

7 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 goods and services can be over three important domains of our earth:
 - Land,
 - Water
 - Air
- There are five transport systems in India:
 - Roadways
 - Railways
 - Airways
 - Waterways
 - Pipelines
- With the development in science and technology, the area of influence of trade and transport increased.

Transport

Roadways

- India has one of the largest road networks in the world, totaling to about 2.3 million km at present.
- Advantages of roadways over railways:
 - 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.
 - Road transport is economical in transportation of few persons and relatively smaller amount of goods over short distances.

→ It also provides door-to-door service, thus the cost of loading and unloading is much lower,
→ 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.

- Roads are categorised into six classes:

→ Golden Quadrilateral Super Highways: The project was launched by the government to link Delhi-Kolkata- Chennai-Mumbai and Delhi by six-lane Super Highways. The major objective of these Super Highways is to reduce the time and distance between the mega cities of India. These highway projects are being implemented by the National Highway Authority of India (NHAI).

→ National Highways: These are the primary road systems and are laid and maintained by the Central Public Works Department (CPWD).

→ State Highways: Roads linking a state capital with different district headquarters are known as State Highways. These 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. These roads are maintained by the Zila Parishad.

→ Other Roads: Rural roads, which link rural areas and villages with towns, are classified under this category.

→ Border Roads: Border Roads Organisation constructs and maintains roads in the bordering areas of the country. This organisation was established in 1960 for the development of the roads of strategic importance in the northern and north- eastern border areas.

- Classification of Roads on the basis of the type of material used for their construction:

→ Metalled roads: These roads may be made of cement, concrete or even bitumen of coal.

→ Unmetalled roads: Roads made up of mud and gravel which are generally found in the rural areas.

Road Density

- The length of road per 100 sq. km of area is known as Road Density.
- Density of all roads varies from only 10.04 km in Jammu and Kashmir to 532.27 km in Uttar Pradesh.
- The national average of 125.02 km.
- Problems of Road Transportation:
 - About half of the roads are unmetalled which limits their usage during the rainy season.
 - The National Highways are inadequate too.
 - The roadways are highly congested in cities.
 - Most of the bridges and culverts are old and narrow.

Railways

- Railways are the principal mode of transportation for freight and passengers in India.
- It makes possible to conduct multifarious activities like business, sightseeing, pilgrimage along with transportation of goods over longer distances.
- The Indian Railway have a network of 7,133 stations spread over a route length of 64,460 km with a fleet of 9,213 locomotives, 53,220 passenger service vehicles, 6,493 other coach vehicles and 2,29,381 wagons as on March 2011.
- The Indian Railway is now reorganised into 16 zones.
- The distribution pattern of the Railway network in the country has been largely influenced by physiographic, economic and administrative factors.
- The railways have become more important in our national economy than all other means of transport put together.
- Problems in Railway Transportation:
 - Many passengers travel without tickets.
 - Thefts and damaging of railway property has not yet stopped completely.
 - People stop the trains, pull the chain unnecessarily and this causes heavy damage to the railway.

Pipelines

- Pipeline transport network is new in India.

- These are used for transporting crude oil, petroleum products and natural gas from oil and natural gas fields to refineries, fertilizer factories and big thermal power plants.
- There are three important networks of pipeline transportation in the country.

→ From oil field in upper Assam to Kanpur (Uttar Pradesh), 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 pipeline from Hazira in Gujarat connects Jagdishpur in Uttar Pradesh, via Vijaipur in Madhya Pradesh. It has branches to Kota in Rajasthan, Shahajahanpur, Babrala and other places in Uttar Pradesh.

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.

- India has inland navigation waterways of 14,500 km in length.
- Waterways that have been declared as the National Waterways by the Government 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.

- India's trade with foreign countries is carried from the ports located along the coast.
- 95 percent of the country's trade volume (68 percent in terms of value) is

moved by sea.

Major Sea Ports

- India has a long coastline of 7,516.6 km with 12 major and 187, notified minor or intermediate ports.
- The major ports handle 95 per cent of India's foreign trade.
- Mumbai is the biggest port with a spacious natural and well-sheltered harbour.

Sea Ports in India

Ports on the western coast

- Kandla port
- Mumbai port
- The Jawaharlal Nehru port
- Marmagao port
- New Mangalore port

Ports on the eastern coast

- Tuticorin port
- Chennai port
- Vishakhapatnam port
- Paradwip port
- Kollkata port
- Haldia port

Airways

- Airways fastest, most comfortable and prestigious mode of transport.
→ 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 nationalised in 1953.
- Indian Airlines, Alliance Air, private scheduled airlines and non-scheduled operators provide domestic air services.
- Pawan Hans Helicopters Ltd. provides helicopter services to Oil and Natural

Gas Commission in its offshore operations, to inaccessible areas and difficult terrains.

- There are two types of airports in India:
 - International
 - Domestic

Communication

- The means of communication are of two types:
 - Personal communication: It includes postcards, letters, telegrams, telephones and emails.
 - Mass communication: It includes magazines, newspapers, radio, television, press and films.
- Personal written communications: Indian postal network is the largest in the world.
 - First-class mail: They are airlifted between stations covering both land and air. Cards and envelopes.
 - Second-class mail: They are carried by surface mail, covering land and water transport. Book packets, registered newspapers and periodicals.
- India has one of the largest telecom networks in Asia.
- Mass communication provides entertainment and creates awareness among people about various national programmes and policies.
 - Radio: All India Radio (Akashwani) broadcasts a variety of programmes in national, regional and local languages for various categories of people, spread over different parts of the country.
 - Television: Doordarshan, the national television channel of India, is one of the largest terrestrial networks in the world.
 - Magazines: India publishes a large number of newspapers and periodicals annually.
 - Films: India is the largest producer of feature films in the world.

International Trade

- Trade: The exchange of goods among people, states and countries is referred to as trade.
- Market: The market is the place where such exchanges take place.
- International Trade: Trade between two countries is called international trade.
→ It may take place through sea, air or land routes.
- Balance of trade: The balance of trade of a country is the difference between its export and import.
- Favourable balance of trade: When the value of export exceeds the value of imports, it is called a favourable balance of trade.
- Unfavourable balance of trade: When the value of imports exceeds the value of exports, it is called unfavourable balance of trade.

Tourism as a Trade

- Foreign tourist's arrivals in the country witnessed an increase of 11.8 per cent during the year 2010 as against the year 2009, contributing Rs 64,889 crore of foreign exchange in 2010.
- More than 15 million people are directly engaged in the tourism industry.

Importance of Tourism

- Tourism promotes national integration, provides support to local handicrafts and cultural pursuits.
- It also helps in the development of international understanding about our culture and heritage.