

CHARTER (LIFELINES OF NATIONAL ECONOMY)

Himalayan mountains → unpopulated due to high relief & sparse population
economic difficulties

Transport: Movement of people and goods from one place to another place is called transport. Modes of transport are: a) Land [Road, Rail, Pipeline], b) Water [Inland, Oceanic] and c) Air [Domestic, International]

Communication: Transfer of idea, message, and information from one place to another place is called communication. Modes of communication are TV, radio, cellphone, newspaper, magazines, internet. Communication has two types: a) Print Media [Newspaper, Magazines] and b) Electronic Media [TV, Radio, Internet].

Harbour: It is an area of sea which provides safe entrance to ships. It also protects ships from waves and storms.

Port: It is a point on the coast which provides facility of anchoring of ship. It also provide facilities like loading and unloading, berth, cold storage. A port is connected with its hinterland. Seaports help in international trade and commerce.

Hinterland: It is an area which serves port for international trade. For example, Maharashtra, M P, Rajasthan, Punjab, Haryana are hinterland for Mumbai seaport. Various things produced in these states are exported through Mumbai port.

Express Highway: These are 6 lanes best quality of roads. They have been constructed to connect important cities of India and to provide fast traffic from one place to other place.

International Trade: Exchange of goods and services between two or more countries is called international trade.

Remember These Facts

Mine

Golden Quadrilateral road connect north with south and east with west. It connects Delhi, Mumbai, Chennai and Kolkata DMCK

East-West Corridor connects Silchar [Assam] with Porbandar [Gujarat]. It connects Guwahati, Gorakhpur, Kanpur, Jhansi and Rajkot. GGJK

North-South Corridor connects Srinagar [J & K] with Kanyakumari. It connects Delhi, Agra, Nagpur, Hyderabad and Bangalore. BHAND

Density of road is lowest in Jammu and Kashmir. It is only 10 km for 100 sq. km. area. Density of road is low in this state because this is a hilly state with very low population.

Highest road density is found in Kerala. It is about 375 km. for 100 sq. km. area.

Longest pipeline in India is H-B-J Pipeline [Hazira-Bijapur-Jagddishpur]. It is about 1700 km. long.

Indian railway is divided into 16 railway zones.

NH - 1 connects Delhi and Amritsar.

NH - 2 connects Delhi and Kolkata. It is also called as Grand Truck Road.

NH - 3 connects Mumbai and Agra.

NH - 7 connects Varanasi and Kanyakumari. It is longest in India.

Transport and Its Types

India has one of the largest road networks in the world. Total road length in India is about 2.3 million km. There are various types of road in India.

Golden Quadrilateral: It is a 6 lane super highway. This connects four mega cities of our country i.e. Delhi, Mumbai, Chennai and Kolkata. East-West Corridor connects Silchar [Assam] with Porbandar [Gujarat]. North-South Corridor connects Srinagar [J & K] with Kanyakumari [Tamil Nadu].

National Highways: These roads are most important in India. National Highways are constructed by CPWD. Important National Highways are NH-1, NH-2, NH-7 etc. These highways connects important cities, railways stations, port, mining areas, capital towns etc.

State Highways: These roads connect state capital with district headquarters. They are constructed by SPWD [State Public Work Dept.].

and resources are favorable for their growth.
Hilly terrains of peninsular region tracks are laid
hills gaps or tunnels.

District Roads: These roads are found in rural areas. They connect district headquarter with village blocks.

Other Roads: It includes village roads. They are mainly non-metalled roads. Many roads have been constructed under "Pradhan Mantri Grameen Sadak Yojana". PMGSY

Border Roads: Border Roads are constructed by Border Road Organisation [BRO]. These roads are constructed along the borders which are used to connect isolated parts with main country. These roads are very important from strategic point of view.

Advantages or Advantage of Roadways

- ✓ Construction and maintenance of road is much lower than railways.
- ✓ Roads can be constructed on hills, plateaus, forests and desert also.
- ✓ Road can negotiate high degree of slope and can take sharp turns.
- ✓ It provides door-to-door service facilities.
- ✓ Roads can be constructed in the hills and forest also.
- ✓ It is economical for few passengers and small amount of goods.
- ✓ Transportation of perishable items e.g. milk, fish, vegetables are more reliable by roads.
- ✓ Cost of loading and unloading of goods is much lower.
- ✓ Road transport provide link between other mode of transport such as rail, airport, seaport etc.

