



# RRB – Technicians

Grade - 3

Railway Recruitment Board (RRB)

Volume - 1

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General Awareness



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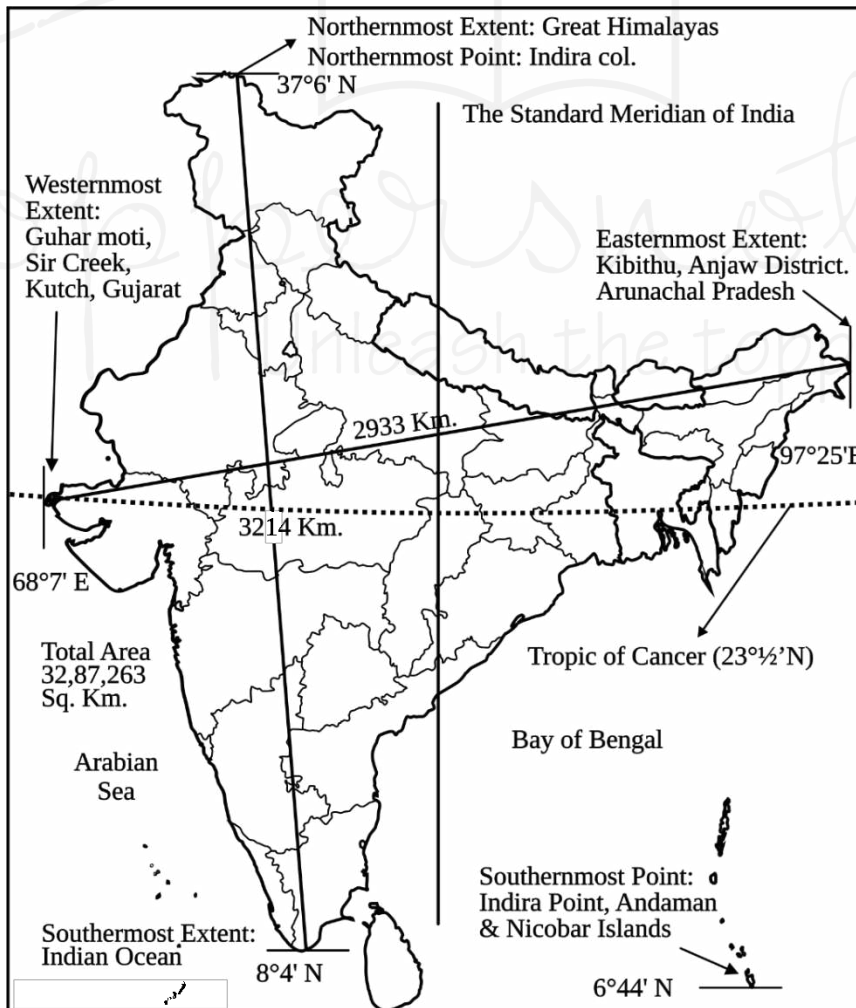
# 1

## CHAPTER

# Indian Geography

### INDIA - AT A GLANCE

Aspect	Details
Latitudinal Extent	8°4' N to 37°6' N
Longitudinal Extent	68°7' E to 97°25' E
Northernmost Point	Indira Col, Ladakh
Southernmost Point	Indira Point, Great Nicobar Island
Easternmost Point	Kibithu/Valang, Arunachal Pradesh
Westernmost Point	Gaurmukh, Gujarat
Area	3,287,263 sq km
World Ranking by Area	7th largest country
Percentage of World Area	2.4%
Countries Larger than India by Area	Russia, Canada, China, USA, Brazil, Australia
Latitudinal Distance (North–South)	3,214 km
Longitudinal Distance (East–West)	2,933 km
Population Ranking	Largest in the world



## Coastline of India:

- On 29th April 2025, the Government of India recalculated the country's coastline. Including islands, the total coastline length is **11,098 km**. The coastline touches **9 states** and **66 districts**.
- **Western Coast States:** Gujarat, Maharashtra, Goa, Karnataka, Kerala
- **Eastern Coast States:** Tamil Nadu, Andhra Pradesh, Odisha, West Bengal
- **State-wise Highlights:**
  - ✓ **Longest coastline:** Gujarat (2,340 km)
  - ✓ **Shortest coastline:** Goa (193 km)
  - ✓ On the eastern coast, the **longest coastline** is Tamil Nadu (1,068 km)
- **Maritime Zones (as per International Maritime Organization):**
  - ✓ Territorial Sea
  - ✓ Contiguous Zone
  - ✓ Exclusive Economic Zone (EEZ)
- **Tropic of Cancer in India:**

- ✓ The Tropic of Cancer is located at **23°N latitude**, north of the Equator.
- ✓ It passes through **8 Indian states:** Gujarat, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, West Bengal, Tripura, and Mizoram.
- ✓ The **Mahi River** crosses the Tropic of Cancer **twice**.

## Standard Time

- The **Standard Time** in India is based on the **82.5° East longitude**, which is the **central meridian** passing through **Naini (Mirzapur), Uttar Pradesh**.
- India's standard time is **5 hours 30 minutes ahead of Greenwich Mean Time (GMT)**, meaning when it is **12:00 noon in England, it is 5:30 PM in India**.
- The **standard meridian** passes through **five states:** Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Odisha, and Andhra Pradesh.

## Bordering Countries

Country	Capital	Border Length with India	Bordering Indian States / Remarks
<b>Afghanistan</b>	Kabul	106 km	Ladakh (via Wakhan Corridor / PoK region)
<b>Bangladesh</b>	Dhaka	4096.7 km	West Bengal, Assam, Meghalaya, Tripura, Mizoram
<b>Bhutan</b>	Thimphu	699 km	West Bengal, Sikkim, Assam, Arunachal Pradesh
<b>China</b>	Beijing	3488 km	Ladakh, Himachal Pradesh, Uttarakhand, Sikkim, Arunachal Pradesh
<b>Myanmar</b>	Naypyidaw	1643 km	Arunachal Pradesh, Nagaland, Manipur, Mizoram
<b>Nepal</b>	Kathmandu	1751 km	Bihar, Uttar Pradesh, Uttarakhand, West Bengal, Sikkim
<b>Pakistan</b>	Islamabad	3323 km	Jammu & Kashmir, Ladakh, Punjab, Rajasthan, Gujarat
<b>Sri Lanka</b>	Colombo (Commercial), Sri Jayawardenepura Kotte (Legislative)	Sea Border	Separated from India by the <b>Gulf of Mannar</b>
<b>Maldives</b>	Malé	Sea Border	Located southwest of India in the <b>Indian Ocean</b> , below Lakshadweep Islands

## International Boundaries

### Adjacent to India:

- **Radcliffe Line** – Between India and Pakistan
- **24th Parallel** – Between India and Pakistan
- **McMahon Line** – Between India and China

- **LAC (Line of Actual Control)** – Between India and China
- **Durand Line** – Between Afghanistan and Pakistan
- **Johnson Line (1865) & MacDonald Line (1893)** – Between China and India (Ladakh); currently considered illegal by China

## International Disputed Areas

### Involving India:

- **Galwan Valley** – India and China
- **Siachen Dispute** – India and Pakistan
- **Katchatheevu Island** – India and Sri Lanka
- **Kalapani Dispute** – India and Nepal
- **Susta Area Dispute** – India and Nepal

### Administrative Status

- **Administrative Structure:** India currently comprises **28 states** and **8 Union Territories**.
- **Districts:** In 2011, India had a total of **640 districts**, which increased to **780 districts** by 2025 (as of October 2025).

