang | Part of Siang and Debang valley | Arunachal Pradesh |
| 7 | Pachmarhi Biosphere Reserve | Parts of Betul District, Hoshangabad District and Chhindwara District | Madhya Pradesh |
| 8 | Simlipal | Part of Mayurbhanj district | Odisha |
| 9 | Achanakamar - Amarkantak | Part of Annupur, Dindori and Bilaspur districts | Madhya Pradesh Chattisgarh |
| 10 | Manas | Part of Kokrajhar, Bongaigaon, Barpeta, Jalbari, Kamrup and Lakhimpur District | Assam |
| 11 | Kanchanjunga | Parts of Kanchanjunga Hills | Sikkim |
| 12 | Agasthyamalai Biosphere Reserve | Neyyar, Peppara and Shenduruny Wildlife Sanctuary and their adjoining areas | Kerala |
| 13 | Great Nicobar Biosphere Reserve | Southern most islands of Andaman and Nicobar Islands | Andaman and Nicobar Islands |
| 14 | Nokrek | Part of Garo Hills | Meghalaya |
| 15 | Dibru-Saikhowa | Part of Dibrugarh District and Tinsukia District | Assam |
| 16 | Cold Desert | Pin Valley National park and surrounding; Chandratal Wildlife Sanctuary | Himachal Pradesh |
| 17 | Seshachalam Hills | Seshachalam Hill Ranger covering parts of Chittoor and Kadapa District | Andhra Pradesh |

Industries In India

Cotton Textile

Most important industry in terms of employment and production of export goods. In Maharashtra (Mumbai, Sholapur, Pune, Kolhapur, Satara, Wardha, Hajipur), Gujarat (Ahmedabad, Vododara, Rajkot, Surat, Bhavnagar), Tamil Nadu (Coimbatore-Manchester of South India). Tamil Nadu has the largest number of cotton textile mills in India.

