



## Ch. – 6 – Lecture Notes

### Geography

### “Lifelines of National Economy”

#### Introduction:

- The pace of development of a country depends upon the production of goods and services as well as their movement over space.
- Movement of these goods and services can be over three important domains of our earth i.e. land, water and air.
- **Based on these, transport can also be classified into land, water and air transport.**
- Today, the world has been converted into a large village with the help of efficient and fast-moving transport.
- Today, India is well-linked with the rest of the world despite its vast size, diversity and linguistic and socio-cultural plurality.
- Railways, airways, waterways, newspapers, radio, television, cinema and internet, etc. have been contributing to its socio-economic progress in many ways.

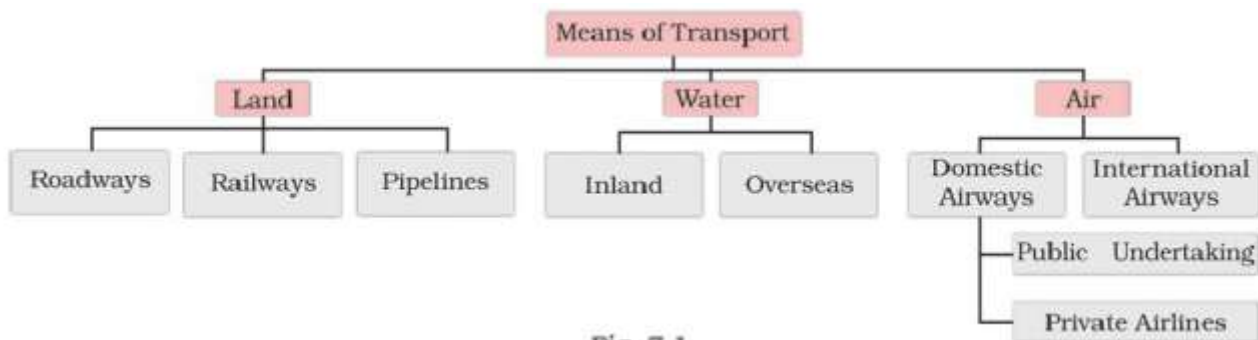


Fig. 7.1

#### Transport

##### 1. Roadways:

- Construction cost of roads is much lower than that of railway lines.
- Roads can traverse comparatively more dissected and undulating topography.
- **Roads can negotiate higher gradients of slopes and as such can traverse mountains such as the Himalayas.**
- It is economical in transportation of few persons and relatively smaller amount of goods over short distances.
- It provides door to door services.
- It is used as feeder to other modes of transport such as they provide a link between railway stations, air and sea ports.

##### • Golden Quadrilateral Super Highways:

- The Government has launched a major road development project **linking Delhi-Kolkata-Chennai-Mumbai and Delhi by six-lane super highways.**
- **The North-South corridors linking** Srinagar [Jammu & Kashmir] & Kanyakumari [T.N.] & East-West Corridor Connecting Silcher (Assam) & Porbander (Gujarat).
- The major objective of these super highways is to reduce time and distance.



- These highway projects are being implemented by the National Highway Authority of India (NHAI).
- **National Highways:** National Highways link extreme parts of the country and are laid and maintained by **the Central Public Works Department (CPWD)**.
- **State Highways:** State Highways link a state capital with different district headquarters and are constructed and maintained by the State Public Works Department (PWD) in State and Union Territories.
- **District Roads:** These roads connect the district headquarters with other places of the district and are maintained by the Zila Parishad.
- **Other Roads:** Rural roads, which link rural areas and villages with towns. These roads received special impetus under the Pradhan Mantri Gram Sadak Yojana.
- **Border Roads:** Border Roads Organisation a Government of India undertaking constructs and maintains roads in the bordering areas of the country.

#### • **Road Density:**

- **The length of road per 100 sq. km of area is known as density of roads.**
- Density of all roads varies from only 10 km in Jammu & Kashmir to 375 km in Kerala with the national average of 75 km (1996-97).

#### 2. **Railways:**

- The distribution pattern of the railway network in the country has been largely influence by physiographic, economic and administrative factors.
- **The Himalayan mountains regions are unfavorable for the construction of railway lines** due to high relief, sparse population & each of economic opportunities.
- The northern plains having high population density, provide most favourable condition for their growth.
- Rivers requiring construction of bridges across their wide beds posed some obstacles for the construction of railway lines.

#### Q1. **Roadways have preceded railways, how?**

- Ans.**
1. Construction cost are much lower than railways.
  2. Roads can traverse comparatively more dissected and undulating topography.
  3. Roads can negotiate higher gradients of slopes and as such can traverse mountains such as the Himalayas.
  4. **Road transport is economical in transportation** of few persons and relatively smaller amount of goods over short distances.
  5. It also provides door-to-door service; thus, the cost of loading and unloading is much lower.
  6. **Road transport is also used as a feeder to other modes of transport** such as they provide a link between railway stations, air and sea ports.