- **Villages:** In 2011, India had approximately **640,000 villages**.

### Political Structure:

- **Lok Sabha Seats:** Maximum 550; currently 543.
- **Rajya Sabha Seats:** Maximum 250; currently 245.
- **Legislative Councils:** Present in six states: Uttar Pradesh (100), Maharashtra (78), Bihar (75), Karnataka (75), Andhra Pradesh (58) and Telangana (40)

## India's Physical Landscape

### Major Himalayan Ranges of India

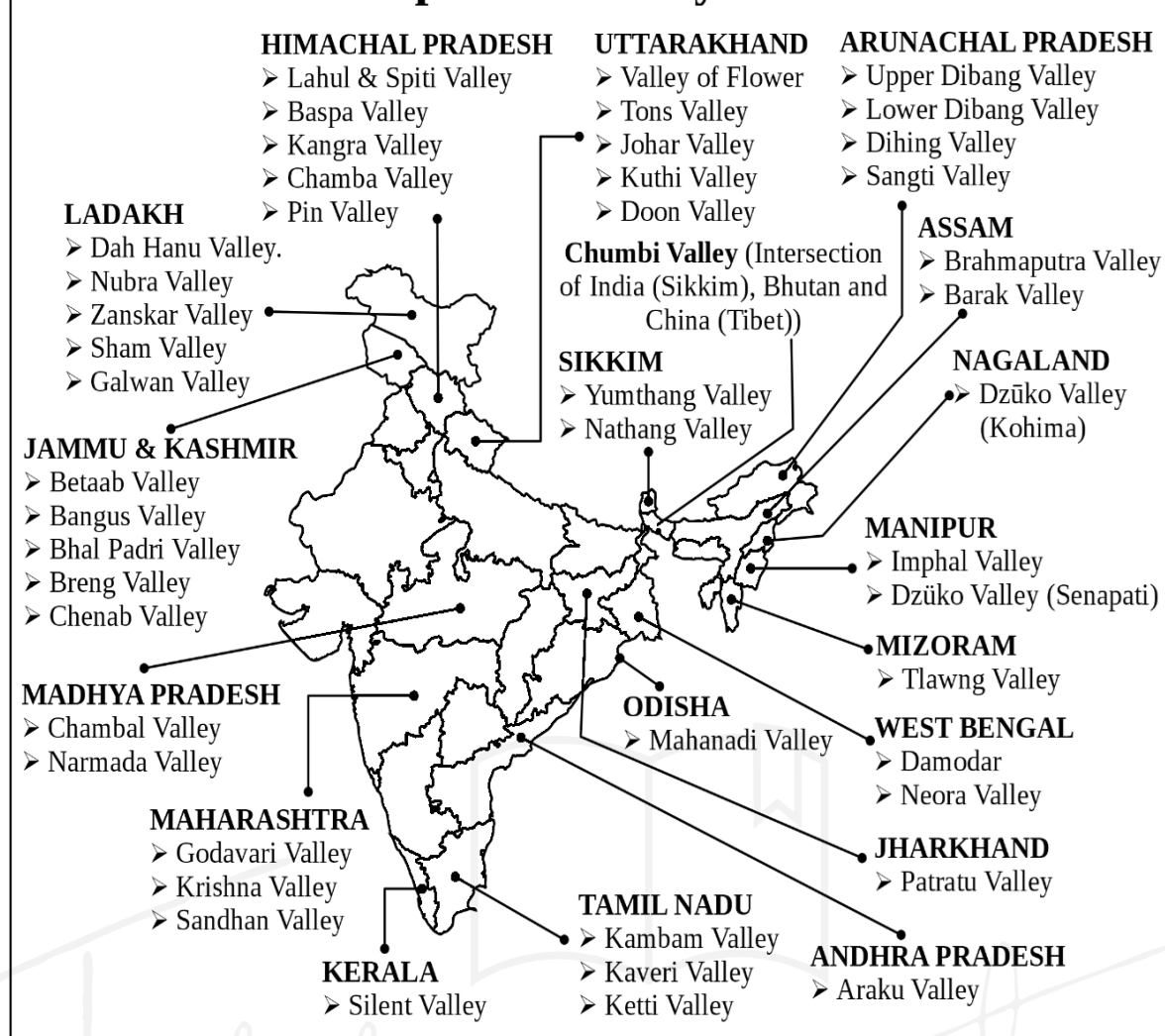
Mountain Range	Location / Extent	Key Notes (Description)	Highest Mountain Peak
<b>Karakoram Range</b>	Ladakh (India), China, Pakistan	One of the world's most rugged mountain systems; contains the greatest concentration of glaciers outside the polar regions (e.g., Siachen Glacier).	<b>K2 (Mount Godwin-Austen)</b> – 8,611 m
<b>Ladakh Range</b>	Ladakh (UT)	Lies between the Indus River and the Karakoram Range; cold desert climate; parallel to the Zaskar Range.	<b>Lunpo Gangri</b> – ~7,095m
<b>Zaskar Range</b>	Ladakh & Himachal Pradesh	Eastern extension of the Greater Himalayas; acts as a climatic barrier; Zaskar River cuts through it forming deep gorges.	<b>Kamet Peak</b> – ~7,756 m
<b>Shiwalik (Siwalik) Range</b>	Outer Himalayas (Punjab to Assam foothills)	Youngest, lowest & outermost Himalayan range; composed of unconsolidated sediments; prone to erosion and landslides.	<b>Churdhar Peak</b> – 3,647 m
<b>Pir Panjal Range</b>	Jammu & Kashmir, Himachal Pradesh	Largest range of the Lesser Himalayas; separates Kashmir Valley from Himachal Pradesh; famous for passes like Banihal.	<b>Indrasan</b> – 6,221 m
<b>Dhauladhar Range</b>	Himachal Pradesh	Southern branch of the Lesser Himalayas; rises sharply from Kangra Valley; known for steep slopes and snow peaks.	<b>Hanuman Tibba</b> – 5,860 m

### Important valleys of India

- **Western Ghats' highest peak** - Anamudi (2695 m), Kerala
- **Eastern Ghats' highest peak** - Jindagarh (1690 m), Andhra Pradesh
- **Western Ghats' highest peak** - Anamudi (2695 m), Kerala

- **Eastern Ghats' highest peak** - Jindagarh (1690 m), Andhra Pradesh
- **Andaman and Nicobar's highest peak** - Saddle Peak (732 m), North Andaman
- **Bihar's highest peak** - Someshwar (874 m)
- **Chhattisgarh's highest peak** - Gaurkata (Samripat, 1225 m)
- **Jharkhand's highest peak** - Parasnath (Giridih district)