Geography

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| Silk Textile | The location of silk industry is governed by two factors- prevalence of sericulture practices and availability of skilled labour. Karnataka is the leading producer, followed by West Bengal, Bihar, etc. |
| Woollen Textile | In Punjab (Dhariwal, Amritsar, Ludhiana, Ferozpur), Maharashtra (Mumbai), UP (Kanpur, Mirzapur, Agra, Tanakpur), etc. |
| Jute | India manufactures the largest quantity of jute goods in the world. Mainly located in West Bengal, followed by Andhra Pradesh, Bihar, UP, MP. |
| Iron and Steel | Located near the sources of raw materials and fuel (coal). In Jamshedpur (Jharkhand), Durgapur, Burnpur (W.B.), Bhadravati (Karnataka), Bokaro (Jharkhand), Rourkela (Odisha), Bhilai (Chhatisgarh), Salem (T.N.), Vishakhapatnam (A.P.). |
| Aluminium Smelting | Located mainly near the sources of raw materials, means of transport and cheap electricity. In Hirakud, Koraput (Odisha), Renukoot (UP), Korba (MP), Ratnagiri (Maharashtra), Mettur (TN), Alwaye. |
| Copper Smelting | In Khetri, Alwar, Jhunjhunu (Rajasthan), Singhbhum (Jharkhand), Agnigundala (A.P.). |
| Heavy Machinery | In Ranchi, Vishakhapatnam, Durgapur, Tiruchirapalli, Mumbai, Naini. |
| Machine Tools Industry | It forms the basis for the manufacturing of industrial, defence equipments, automobiles, railway engines and electrical machinery. In Bangalore, Pinjore (Haryana), Kalamassery (Kerala), Hyderabad, Secunderabad, Srinagar, Ajmer. |
| Heavy Electrical Equipments | Power generation equipments. In Bhopal, Tiruchirapalli, Jammu, Ramchandrapuram (Hyderabad), Hardwar, Bangalore and Jagdishpur (UP). |
| Railway Equipments | Locomotives: In Chittaurgarh (W.P.), Varanasi, Jamshedpur, Bhopal. Coaches: Perambur (T.N.), Kapurthala (Punjab), also at Bangalore and Kolkata. |
| Ship Building | Hindustan Shipyard at Vishakhapatnam, Cochin Shipyard, Mumbai (Mazgaon Dock) and Kolkata (Garden Reach Workshop). For Indian Navy, only at Mazgaon. |
| Cycles | In Mumbai, Asansol, Sonapat, Delhi, Chennai, Jalandhar and Ludhiana. |
| Tractors | At Faridabad, Pinjore, Delhi, Mumbai, Chennai. |
| Fertilizers | The location of fertilizer industry is closely related to petro-chemicals. About 70% of the plants producing nitrogenous fertilizers use naphtha as raw material. Naphtha is a by-product of oil refineries. Phosphate plants are dependent on mineral phosphate found in UP and MP. Now natural gas based fertilize plants are also being set up. The Fertilizer Corporation of India (FCL) was set up in 1961. National Fertilizer Limited (NFL) was set up in 1974. In Sindri (Bihar), Nangal, Trombay, Gorakhpur Durgapur, Namrup, Cochin, Rourkela, Neyveli, Varanasi Vadodara, Vishakhapatnam, Kota and Kanpur. |
| Pharmaceuticals and Drugs | Antibiotics are prepared at Pimpri and Rishikesh. The Indian Drugs and Pharmaceuticals Limited has 5 plants at Hyderabad Rishikesh, Chennai, Gurgaon and Muzaffarpur. A number of other units are concentrated in Mumbai, Baroda, Delhi, Kolkata and Kanpur. |
| Pesticides | Delhi and Alwaye |
| Sugar Industry | UP, Maharashtra, AP, TN, Karnataka and Bihar. |
| Aircraft | Hindustan Aeronautics India Ltd. was formed by merging two aircraft factories at Bangaluru and Kanpur. Four other factories are at Nasik, Hyderabad, Koraput (Odisha), Lucknow. |
| Rubber Industry | Bareilly (UP), Baroda (Gujarat)- Synthetic Rubber Units, Mumbai, Ahmedabad, Amritsar-Reclaimed Rubber Units. |

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Geography

Oil Refineries

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|----------------------------------------|---------------------------------------|
| Barauni Refinery (IOC) | Kochi Refinery (Kochi Refineries Ltd) |
| Guwahati Refinery (IOC) | Numaligarh Refinery (NRL) |
| Mathura Refinery (IOC) | Mangalore Refinery (MRPL) |
| Bongaigaon Refinery (IOC) | Tatipaka Refinery (ONGC) |
| Manali Refinery (IOC) | Essar Refinery (Essar) |
| Jamnagar Refinery (Reliance Petroleum) | |

Nuclear Power Stations

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|------------------------|--------------------------------------------------------|
| Tarapur | Maharashtra |
| Kalpakkam | Tamil Nadu, called Indira Gandhi Nuclear Power Station |
| Narora | UP |
| Rawatbhata | Kota, Rajasthan |
| Kaiga | Karnataka |
| Kakrapara | Gujarat |
| Kundnkulam (TN) | Under construction with the assistance of Russia. |

Major Thermal Power Plants

| Power Plant | State | Power Plant | State |
|-------------|--------------|--------------|-------------|
| Neyveli | Tamil Nadu | Talcher | Odisha |
| Korba | Chhattisgarh | Farakka | West Bengal |
| Obra | UP | Katapur | MP |
| Haduaganj | UP | Jamnagar | Rajasthan |
| Rihand | UP | Vindhyanchal | MP |
| Singrauli | UP | Bokaro | Jharkhand |
| Parichha | UP | | |

Ultra Mega Power Plants

| Power Plant | State |
|-------------|----------------|
| Mundra | Gujarat |
| Sasan | Madhya Pradesh |