Notes

20

FOREIGN DIRECT INVESTMENT (FDI), TRANSPORT, COMMUNICATION AND TRADE

In previous lessons, you have learnt about the richness of resources in our country and its agricultural and industrial development. The availability of such resources and their optimum use makes our standard of living high. The growth and development of a country is also impacted by the availability of financial resources, knowledge, technology and skills. Optimum availability of these things provide an appropriate atmosphere to grow industry resulting in the development of a country. Foreign Direct Investment (FDI) provides these essential elements of industry. Transport, communication and trade are an important aspect of the development of a country. They facilitate agriculture and industry to grow to their fullest potential. Transport carries the people and goods to different places. Communication is the process of receiving and sending messages between two persons or agencies located at different places. Trade involves exchange of goods among people living in different regions or countries of the world. It plays a vital role in accelerating the progress of agriculture and industry of a country.

In this lesson, you will study the significance of the FDI, importance of transport and communication and their distribution. In trade you will know its volume and direction.

OUTCOMES

After studying this lesson, learner:

- explains the role of FDI in the development over the years;
- identifies the different modes of transport and their development;
- traces out the role of ICT in development of India and
- describes the changing patterns of import and export.

20.1 MEANING AND SIGNIFICANCE OF FOREIGN DIRECT INVESTMENT (FDI)

According to the IMF, 'Foreign Direct Investment (FDI) is the category of international investment that reflects the objective of obtaining a lasting interest by a resident entity in one economy in an enterprise resident in another economy'. The 'Reserve Bank of India (RBI)' has also defined it as 'the investment through capital instruments by a person resident outside India (a) in an unlisted Indian company; or (b) in 10 percent or more of the post issue paid-up equity capital on a fully diluted basis of a listed Indian company'. It is an investment made by an individual or an organisation of a country into a business established in another country. This investment doesn't include money only but also includes new knowledge, technology, skills and employment. For the growth of a country it is important for the continuous growth of businesses and industries. An industry requires optimum finance for availing latest technologies, raw materials, equipment, human resources and infrastructure. In the lack of money, it becomes difficult for an industry or business to survive for a longer period. Sometimes, an industry may not be able to receive finances locally. In such cases, money received through FDI may help to provide optimum money, technology and infrastructure to innovate and grow. Often it is perceived that FDI is a channel of progress and development because it provides financial resources and technology.

The liberalisation in FDI by the Government of India was initiated during 1980-91. It began with the Industrial Policy Statements of 1980 and 1982. Later the Technology Policy Statement in 1983 also continued the process. During this period considerable degrees of trade liberalisation were also experienced. This was in the area of reductions in tariffs and the shifting of many import items under open general licence (OGL) category. However, in the beginning of 1990s, the FDI was accepted and promoted as a preferred way for financial resources over loans and other types of finance as the Foreign direct investment (FDI) in India was introduced in 1991 under the Foreign Exchange Management Act (FEMA). FDI was considered as an effective tool to bring new foreign technology which was still not available in India. Later multiple changes have been made in norms and procedures to regulate it and make it easier for doing business. Today, India is considered as an important destination for foreign direct investment.

Routes of FDI in India

There are two common routes for Foreign Direct Investments in India:

1. The automatic route

Under this route an Indian company or Non-Resident does not need any prior permission from the RBI or the Government of India for investment from other countries in India. Many sectors are permitted to get 100 percent investment through the automatic route category. Such areas are agriculture and animal husbandry, airports, automobiles, construction companies, food processing etc.

Notes

2. The government route

Under this route the FDI is received after prior permission from the Government of India only. The companies interested to invest in India have to fill and submit an application form through the Foreign Investment Facilitation portal. This portal enables them to obtain single-window clearance.

Sector Specific Conditions on FDI

The FDI is governed with certain norms to monitor and regulate it. With these objectives some sectors have been identified where FDI is permitted or restricted. These sectors are:

Prohibited Sectors:

- Lottery Business including Government/private lottery, online lotteries, etc.,
- Gambling and Betting including casinos etc.,
- Chit funds,
- Nidhi company,
- Trading in Transferable Development Rights (TDRs),
- Real Estate Business or Construction of Farm Houses 'Real estate business' shall not include development of townships, construction of residential /commercial premises, roads or bridges and Real Estate Investment Trusts (REITs) registered and regulated under the SEBI (REITs) Regulations 2014,
- Manufacturing of cigars, cheroots, cigarillos and cigarettes, of tobacco or of tobacco substitutes,
- Activities/sectors not open to private sector investment e.g.(I) Atomic Energy and (II) Railway operations (other than permitted activities).