## Important Valleys Of India



### Prominent Himalayan Glaciers

Glacier Name	Location	Important Features
<b>Siachen</b>	Karakoram ranges	Nubra Valley of Himalayas; 2nd longest glacier outside Polar region largest glacier of trans-Himalayas
<b>Biafo</b>	Karakoram	Flows into the Shigar River
<b>Gangotri</b>	Uttarakhand	Origin below Chaukhamba Peak; also known as ‘Gomukh’
<b>Hispar</b>	Gilgit-Baltistan	World’s longest glacial system
<b>Zemu</b>	Sikkim/Nepal	Largest glacier of Eastern Himalaya; feeds River Teesta
<b>Sonapani</b>	Lahaul & Spiti, HP	Longest glacier in the Pir Panjal range. A glacier stream is a tributary to the Chandra River, which later merges with the Bhaga River to form the Chenab.
<b>Milam</b>	Uttarakhand	Major source of River Gori Ganga (Saryu); biggest glacier in Kumaon Himalaya
<b>Chong Kumdan</b>	Karakoram, Ladakh	Feeds Shyok River due to potential blocking
<b>Diamir</b>	POK	Known as the ‘King of Mountains’
<b>Rupal</b>	Kashmir	In Greater Himalayas; flows north eastward
<b>Bhillans, Thajivas, and Prui</b>	Jammu and Kashmir	

## Prominent Himalayan Passes

Pass Name	State / UT	Location / Border	Importance
<b>Zoji La</b>	Jammu & Kashmir, Ladakh	Greater Himalayas	Connects Srinagar–Kargil & Leh; Lying in the middle of India and China
<b>Banihal Pass</b>	Jammu & Kashmir	Pir Panjal Range	<b>Jawahar Tunnel</b> passes <b>beneath it</b> ; <b>Srinagar–Jammu route</b> ; a <b>pass connecting the rest of India to Kashmir</b> .
<b>Khardung La</b>	Ladakh	Ladakh Range	Road to Siachen; one of highest motorable roads
<b>Chang La</b>	Ladakh	Ladakh Range	Connects Leh to Pangong Lake
<b>Fotu La</b>	Ladakh	Zaskar Range	Highest point on Srinagar–Leh highway
<b>Namika La</b>	Ladakh	Zaskar Range	On Kargil–Leh route
<b>Baralacha La</b>	Himachal Pradesh	Zaskar Range	On Leh–Manali highway
<b>Shipki La</b>	Himachal Pradesh	India–Tibet Border (Kinnaur)	Historic silk route for trade.
<b>Mana Pass</b>	Uttarakhand	Chamoli District	Road to Kailash–Mansarovar; Indo-China route
<b>Niti Pass</b>	Uttarakhand	Chamoli District	Old trade route to Tibet
<b>Lipulekh Pass</b>	Uttarakhand	Pithoragarh District	Kailash–Mansarovar Yatra route; India–Nepal–Tibet tri-junction
<b>Muling La</b>	Uttarakhand		connects Uttarakhand and Tibet and is situated in the north of Gangotri.
<b>Nathu La</b>	Sikkim	Indo–China Border	A border trade post with China; one of the highest motorable roads in the world connects Sikkim with the Tibet Autonomous Region of China.
<b>Jelep La</b>	Sikkim	Near Kalimpong	Trade route to Lhasa in historical times
<b>Sella Pass</b>	Arunachal Pradesh	Tawang District	Connects Tawang to rest of state; Sella tunnel world’s Longest twin lane tunnel above 13000 feet altitude.
<b>Bum La</b>	Arunachal Pradesh	Near Tawang	Indo–China sensitive military pass
<b>Dipher Pass</b>	Arunachal Pradesh	East Kameng	Eastern Himalayas, remote and strategic
<b>Khunjerab Pass</b>	(POK)	Gilgit–Baltistan (Pak-Occupied Kashmir)	On China–Pakistan border; on CPEC route
<b>Lanak La</b>	Ladakh (Disputed Border)	Aksai Chin region (Indo-China)	Disputed India–China border crossing

<b>Lekhapani</b>	Arunachal Pradesh	Eastern tip near Assam-Arunachal	Historic WW-II route via Stilwell Road; strategic for eastern sector
<b>Rohtang Pass</b>	Himachal Pradesh	Pir Panjal Range	Connects <b>Kullu Valley</b> to <b>Lahaul and Spiti valleys</b> ; separates <b>Chenab and Beas basins</b> a famous tourist attraction site
<b>Debsa Pass</b>	Himachal Pradesh	-	Located between <b>Kullu and Spiti districts</b>
<b>Dihang Pass</b>	Arunachal Pradesh	-	Connects <b>Arunachal Pradesh</b> to <b>Myanmar</b> Beyond this pass, the Himalayas bend sharply to the south and spread along the eastern boundary of India.
<b>Khyber Pass</b>	Pakistan–Afghanistan		Connects <b>Peshawar (Pakistan)</b> to <b>Jalalabad (Afghanistan)</b> ; part of the <b>ancient Silk Road trade network</b>
<b>Muling La Pass &amp; Mangsha Dhura Pass</b>	Uttarakhand	Greater Himalayas	Connects <b>Uttarakhand</b> to <b>Tibet</b>

## Geographical Division of Plains

Geographical Type	Location/Extent	Characteristics / Special Features
<b>Bhabar Plains</b>	From Punjab to Assam; located south of the Shivalik hills (foothill region)	Small rivers disappear underground in these plains.
<b>Terai Plains</b>	South of the Bhabar plains; marshy area	Rivers flow on the surface instead of going underground.
<b>Bangar Plains</b>	Doab regions situated between two rivers	Composed of gravel, stones, sand, and clay; formed by older alluvium. Also called Bhud, Reh, Dhaya, or Bet in some regions.
<b>Khadar Plains</b>	Formed by new alluvial soil	Highly fertile; located in flood-prone areas; formed by recent alluvium.

## Doab Area

Doab Name	Rivers It Lies Between
Sind Sagar Doab	Indus & Jhelum
Jech Doab	Jhelum & Chenab
Rachna Doab	Ravi & Chenab
Bari Doab	Beas & Ravi
Bist Doab	Beas & Sutlej

## Plateau

Plateau	Location	Special Features / Notes	Major Rivers / Highlights
<b>Central India Plateau</b>	Rajasthan, Madhya Pradesh, Uttar Pradesh	Known as the "Basket of Mustard" of Central India	Parvati, Chambal, Banas, Kuno, Seep