#### 3. **Pipelines:**

- Pipelines transport network is a new arrival on the transportation map of India.
- Its initial cost is high but subsequent running costs are minimal.
- It is **used for transporting crude oil, petroleum products and natural gas.**
- It rules out trans-shipment losses and delays.



## • Important Networks

- Oil field in Assam to Kanpur (U.P.), via Guwahati, Barauni and Allahabad. It has branches from Barauni to Haldia, via Rajbandh, Rajbandh to Maurigram and Guwahati to Siliguri.
- From Salaya in Gujarat to Jalandhar in Punjab via Viramgam, Mathura, Delhi and Sonipat. It has branches to connect Koyali (near Vadodara, Gujarat) Chakshu and other places.
- Gas pipelines from Hazira in Gujarat connects Jagdishpur in UP via Vijaypur in Madhya Pradesh, linked Mumbai High and Bassein gas fields with various fertilizer, power and industrial complexes in western and northern India.

## 4. Waterways:

- Waterways are the cheapest means of transport. They are most suitable for carrying heavy and bulky goods.
- It is a fuel-efficient and environment friendly mode of transport.
- The following waterways have been declared as the National Waterways by the Government:
- The Ganga River between Allahabad and Haldia (1620 km)-N.W. No.1.
- The Brahmaputra River between Sadiya and Dhubri (891 km)-N.W. No.2.
- The West-Coast Canal in Kerala (Kottapuram-Kollam, Udyogamandal and Champakkara canals-205 km) – N.W. No.3.
- Specified stretches of Godavari and Krishna rivers along with Kakinada Puducherry stretch of canals (1078 km) – N.W. No.4.
- Specified stretches of river Brahmani along with Matai River, delta channels of Mahanadi and Brahmani rivers and East Coast Canal (588 km) – N.W. No.5.

## • Major Sea Ports:

- With a long coastline of 7,516.6 km, India is dotted with 12 major and 181 medium and minor ports. **Kandla in Kuchh was the first port developed soon after Independence.**

### (i) West coast Port:

- **Kandla is a tidal port** also known as the Deendayal Port. It caters to the convenient handling of exports and imports of highly productive granary and industrial belt.
- **Mumbai is the biggest port** with a spacious natural and well-sheltered harbour.
- **Marmagao port (Goa) is the premier iron ore exporting port** of the country.
- New Mangalore port, located in Karnataka caters to the export of iron ore concentrates from Kudremukh mines.
- Kochi is the extreme south-western port, located at the entrance of a lagoon with a natural harbour.

### (ii) East Coast Port:

- **Tuticorin in Tamil Nadu** has natural harbor and rich hinterland.
- **Chennai is one of the oldest artificial ports** of the country. It is ranked next to Mumbai in terms of the volume of trade and cargo.
- **Vishakhapatnam is the deepest landlocked and well-protected port.** This port was, originally, conceived as an outlet for iron ore exports.
- **Paradwip port** located in Odisha, **specialises in the export of iron ore.**
- **Kolkata is an inland riverine port**, serves a very large and rich hinterland of Ganga Brahmaputra basin.
- Haldia port was developed as a subsidiary port, in order to relieve growing pressure on the Kolkata port.



### 5. Air Ways:

- It can cover very difficult terrains like high mountains, dreary deserts, dense forests and also long oceanic stretches with great ease.
- **The air transport was nationalized in 1953.**
- Air India provides international air services.
- **Pawanhans Helicopters Ltd. provides helicopter services to Oil and Natural Gas.** Commission in its off-shore operations, to inaccessible areas and difficult terrains like the north-eastern states and the interior parts of Jammu and Kashmir, Himachal Pradesh and Uttaranchal.

### 6. Communication:

- Personal communication and mass communication including television, radio, press, films, etc. are the major means of communication in the country.
- The Indian postal network is the largest in the world. Cards and envelopes are considered first-class mail.
- The second-class mail includes book packets, registered newspapers and periodicals.
- **To facilitate quick delivery of mails in large towns and cities, six mail channels have been introduced recently.**
- They are called Rajdhani Channel, Metro Channel, Green Channel, Business Channel, Bulk Mail Channel and Periodical Channel. India has one of the largest telecom networks in Asia.

### International Trade:

- The exchange of goods among people, states & countries is referred to as trade.
- Exports and imports are the components of trade. The balance of a trade of a country is the difference between its export and import.
- **When the value of exports exceeds the value of imports, it is called favorable balance of trades.**

### Tourism as a Trade:

- Tourism has proved itself as one of the most important aspects of trade.
- Tourism in India has grown substantially.
- It helps as promotion of National Integration.
- Provide support to local handicrafts.
- Provides support to cultural pursuits.
- Development of international understanding about our culture and heritage.