Indian Railway at a Glance

Indian railway is about 150 years old. First rail was started in 1853 between Mumbai and Thane. It connects State Capital with Capital of India. It also connects major towns and cities, tourist places, mining centers, seaports, airports etc.

There are about more than 7,000 stations on 63,000 km. long railway track

Indian railway is divided into 16 zones for proper administration.

Railways in India have three gauge system:

a) Broad Gauge	[1.676 m]
b) Meter Gauge	[1.0 m]
c) Narrow Gauge	[0.762 and 0.610 m].

There are various types of train running in India such as Rajdhani, Shatabdi, Mail and Express and Special Trains which carry passengers.

About 80% of freight [goods] and 70% of passenger traffic is carried by railways.

Konkan Railways is built in Western Ghat Mountain. It is an example of best railway engineering in India. It has hundred of tunnels and bridges.

There is marked improvement in Indian railways. They are: a) Computerised Reservation System, b) Waiting Room Facilities on Stations, c) Catering Facility, d) Electrification of Tracks, e) Unified Ticketing System [Conversion of all gauges into broad gauge], f) Replacement of Steam Engine with Diesel Engine, g) Special Trains like Rajdhani, Shatabdi, Jan Shatabdi, Summer Special etc.

Merits or Advantage of Railways

- Good for transportation of bulky and heavy materials ✓
- It is cheaper for transporting goods for longer distances.
- Best for transportation of raw materials e.g. iron ore, manganese, coal etc
- It is fast mode transportation. ✓
- Large number of passengers can be transported. ✓
- Railway provides various facilities such as night berth, catering, comput

Pipelines in India and Its Advantages

- Pipelines are used to transport gas and liquid materials such as mineral oil or even milk. Solid items can also be transported after making it 'slurry'

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Pipelines are found from oil producing centers to oil refinery plants and from oil refinery plants to the

oil from upper Assam is transported to Barauni and Allahabad oil refinery through pipeline. Pipeline from Salaya to Jalandhar via Mathura and Delhi is also very important pipeline.

The longest pipeline in India is H-B-J pipeline which connect Hazira, Bijapur and Jagdishpur. It is about 1700 km. long.

Advantage of Pipeline Transportation

Pipeline is best for transportation of gas and liquid materials e.g. oil, natural gas, water and milk.

Construction of pipeline is cheaper than road and railways.

Pipeline can be constructed in forest, swampy area, hills and desert. It can also be laid down under river and ocean water.

Pipeline can ensure regular, quick and on-demand supply of liquid and gaseous materials.

Pipelines can be operated at low energy cost and it does not pollute environment.

Water Transportation in India

Water transportation is cheapest among all mode of transportation because there is no need to construct any route.

They are cheaper for transporting bulky and heavy raw materials.

India has many perennial and seasonal rivers which offer transport facility. India has about 14,500 km long inland navigation waterways.

India also has long sea coast on which there are many ports like Mumbai, Goa, Kochhi, Chennai, Vishakhapatnam, Haldia etc.

India has three National Waterways:

National Waterways - 1	Ganga	1620 km	Allahabad - Haldia
National Waterways - 2	Brahmaputra	803 km	Sadiya - Dhubri
National Waterways - 3	West Coast Canal	205 km	Kollam - Kottapuram

There are some problems in using waterways like: a) Peninsular rivers are seasonal, b) Many rivers make waterfalls in their course, c) Water transportation is slowest among all transport modes, d) Construction of dams and barrage also blocks waterways, e) Many rivers flow in uninhabited area, f) Indian coast are shallow and we have less natural ports.

Distinguish between Ports on West and East Coasts

West Coast Ports

West coast ports are located in the west along Arabian Sea.

Important west coast ports are Mumbai, Mangalore, Marmagao, Cochin.

Cotton, spices, coffee, rubber, iron ore, manganese etc are exported to USA and European countries.

Mumbai is the largest port on west coast.