<b>Malwa Plateau</b>	Madhya Pradesh	Located between Aravalli and Vindhya ranges; famous for soybean production; rich in black soil; Chinese traveler Faxian called its climate one of the best in the world	–
<b>Bundelkhand Plateau</b>	Madhya Pradesh, Uttar Pradesh	Panna district produces the most diamonds in India; famous tourist sites include Khajuraho, Orchha, Chanderi, and Devgarh	–
<b>Baghelkhand Plateau</b>	Madhya Pradesh, Chhattisgarh	Red-yellow soil predominates; major rice-producing region; highest concentration of sal trees in India	–
<b>Chota Nagpur Plateau</b>	Bihar, Jharkhand, West Bengal	Rich in minerals; known as the "Ruhr of India"; largest mineral production in India	–
<b>Kathiawar Plateau</b>	Gujarat	Region has black soil; famous for peanut and cotton cultivation	–
<b>Deccan Plateau</b>	Maharashtra, Gujarat, Karnataka	Largest plateau in India; Kalsubai is its highest peak; formed by volcanic activity and basalt rocks	–
<b>Dandakaranya Plateau</b>	Odisha, Chhattisgarh, Andhra Pradesh	Famous for rice cultivation; one of the most Naxal-affected regions	Mahanadi, Tel, Ong
<b>Rayalaseema Plateau</b>	Andhra Pradesh, Telangana	Red-yellow soil predominates; famous for tobacco and maize cultivation	–

### Important Facts

- Natarhat in Jharkhand is known as the "Queen of Chotanagpur Plateau."
- The highest peak of the Chotanagpur Plateau is Parasnath Hill.
- The Rashtrapati Bhavan in New Delhi, India, is located on Raisina Hill.

### Indian Coast

#### West Coast (Western Coastal Plains)

Coastal Plain	Location / Extent	Special Features / Notes
<b>Kathiawar Coast</b>	Gujarat to Daman	Major ports: Pandit Deendayal (Kandla), Dahej, Mundra.
<b>Konkan Coast</b>	Daman to Goa	Major ports: Mumbai, Nhava Sheva (Jawaharlal Nehru).
<b>Canara Coast</b>	Goa to New Mangalore	Also called the Kannada Coast. Major ports: New Mangalore, Marmagao (Vasco da Gama).
<b>Malabar Coast</b>	New Mangalore to Kanyakumari	Major port: Kochi (Spice Port). Minerals: sand, thorium, monazite.

#### East Coast (Eastern Coastal Plains)

Coastal Plain	Location / Extent	Special Features / Notes
<b>Northern Circars Coast</b>	West Bengal to Mahanadi Delta	Major ports: Haldia, Kolkata.
<b>Utkal Coast</b>	Mahanadi to Krishna Delta	Major port: Paradip (Odisha).
<b>Golconda Coast</b>	Krishna River to Cauvery River	Major port: Vishakhapatnam (India's deepest port).
<b>Coromandel Coast</b>	Cauvery River to Kanyakumari	Highest rainfall due to retreating monsoon (Nov–Dec). Rice cultivation in Nov–Dec.

## Major Island Groups of India

- **Andaman & Nicobar Islands (Bay of Bengal):**
  - ✓ Volcanic islands known for pristine beaches, coral reefs, and rich biodiversity (Havelock, Neil, Ross).
  - ✓ The Great Nicobar Island is the largest island in India
  - ✓ 22 islands in Nicobar.
  - ✓ It is believed that Andaman and Nicobar Islands are an elevated portion of submarine mountains.
- **Lakshadweep Islands (Arabian Sea):**
  - ✓ Coral atolls famous for lagoons, marine life, and water sports.

### Arabian Sea Islands

Island / Island Group	Location	Features / Special Notes
Aliya Wet	Gulf of Khambhat	Formed between the mouths of the Narmada and Tapi rivers; famous for petroleum production.
Khadiya Wet	Gulf of Khambhat	Island formed by the Narmada and Tapi rivers.
Piram Wet	Gulf of Khambhat	Located in Bhavnagar district; famous for salt production.
Bombay High	Maharashtra (near Mumbai)	India's largest petroleum source, located near Mumbai.
Basin Island	Maharashtra	A small petroleum source.
Elephanta Island	Maharashtra	Famous for the Elephanta Caves located on this island.
Jawahar Island	Maharashtra	Also known as Butcher Island.
Salsette Island	Maharashtra	Home to the major city of Thane.
Chorão Island	Goa	Location of the Salim Ali Bird Sanctuary.
Willingdon Island	Kerala	Located in Vembanad Lake, Kerala.
Lakshadweep Islands	Arabian Sea	Coral-built atoll islands consisting of 36 small islands.

### Bay of Bengal Islands

Island Name	Location	Notes / Significance
New Moore Island	Bay of Bengal	Disputed between India and Bangladesh since 1981.
Kalash Island	Bay of Bengal	Famous island within Sundarbans National Park.
Ganga Sagar Island	West Bengal	Located at the mouth of the Hooghly River; also known as Sagar Island.
Abdul Kalam Island	Odisha	India's missile launching center; formerly called Wheeler Island. Nearby are two smaller islands: Chandipur and Balasore.
Sriharikota Island	Andhra Pradesh	Houses the Satish Dhawan Space Centre.
Pamban Island	Tamil Nadu	Located in the Gulf of Mannar.
Barren Island	Eastern Andaman	India's only active volcano. Last eruption occurred on 5 November 2020.
Andaman & Nicobar Islands	Bay of Bengal	India's largest island group.
Shaheed Dweep	Andaman & Nicobar	Formerly called Neil Island.
Subhash Chandra Bose Island	Andaman & Nicobar	Formerly called Ross Island.
Swaraj Dweep	Andaman & Nicobar	Formerly called Havelock Island.

## River Islands

Island Name	River	Notable Facts / Description	Location / State
Majuli Island	Brahmaputra	World's largest river island; declared India's first river island district in 2017	Assam
Umanand Island	Brahmaputra	Famous for the Golden Langur	Assam
Srirangapatnam Island	Kaveri	Located on an island in Tamil Nadu	Tamil Nadu
Mandhata Island	Narmada	Historical/Geographical significance	Khargone/Khandeva, Madhya Pradesh

