

NCERT Revision Notes
Class 10th Social Science (Geography)

Chapter 7 – Lifelines of National Economy

There are three important areas of our planet where we can move goods and services, i.e., land, water, and air. On this basis, transportation can also be classified as land, sea, and air transportation. Let's have a fulsome discussion:

Roadways:

India has one of the world's largest road networks, totaling approximately 54.7 lakh kilometres. The increasing importance of road versus rail transportation is noted below:

- 1) Roads are much cheaper to build than rail.
- 2) Roads can negotiate higher slopes and can be easily integrated through mountains like the Himalaya.
- 3) Roads can cover geographically more difficult areas which cannot be built by rail.
- 4) In addition, it offers door-to-door service.
- 5) Highway transportation is economical.
- 6) Road transport connects train stations, airports and sea ports.

In India, the routes are ranked in the following six classes according to their capacity.

Golden Quadrilateral Super Highways: Golden Quadrilateral is a system of motorways connecting the four main metropolitan cities of India, namely Delhi, Kolkata, Chennai, Mumbai. These road projects are delivered through the National Highway Authority of India (NHAI).

National Highways: National highways are a system of major highways that are laid and maintained by the Central Public Works Department (CPWD). The historic Sher-Shah Suri Marg is known as the National Road No.1, between Delhi and Amritsar.

State Highways: The roads connecting a state capital with several district headquarters are known as State Highways. These roads have been built and maintained by the State Public Works Department (PWD).

District Roads: These roads connect the district head office to other locations in the district. These roads are managed by Zila Parishad.

Other Roads: Rural roads, which connect rural areas and towns to cities, are included in this category. Those roads received a particular impulse under the

Pradhan Mantri Grameen Sadak Yojana.

Border Roads: Border Roads Organization builds and maintains roads in neighboring parts of the country. This organization was created in 1960 to develop strategically important highways in the northern and northeastern border regions.

Highways can also be categorized according to the type of materials used in their construction, such as:

- **Metalled roads:** Metallized roadways can be made from cement, concrete or even coal bitumen. They are all-season highways.
- **Unmetalled roads:** Unmetalled roadways become unusable during the rainy season.

Railways: Railways are the primary means of transport for transporting large loads and bulky goods over long and short distances in India. Railways have increased in importance in the Indian economy. However, railway transportation also suffers from a number of problems, which are mentioned below:

- Railroad lines on sandy plains are difficult to establish.
- In the hilly terrain of the peninsular region, railway tracks are laid across low hills, interstices and tunnels.
- The mountainous regions of the Himalayas are also unfavorable to the building of railway lines due to the higher elevation points of the surface, the low population and the lack of economic opportunities.
- Bridge construction is necessary across wide river beds to establish rail lines.

Pipelines: The pipeline system uses pipes, usually underground, for the transportation and distribution of fluids. They are used for the transportation of water, crude oil, petroleum products and natural gas, fertilizer plants and major thermal power plants. Solids can also be carried in a pipeline when they are processed into manure.

We have three major pipeline systems across this country.

- From Hazira in Gujarat to Jagdishpur in Uttar Pradesh
- From Salaya in Gujarat to Jalandhar in Punjab
- From oil field in upper Assam to Kanpur (Uttar Pradesh)

Waterways: Waterways are the least expensive method of transportation. They are more suitable for transporting large and heavy goods. It is a mode of transportation that is energy efficient and environmentally friendly.

The National Waterways in India are:

- 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 (Kottapurma-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
- The internal waterways in India are Mandavi, Zuari and Cumberjua, Sunderbans, Barak and Kerala backwaters through which transport takes place.

Major Sea Ports: Trade between India and foreign countries takes place through ports. There are 2 major and 200 notified non-majors (minor/intermediate) ports in India.

The following is a list of the most important ports in India:

- Mumbai is the largest harbor with a natural and well protected harbor.
- The port of Marmagao (Goa) is India's most important iron ore exporting port.
- Kandla in Kachchh was the first harbour to be developed following independence. It is also referred to as the port of Deendayal.
- Kochchi is the south-west extremity of the harbour, located at the entrance to a lagoon.
- The port of Mangalore, located in Karnataka, takes care of the export of iron ore.
- Chennai is one of the oldest manmade harbours in India.
- The port of Tuticorin lies at the extreme southeast.
- Kolkata is an interior river harbour.
- Visakhapatnam is the deepest port, enclosed and well protected.
- Paradwip port situated in Odisha, specializes in exporting iron ore.
- Haldia port was developed as a subsidiary port, in order to alleviate the increasing pressure on the port of Kolkata.

Airways: Air travel is the quickest, most comfortable and most prestigious mode of transportation. Air transportation has facilitated access to land areas such as high mountains, bleak deserts, dense forests and long oceans. The air transport was nationalized in 1953. Air India is a provider of domestic and international air services. Pawanhans Helicopters Ltd. provides helicopter services to Oil and Natural Gas Corporation for its offshore activities in inaccessible areas and difficult terrain. But air travel is not something that ordinary people can do.

Communication

Since the appearance of humans on Earth, they use different methods of communication. But, the rhythm of change, was rapid in the modern era. Long-range communication is much easier without the physical motion of the communicator or receiver. Individual and mass communication, including television, radio, press, cinema, etc. are the primary means of communication within the country. India has the largest postal service in the world. It is responsible for parcels and personal written communications. Cards and envelopes are considered to be first-class mail and are carried by air between land and air stations. Second-class mail consists of book packages, recorded journals and periodicals. They are transported by land and marine transportation.

International Trade: Trade in goods between persons, states and countries is called trade. Trade between one country and another is called international trade. It is regarded as the national economic barometer. Exports and imports are the building blocks of trade. A country's trade balance is the difference between their exports and imports.

- If the value of imports is greater than the value of exports, then we are talking about an unfavorable trade balance.
- When the value of exports exceeds the value of imports, we speak of a favorable trade balance.

Products exported from India to other countries include precious stones and jewelry, chemicals and related products, agriculture and related products, and so on.

Products imported into India include crude oil and products, gemstones and jewellery, chemicals and related products, base metals, electronic goods, machinery, agriculture and related products.

Tourism as a Trade: Over 15 million people contribute directly to the tourism industry. Tourism in India:

- Assistance for developing international understanding of Indian culture and heritage. International tourists travel to India for heritage tourism, ecotourism, adventure tourism, cultural tourism, medical tourism and business tourism.
- Encourages national integration.
- Support local craftwork and cultural activities.