East Coast Ports

1. East coast ports are located in the east along Bay of Bengal.

2. Important east coast ports are Kolkata, Vishakhapatnam, Chennai and Tuticorin.

3. Hinterland of these ports are rich in resources like iron ore, bauxite, manganese, mica.

4. Kolkata is the largest port on east coast.

Air Transport in India and Its Advantages

It is fastest and most comfortable mode of transport. It can cover long distance within hours.

River, hills, forest, oceans etc. do not come in the way of air transport.

Air transport play very important role in rescue operation during natural disasters like flood and earthquake.

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- It also connects isolated and far away places with main stream of the country. It is best for north-eastern states and Jammu and Kashmir.

In India, domestic service is provided by 'Indian Airlines'. It covers major cities of India and neighboring countries. International air transport service is provided by 'Air India'. Pawanhans provides helicopter facility. Private companies like Sahara, Kingfisher are also operating air transportation in India.

Disadvantages: Problems: a) Air transport is very costly and not suited for common people, b) Construction of airports needs huge capital and technology, c) Airports cannot be constructed everywhere.

Air transport was nationalised in 1953.

Difference between Personal and Mass Communication

Personal Communication

- Personal communication takes place between two people or among very few people at a time.
- Means of personal communication are letters, postcards, telephone, mobile, telegram etc.
- It is handled mainly by Indian Postal Network and telephone companies.

Mass Communication

- Mass Communication takes place among many people at a time. Many persons can interact with each other.
- Means of mass communication are TV, radio, magazines, newspapers, internet, films etc.
- Mass communication includes print media and electronic media.

India Trade and Its Types

- Meaning of Trade: Exchange of goods and services among people is called as trade. In other words, buying and selling goods and services is called trade. The place where trade takes place is called as market or trading center. Trade takes place because all parts of world do not have same resources and they do not produce same commodity. Higher amount of trade indicate higher economic development of a country.
- Balance of Payment: The ratio between value of export and import is called balance of payment. If export is higher than import, it is called 'favourable balance of payment'. If import is higher than export, it is called negative balance of payment.
- Export from India: Petroleum products, engineering goods, gems and jewellery, computer software, chemical products and agricultural products are exported by India to other countries.
- Import to India: Petroleum, pearls and precious stones, coal, inorganic chemicals, fertilizers, electronic consumer durables are imported by India from other countries.

Problem associated with Roads:-

- Vol. of traffic is high and road density is less.
- Half of the roads are un-metalled metalled.
- National Highways are un-adequate.
- Road side facilities like - Medical aid etc. are absent.

Problems with Railway:-

- Many people travel without ticket.
- Theft & Damaging of railway property.
- People stop the train by pulling chain unnecessarily, causing heavy damage & delay.

→ ONGC in its offshore operations to inaccessible places & difficult terrains in eastern states.

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~~1. Major ports~~
West coast ~~(A) Kandla~~ - Kachh - first port after independence to reduce volume of trade on Mumbai ports (B) It is a tidal port (C) Exports & Imports highly productive granary and Industrial belt of Punjab & Haryana

2) Mumbai Port → Biggest port with a spacious natural & well settled Harbour

3) Jawaharlal Nehru Port → It was plant to decongest Mumbai port and serve as a hub port for this region

4) Mormugao Port → Goa - Exports 50% of India's iron ore

5) New Mangalore → In Karnataka - Exports iron ore concentrates from Kudremukh mines.

6) Kochi → Extreme south western port at the entrance of lagoon with a natural harbour.

East Coast - (1) Tuticorin → Extreme south eastern port in Tamil Nadu. It is a natural harbour & a rich hinterland.

2) Chennai → Oldest Artificial port ranks 2nd in terms of volume of trade.

3) Vishakhapatnam → Deepest land locked & well protected port. Outlet for Iron export port

4) Kolkata → Inland riverine port. It serves as a large and rich hinterland of Ganga - Brahmaputra Basin. Since it is a tidal port it requires constant dredging of Hoogly.

5) Haldia → Developed to relieve heavy pressure on Kolkata port.

(2) It is affected by physiographic, economic and administrative factors.

(3) Northern plains → Level land, high population density, rich agriculture