## Rivers and Water Resources of India

### Important River of India

Rivers	Description
<b>Indus</b>	<ul style="list-style-type: none"> <li>➤ <b>Origin:</b> Near <b>Mount Kailash</b> in Tibet (China)</li> <li>➤ <b>Major Tributaries:</b> Jhelum River, Chenab River, Ravi River, Beas River, Sutlej (Satluj) River, etc.</li> <li>➤ <b>Course:</b> Enters India through Ladakh (UT of Ladakh) and flows northwest into Pakistan and finally drains into the Arabian Sea.</li> <li>➤ According to the 1960 Indus Waters Treaty, the eastern rivers of the water system - Sutlej, Ravi and Chenab were to be with India</li> <li>➤ <b>North to South Sequence:</b> Indus, Chenab, Ravi, Beas, Satluj</li> </ul>
<b>Ganga</b>	<ul style="list-style-type: none"> <li>➤ <b>Origin:</b> Gangotri Glacier near Gaumukh in Uttarakhand.</li> <li>➤ <b>Total length:</b> 2,525 km (longest river in India).</li> <li>➤ Empties into the Bay of Bengal through the Sunderbans Delta</li> <li>➤ <b>Major Tributaries:</b> Yamuna, Son, Kosi, Ghaghara etc.</li> <li>➤ Distributary: Bhagirathi-Hooghly (formed at Farakka)</li> <li>➤ At Devprayag the Bhagirathi is Joined by Alaknanda.</li> </ul>
<b>Yamuna (1375 km)</b>	<ul style="list-style-type: none"> <li>➤ <b>Source:</b> <b>Yamunotri Glacier</b> in Uttarakhand.</li> <li>➤ <b>Role:</b> Westernmost &amp; longest tributary of the Ganga, joining it at Prayag (Allahabad).</li> <li>➤ <b>Right-bank tributaries:</b> Chambal, Sind, Betwa (480 km), Ken.</li> <li>➤ <b>Left-bank tributaries:</b> Hindan, Rind, Senger, Varuna, Tons (Longest tributary, its tributaries- Pabbar, Asan)</li> </ul>
<b>Son(780km)</b>	<ul style="list-style-type: none"> <li>➤ <b>Origin:</b> Amarkantak Plateau in Madhya Pradesh.</li> <li>➤ <b>Note:</b> Large south bank tributary of the Ganga.</li> </ul>
<b>Chambal (1050km)</b>	<ul style="list-style-type: none"> <li>➤ <b>Source:</b> Near Mhow, Madhya Pradesh.</li> <li>➤ <b>Confluence:</b> Joins Yamuna.</li> <li>➤ <b>Feature:</b> Famous for ravines and badland topography.</li> <li>➤ Tributaries: Banas, Kali Sindh, Parvati</li> <li>➤ Border of Madhya Pradesh and Uttar Pradesh and Madhya Pradesh and Rajasthan</li> </ul>
<b>Kosi(730km)</b>	<ul style="list-style-type: none"> <li>➤ <b>Type:</b> Antecedent river.</li> <li>➤ <b>Source:</b> Arun River from Everest region, merging to form Saptakoshi in Nepal.</li> <li>➤ <b>Nickname:</b> "Sorrow of Bihar" due to flooding.</li> <li>➤ <b>Plain Elevation:</b> 30 metres above sea level.</li> </ul>
<b>Narmada (1312km)</b>	<ul style="list-style-type: none"> <li>➤ <b>Origin:</b> Amarkantak Plateau</li> <li>➤ <b>Flow:</b> Flows through fault valleys between the Satpura and Vindhya ranges; forms the boundary between North and South India</li> <li>➤ <b>Feature:</b> Dhuandhar Waterfall; formation of an estuary</li> <li>➤ <b>Tributaries:</b> Tawa, Sher, Shakkar</li> </ul>

<b>Tapti</b>	<ul style="list-style-type: none"> <li>➤ <b>Origin:</b> Multai, fault valley of the Satpura Range (Betul, Madhya Pradesh)</li> <li>➤ <b>Flow:</b> Passes through Madhya Pradesh, Maharashtra, and Gujarat</li> <li>➤ <b>Feature:</b> Flows parallel to the Narmada; about 80% of its basin lies in Maharashtra</li> <li>➤ <b>Tributaries:</b> <b>Waghur, Aner, Girna, Purna, Panzara and Bori.</b></li> </ul>
<b>Brahmaputra</b>	<ul style="list-style-type: none"> <li>➤ <b>Origin:</b> Chemayungdung Glacier, near Mount Kailash (Northern Himalayas)</li> <li>➤ <b>Total length:</b> ~2,900 km (one of the longest rivers of Asia).</li> <li>➤ Finally drains into the Bay of Bengal, forming the Ganga–Brahmaputra–Meghna Delta.</li> <li>➤ <b>Major Tributaries:</b> Subansiri, Manas, Sankosh, Dihang, Lohit, Burhi dihing etc.</li> <li>➤ It has the least storage capacity of usable water.</li> </ul>
<b>Mahanadi (858km)</b>	<ul style="list-style-type: none"> <li>➤ <b>Origin</b> → Sihawa range, Chhattisgarh</li> <li>➤ <b>States</b> → Chhattisgarh, Odisha (The largest river here)</li> <li>➤ <b>Tributaries</b> → Seonath, Hasdeo, Mand, Ib, Ong, Tel, Jonk</li> </ul>
<b>Godavari (1465km)</b>	<ul style="list-style-type: none"> <li>➤ <b>Origin</b> → Kasu bai hill, Nashik (MH - About 50 percent of the basin area is in this state, longest peninsular river.</li> <li>➤ <b>Tributaries</b> → Pranhita, Indravati, Penganga, Manjra</li> <li>➤ Peninsular India's longest river, the Old Ganga or Ganga of the South, the country's second largest basin.</li> </ul>
<b>Krishna (1400km)</b>	<ul style="list-style-type: none"> <li>➤ <b>Origin:</b> Mahabaleshwar, located in the Sahyadri Range (Maharashtra)</li> <li>➤ <b>Tributaries:</b> Bhima, Tungabhadra, Koyna, Munsri, Malaprabha, Panchganga, Dudhaganga, Ghataprabha</li> <li>➤ <b>Feature:</b> It has the largest drainage basin among the peninsular rivers.</li> <li>➤ <b>Note:</b> The Krishna–Godavari water dispute is between Karnataka and Andhra Pradesh.</li> </ul>
<b>Cauvery / Kaveri (805km)</b>	<ul style="list-style-type: none"> <li>➤ <b>Origin:</b> Brahmagiri Hills (Karnataka); known as <i>Ponni</i> in Tamil Nadu; the fourth-largest river in South India</li> <li>➤ <b>States:</b> Karnataka, Kerala, Tamil Nadu (The Cauvery water dispute is between Tamil Nadu and Karnataka)</li> <li>➤ <b>Feature:</b> Shivanasamudra Waterfall (largest in terms of volume); total length – 800 km</li> <li>➤ <b>Tributaries:</b> Kabini, Bhavani, Amaravati, Hemavati, Shimsha</li> </ul>
<b>Luni (450km)</b>	<ul style="list-style-type: none"> <li>➤ Origin: Aravalli Range</li> <li>➤ Feature: Seasonal River; ends in the Rann of Kutch;</li> <li>➤ major tributaries include Jojari, Sukri, and Jawai</li> </ul>
<b>Jhelum (725 km)</b>	Origin: Verinag Spring → passes through Wular Lake → Joins chenab In the <b>Vedas – Vitasta</b>
<b>Chenab (974 km)</b>	Formed by confluence of Chandra + Bhaga rivers at Tandi (Himachal) → Largest tributary of Indus → Joins Sutlej before finally merging with Indus In the <b>Vedas</b> , it is referred to as <b>Asikni</b> .
<b>Ravi (720 km)</b>	Origin: Kullu Hills near Rohtang pass → drains area between Pir Panjal & Dhaola Dhar ranges
<b>Beas (470 km)</b>	Origin: Near Rohtang pass → Joins Sutlej River
<b>Sutlej (1050km) (Sutudri)</b>	Origin: Rakas's lake (Tibet) → enters Punjab via Shipki La pass → Antecedent River cutting through the Himalayas before uplift

**Fact to Know:**

- Nandi river flows through Tiruttani a famous pilgrimage place of South India.
- Berach River, a southern-side tributary of Banas River, originates from the hills in Udaipur, Rajasthan.
- The Galwan River is a strategic river in Ladakh, India, flowing from disputed Aksai Chin (controlled by China) to join the Shyok River, an Indus tributary.
- Pindar River is the tributary of Alaknanda.

**Lakes In India**

Lake	State/Union Territory	Main Features
<b>Wular Lake</b>	Jammu and Kashmir	India's largest and Asia's second-largest freshwater natural lake; formed due to tectonic activity; the Jhelum River flows through it.
<b>Kodaikanal Lake</b>	Tamil Nadu	Artificial freshwater lake.
<b>Dal Lake</b>	Jammu and Kashmir	Famous for houseboats and Shikaras; known as the "Jewel of Srinagar."
<b>Pangong Tso</b>	Ladakh	Salt Lake extending into China.
<b>Tso Moriri, Tso Kar</b>	Ladakh	High-altitude freshwater lakes.
<b>Chilika Lake</b>	Odisha (Mahanadi Delta)	Asia's largest brackish water lake; famous for flamingos; India's first Ramsar site.
<b>Kanwar Lake</b>	Bihar	Asia's largest freshwater oxbow lake.
<b>Chandra Tal Lake</b>	Himachal Pradesh	"Lake of the Moon"; Parashar Lake is also located in Himachal Pradesh.
<b>Sasthamkotta Lake</b>	Kerala	"Queen of Lakes"; the largest freshwater lake in Kerala.
<b>Loktak Lake</b>	Manipur	The largest freshwater lake in Northeast India; famous for <i>phumdis</i> ; home to the world's only floating national park.
<b>Pookode Lake</b>	Kerala	The smallest lake in India.
<b>Bhojtal Lake</b>	Madhya Pradesh	Asia's largest artificial lake.
<b>Govind Ballabh Pant Sagar (Rihand Dam)</b>	Uttar Pradesh	India's largest artificial lake.
<b>Cholamu Lake</b>	Sikkim	The highest-altitude lake in India.
<b>Pulicat Lake</b>	Andhra Pradesh and Tamil Nadu	India's second-largest brackish lagoon; shared by two states.
<b>Vembanad Lake (Lagoon)</b>	Kerala	The longest lake in India; the largest lake in Kerala.
<b>Sambhar Lake</b>	Rajasthan	India's largest inland Salt Lake.
<b>Kolleru Lake</b>	Andhra Pradesh	Seasonal freshwater lake located between the Krishna and Godavari rivers.
<b>Nainital Lake</b>	Uttarakhand	Crescent-shaped natural freshwater lake.
<b>Naukuchia Tal</b>	Nainital, UK	
<b>Bhimtal Lake</b>	Uttarakhand	Larger than Nainital Lake.
<b>Renuka Lake</b>	Himachal Pradesh	Named after Goddess Renuka.
<b>Tsongmo (Changu) Lake</b>	Sikkim	Glacial lake located near the Nathu La Pass.
<b>Rudrasagar Lake</b>	Tripura	Wetland designated under the Ramsar Convention.

<b>Roopkund Lake</b>	Uttarakhand	Glacial lake; known as the “Mystery Lake” due to hundreds of human skeletons found around it.
<b>Jaisamand Lake</b>	Rajasthan	Asia’s second-largest artificial freshwater lake; Pichola Lake is another prominent lake in Rajasthan.
<b>Gurudongmar Lake</b>	Sikkim	Mountain lake; a sacred pilgrimage site in Buddhism.
<b>Keetham Lake</b>	Uttar Pradesh	Also known as <i>Sur Sarovar</i> ; designated as a Ramsar site.
<b>Lonar Lake (Crater Lake)</b>	Maharashtra	India’s only lake formed by a meteor impact; the largest crater lake in the world.
<b>Hussain Sagar Lake</b>	Telangana	Artificial lake built on the Musi River; connects the twin cities of Hyderabad and Secunderabad.
<b>Bhopal Lake</b>	MP	one of the largest artificial lake of its time was built in 11 <sup>th</sup> C

## Waterfalls in India

<b>Waterfall</b>	<b>Location</b>	<b>Description</b>
<b>Nohkalikai Waterfall</b>	Meghalaya	India’s highest plunge (vertical drop) waterfall.
<b>Dudhsagar Waterfall</b>	Goa	Four-tiered waterfall located on the Mandovi River.
<b>Jog Waterfall</b>	Karnataka	Situated on the Sharavathi River; also known as Gersoppa Falls.
<b>Dhuandhar Waterfall</b>	Madhya Pradesh	World-famous waterfall flowing through marble rocks; falls from the narrow stream of the Narmada River.
<b>Rajrappa Waterfall</b>	Jharkhand	Formed at the confluence with the Damodar River; known for its fascinating rock formations.
<b>Hundru Waterfall</b>	Jharkhand	Located in Ranchi district; surrounded by varied rock formations.
<b>Kempty Waterfall</b>	Uttarakhand	Situated in Tehri Garhwal district.
<b>Shivanasamudra Waterfall</b>	Karnataka	Located on the banks of the Cauvery River; the second-largest waterfall in India.
<b>Kapildhara Waterfall</b>	Madhya Pradesh	Formed at the confluence of the Kapila and Erandi rivers with the Narmada River.
<b>Kunchikal Waterfall</b>	Karnataka	The highest waterfall in India; formed by the Varahi River.
<b>Duduma Waterfall</b>	Odisha	Located on the Machkund River.
<b>Tirathgarh Waterfall</b>	Chhattisgarh	The highest waterfall in Chhattisgarh, situated on the Kanger River.
<b>Chitrakote Waterfall</b>	Chhattisgarh	Known as the “Niagara Falls of India”; located on the Indravati River.
<b>Gatha (Gatha Seha Waterfall)</b>	Madhya Pradesh	Fed by the Ken River.
<b>Magod Falls</b>	Karnataka	A group of waterfalls where the Bedti River descends.
<b>Thalaiyar Falls</b>	Tamil Nadu	The tallest waterfall in Tamil Nadu; also known as Rat Tail Falls.
<b>Athirappilly Waterfall</b>	Kerala	The largest waterfall in Kerala.

## Dams & Reservoirs

- A dam is a barrier across flowing water that obstructs, directs or retards the flow, often creating a reservoir, lake or impoundment.

Name of Dam	State	River	Main Feature
<b>Nagarjuna Sagar Dam</b>	Andhra Pradesh / Telangana	Krishna	The largest stone–masonry dam in Asia.
<b>Srisaïlam Dam</b>	Andhra Pradesh / Telangana	Krishna	Constructed in a deep gorge for hydroelectric power generation.
<b>Sardar Sarovar Dam</b>	Gujarat	Narmada	Part of the Narmada Valley Project; multipurpose dam.
<b>Ukai Dam</b>	Gujarat	Tapi	The second-largest water project in Gujarat.
<b>Bhakra Dam</b>	Himachal Pradesh / Punjab	Sutlej	The highest gravity dam in Asia; part of the Bhakra–Nangal Project.
<b>Baglihar, Salal, Dulhasti Dams</b>	Jammu & Kashmir	Chenab	Built for hydroelectric power generation.
<b>Almatti Dam</b>	Karnataka	Krishna	Major dam of Karnataka; disputed with Maharashtra and Andhra Pradesh; also known as Lal Bahadur Shastri Dam.
<b>Tungabhadra Dam</b>	Karnataka	Tungabhadra	Used for irrigation and hydroelectric power generation.
<b>Krishnarajasagar Dam</b>	Karnataka	Cauvery	Lifeline of the Mysore region.
<b>Idukki Dam</b>	Kerala	Periyar	The largest hydroelectric dam in Kerala.
<b>Mullaperiyar Dam</b>	Kerala / Tamil Nadu	Periyar	A disputed dam between Kerala and Tamil Nadu.
<b>Banasura Sagar Dam</b>	Kerala	Karamanasha Tributary	The largest earthen dam in India.
<b>Indira Sagar Dam</b>	Madhya Pradesh	Narmada	Largest reservoir in India by surface area.
<b>Gandhi Sagar Dam</b>	Madhya Pradesh / Rajasthan	Chambal	The first dam of the Chambal Valley Project.
<b>Koyna Dam</b>	Maharashtra	Koyna	The largest hydroelectric dam in Maharashtra.
<b>Hirakud Dam</b>	Odisha	Mahanadi	The longest earthen dam in Asia.
<b>Ranjit Sagar Dam</b>	Punjab	Ravi	Used for irrigation and power generation.
<b>Rana Pratap Sagar Dam</b>	Rajasthan	Chambal	Part of the Chambal Valley Project.
<b>Bisalpur Dam</b>	Rajasthan	Banas	Main source of drinking water for Jaipur.
<b>Mettur Dam</b>	Tamil Nadu	Cauvery	The oldest and most important dam in Tamil Nadu.
<b>Rihand Dam</b>	Uttar Pradesh	Rihand	The largest multipurpose dam in India.
<b>Tehri Dam</b>	Uttarakhand	Bhagirathi and Bhilangna	The highest dam in India (~260 meters).
<b>Farakka Barrage</b>	West Bengal	Ganga	Maintains water flow in the Kolkata port.

<b>Maithon Dam</b>	West Bengal / Jharkhand	Barakar	Part of the Damodar Valley Corporation project.
<b>Panchet Dam</b>	West Bengal / Jharkhand	Damodar	A component of the Damodar Valley Corporation project.
<b>Tilaiya Dam</b>	Jharkhand	Barakar	The first project under the Damodar Valley Corporation.
<b>Kallanai (Grand Anicut) Dam</b>	Tamil Nadu	Cauvery	The oldest dam in India, also known as the Grand Anicut.

## Transportation in India

### Road Transport

- **State with the highest number of roads:** Maharashtra
- **State with the lowest number of roads:** Sikkim
- **State with the highest number of paved roads:** Maharashtra
- **State with the highest number of unpaved roads:** Odisha
- **State with the highest road density:** Goa
- **State with the lowest road density:** Jammu & Kashmir
- **Longest road tunnel in India:** Dr. Shyama Prasad Mukherjee Tunnel, Jammu & Kashmir (9.2 km)

- **Longest road bridge in India:** Bhupen Hazarika Bridge, Assam (9.15 km)
- **Second longest National Highway in India:** NH-27, Porbandar (Gujarat) to Silchar (Assam), 3,507 km
- **State with the highest number of National Highways:** Maharashtra (102)
- **State with the lowest number of National Highways:** Meghalaya (5)
- **Shortest National Highway in India:** NH-327B, West Bengal (1.2 km)
- **Golden Quadrilateral cities:** Delhi, Mumbai, Chennai, Kolkata

### National Highways

National Highway	Connects	Key Features
NH-44	Srinagar (Jammu & Kashmir) – Kanyakumari (Tamil Nadu)	India's longest National Highway; approximately 3,745 km; passes through 12 states and Union Territories (from Jammu & Kashmir to Kanyakumari (Tamil Nadu)) 7 NHs were merged to form National Highway 44 (NH 44)
NH-27	Silchar (Assam) – Porbandar (Gujarat)	India's second-longest highway; East–West corridor
NH-19 (formerly NH-2)	Delhi – Kolkata (via Jhansi, Prayagraj, Varanasi, Dhanbad)	Part of the Golden Quadrilateral; runs parallel to the Ganga
NH-48	Delhi – Mumbai – Bengaluru – Chennai	Major part of the Golden Quadrilateral
NH-16 (formerly NH-5)	Kolkata – Chennai (via Odisha and Andhra coasts)	Eastern Coastal Highway; main route for Andhra Pradesh and Odisha
NH-8 (now part of NH-48)	Delhi – Mumbai	Busiest industrial corridor
NH-1 (now part of NH-44)	Delhi – Amritsar (Wagah Border)	Key route in North India; historically significant / Sher Shah Suri Route

**Fact to Know:**

- **National Highways Authority of India (NHAI):** An autonomous body under the Ministry of Road Transport and Highways, established in 1995, maintains National Highways.
- At present, the Grand Trunk Road extends from Amritsar to Kolkata in India.
- Roads are classified in 6 categories in India.

**Railway Transport:**

- The first train in India ran on **16 April 1853** between **Mumbai and Thane**. This train was named "**Black Beauty**."
- **Founder of Railways in India: Lord Dalhousie** is considered the father of railways in India.

**Metro Services in India:**

- The first metro in India was inaugurated in **Kolkata (Calcutta Metro)**.
- In **2011**, **Namma Metro** in **Bengaluru** was launched with support from **Japan**.

**Important facts related to Railways**

- **Longest train route in India:** Vivek Express (Kanyakumari to Dibrugarh)
- **Fastest train in India:** Vande Bharat Express (Varanasi to Delhi)
- **Longest railway platform in India:** Hubli / Siddharudha Swami Railway Station, Karnataka (since 2020)
- **Largest railway station in India:** Howrah, West Bengal

- **India's first solar-powered railway station:** Guwahati (2018)
- **Railway services between India and Bangladesh:** Maitree Express and Bandhan Express
- **Railway services between India and Pakistan:** Thar Express and Samjhauta Express
- **Mountain railway services in India:** Kalka–Shimla (Himachal Pradesh), Darjeeling (West Bengal), and Nilgiri (Tamil Nadu)
- **India's first private railway station:** Rani Kamalapati Station, Habibganj, Madhya Pradesh
- **Proposed bullet train service in India:** Ahmedabad to Mumbai
- **Konkan Railway Service (1990):** Operates between Roha (Maharashtra) and Mangaluru (Karnataka) covering 760 km
- **Indian Railways in UNESCO World Heritage List:**
  - ✓ Darjeeling Himalayan Railway
  - ✓ Nilgiri Mountain Railway
  - ✓ Kalka–Shimla Railway
- **Konkan Railway:** Started in 1990; serves Maharashtra (Roha), Goa, and Karnataka (Mangaluru); 760 km long.

**Fact to Know:**

- The Indian Railways has integrated its helpline numbers into a single number, that is 139.

**Railway Zone**

Railway Zone	Headquarters	States/Regions Covered
Northern Railway	Delhi	Delhi, Haryana, Uttar Pradesh, Punjab, Rajasthan, Jammu & Kashmir
North Central Railway	Prayagraj (Allahabad)	Uttar Pradesh, Madhya Pradesh, Rajasthan
North Eastern Railway	Gorakhpur	Uttar Pradesh, Bihar, part of West Bengal
North East Frontier Railway	Maligaon, Guwahati	Assam, Arunachal Pradesh, Nagaland, part of West Bengal, Bihar, Meghalaya
North Western Railway	Jaipur	Rajasthan, Punjab, Haryana, part of Uttar Pradesh
Eastern Railway	Kolkata	West Bengal, Jharkhand, Bihar
East Central Railway	Hajipur	Bihar, Jharkhand, part of Uttar Pradesh

East Coast Railway	Bhubaneswar	Odisha, Andhra Pradesh, Chhattisgarh
Southern Railway	Chennai Central	Tamil Nadu, Kerala, Puducherry, parts of Andhra Pradesh and Karnataka
South Central Railway	Secunderabad	Telangana, Andhra Pradesh, Maharashtra, parts of Karnataka
South Coast Railway	Visakhapatnam	Coastal Andhra Pradesh (Visakhapatnam, Vijayawada divisions)
South Eastern Railway	Garden Reach, Kolkata	West Bengal, Jharkhand, Odisha
South East Central Railway	Bilaspur	Chhattisgarh, Odisha, Maharashtra, parts of Madhya Pradesh
South Western Railway	Hubli	Karnataka, Tamil Nadu, Andhra Pradesh, parts of Maharashtra
Western Railway	Mumbai	Maharashtra, Gujarat, parts of Rajasthan
West Central Railway	Jabalpur	Madhya Pradesh, Uttar Pradesh, parts of Rajasthan
Central Railway	Mumbai	Maharashtra, Madhya Pradesh, Karnataka, parts of Andhra Pradesh
Konkan Railway	Navi Mumbai	Konkan region of Maharashtra, Goa, Karnataka (started in 1998)
Metro Railway (Kolkata)	Kolkata	West Bengal (Kolkata Metropolitan Area; announced in 2010)

### Railways Tunnel

Tunnel Name	Track Length (meters)	Location	Railway Division
Pir Panjal Railway Tunnel	11,215 m	Jammu & Kashmir	Northern Railway
Atal Tunnel (Rohtang passageway)	9,020 m	Himachal Pradesh	Northern Railway
Sangaldaan Tunnel	8,000 m	Jammu & Kashmir	Northern Railway
Karbude Tunnel (T-35)	6,505 m	Maharashtra	Konkan Railway
Nathu Wadi Tunnel (T-6)	4,390 m	Maharashtra	Konkan Railway
Tike Tunnel (T-39)	4,078 m	Maharashtra	Konkan Railway
Barviewadi Tunnel (T-49)	4,000 m	Maharashtra	Konkan Railway
Savarde Tunnel (T-17)	3,429 m	Maharashtra	Konkan Railway
Barsem Tunnel (T-73)	3,343 m	Goa	Konkan Railway
Karwar Tunnel (T-80)	2,950 m	Karnataka	Konkan Railway

### Waterways

- The **Inland Waterways Authority of India (IWAI)** was established in 1986 under the **Inland Waterways Authority of India Act, 1985** as an autonomous organization for the development, maintenance, and regulation of national waterways.
- Under the **National Waterways Act, 2016**, 111 inland waterways were declared as National Waterways.

#### **Major National Waterways of India:**

Serial No.	National Waterway (NW) No.	Name	Length (km)	Location (States)
1	NW-1	Ganga–Bhagirathi–Hooghly River System	1,620	Uttar Pradesh, Bihar, Jharkhand, West Bengal (Allahabad-Haldia stretch)
2	NW-2	Brahmaputra River	891	Assam

3	NW-3	West Coast Canal, Champakara, and Udyogmandal Canals	205	Kerala
4	NW-4	Krishna River	82	Andhra Pradesh
5	NW-100	Tapi River	436	Gujarat and Maharashtra
6	NW-96	Subarnarekha River	314	Odisha, Jharkhand, West Bengal
7	NW-97	Sundarbans Waterway	172	West Bengal
8	NW-99	Tamiraparani River	62	Tamil Nadu

## Types of Ports in India

### Major Ports:

- Directly administered by the Central Government.
- Operate under the **Major Port Authorities Act, 2021**.
- **Major Ports: 13. Examples:** Mumbai, Chennai, Visakhapatnam, Kolkata, Kandla

Port	State	Key Features
Kandla (Deendayal Port Trust)	Gujarat (Gulf of Kutch)	Protected natural tidal port; largest state-operated cargo port developed as a major port to cater to the needs of western and north-western parts of the country and also to reduce the pressure at Mumbai port.
Mumbai Port Trust	Maharashtra	Busiest and largest natural port
Jawaharlal Nehru (Nhava Sheva)	Maharashtra	India's largest artificial and container port; satellite port
Mormugao Port	Goa	Developed for iron ore export; natural port
New Mangalore Port	Karnataka	Karnataka's only major port; deepest inland port on the western coast
Cochin Port	Kerala	India's largest international container transshipment terminal; known as the "Queen of the Arabian Sea"
Chennai Port	Tamil Nadu	Largest port on the Bay of Bengal and India's second-largest container port
Kamarajar (Ennore) Port	Tamil Nadu	India's first corporatized or corporate-managed major port
Paradip Port	Odisha	Located at the confluence of Mahanadi and Bay of Bengal; deep-water port
Visakhapatnam Port	Andhra Pradesh	Second-largest cargo port; deepest land-locked port
Tuticorin (V.O. Chidambaranar)	Tamil Nadu	India's third-largest container terminal
Kolkata (Syama Prasad Mukherjee) Port	West Bengal	India's oldest operational and only major river port; dual dock system (Haldia-Kolkata)
Vadhavan (Proposed) Port	Maharashtra	Main greenfield port under the Sagarmala Project <b>Ports to be developed under the Sagarmala Project:</b> Vadhavan (Maharashtra), Ennore (Tamil Nadu), Tajpur (West Bengal), Paradip Outer Harbor (Odisha), Sirikazhi (Tamil Nadu), Belekeri (Karnataka)

## Air Transport:

- **Beginning:** 1911, between Allahabad and Naini (10 km); **Tata Airlines** was established in 1932.
- **Operation & Regulation:** Managed by the **Airports Authority of India**, established in 1992 under the Ministry of Civil Aviation.
- **Nationalization:** 1953
- From **January 2022**, **Air India** became a private company.

## Other Important Facts

- **India's first airport:** Santacruz / Juhu Airport, Mumbai

- **India's first solar-powered airport:** Cochin (Kochi) International Airport
- **India's first green airport:** Rajiv Gandhi International Airport
- **India's busiest airport:** Indira Gandhi International Airport
- **Largest airport in India by area:** Rajiv Gandhi International Airport, Hyderabad
- **Largest proposed airport in India:** Jewar (Noida) Airport
- **India's 100th airport:** Pakyong Airport