Permitted Sectors:

- Agriculture
- Agriculture and Animal Husbandry
- Plantation sector
- Mining and Petroleum and Natural Gas
- Manufacturing
- Manufacturing
- Defence
- Service sector

- Broadcasting
- Print media
- Civil aviation
- Construction development: townships, housing, built-up infrastructure
- Industrial parks
- Satellites- establishment and operation
- Telecom services
- Trading
- Railway infrastructure
- Financial Services
- Asset reconstruction companies
- Banking- private sec
- Banking- public sector
- Credit information companies (cic)
- Infrastructure company in the securities market
- Insurance
- Pension sector
- Power exchanges
- White label atm operations
- Other financial services
- Others
- Pharmaceuticals

Regional Pattern

India has witnessed a positive inflow of FDI in recent years. It attracted annual FDI inflows of approx $ 84,835 million in Financial Year 2021-22. It is estimated that the Total FDI inflows in the country in the last 22 years (April 2000 - March 2022) were $ 847 billion.

It is also observed that there are regional variations in receiving the FDI from different countries. Singapore with 27.01% of the total FDI topped the list of countries investing in India for financial year 2021-22. It was followed by the USA (17.94%), Mauritius (15.98%), the Netherlands (7.86%) and Switzerland (7.31%). There are also variations in receiving FDI in

Notes

different sectors. If we talk about the major sector receiving the FDI for financial year 2021-22, the Computer Software & Hardware sector has received the highest FDI with 24.60%. Next was Services Sector (Fin., Banking, Insurance, Non Fin/Business, Outsourcing, R&D, Courier, Tech. Testing and Analysis, Other) which received 12.13%. Other important sectors were Automobile Industry (11.89%), Trading 7.72% and Construction (Infrastructure) Activities (5.52%).

INTEXT QUESTIONS 20.1

1. The term FDI refers to-
   a. Foreign Digital Investment
   b. Foreign Direct Investment
   c. Force Direct Investment
   d. Free Digital Investment
2. Which Country has maximum shares in FDI?
   a. USA
   b. UAE
   c. Singapore
   d. Switzerland

20.2 TRANSPORTS IN INDIA

India is a vast and diverse country with long distances. It has climatic as well as physiographic diversity. A dense and efficient network of transport is essential to promote social cohesion, accelerate economic prosperity and ensure security and territorial integrity. Transport consists of three different modes - land, water and air. Each one of them has some advantages and disadvantages. They all compete with one another. More importantly they complement each other and in the process constitute a single integrated network.

While air transport is of recent origin, the other two have been as old as the nomadic man himself. The land transport comprises road and rail transport. Of the two, rail transport is relatively new. The road transport on the other hand is very handy and convenient to carry goods and passengers over relatively short distances. Water transport for passengers is now no more attractive; but it is an ideal means of transport to carry heavy and bulky goods along navigable rivers and across the oceans of the world. Air transport has become tremendously

popular for people who are called upon to urgently visit various parts of the world at a very short notice.

Transport system links areas of production with those of consumption. It facilitates the movement of goods, services and people at local, regional, national and international levels.

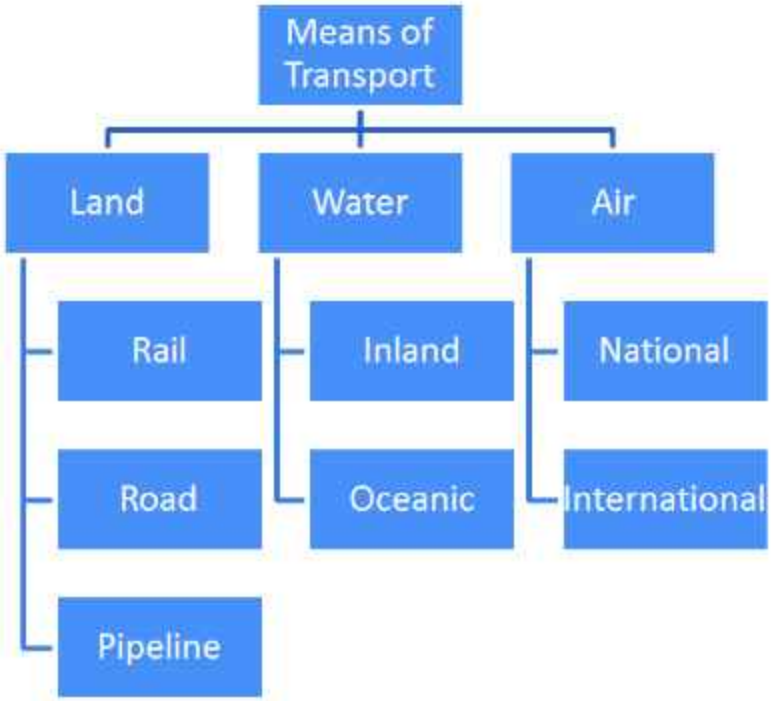


Fig. 20.1 Types of Transport

20.3 RAIL TRANSPORT

The Indian railway network is the fourth largest in the world after Russia, the U.S.A. and Canada. In a vast country like India, it has brought the people of the farthest corners of the country closer to one another. Railways are ideal for carrying goods and people over long distances. It employs the largest number of persons among the Central Government departments.

The first train steamed off in the country in 1853 from Mumbai to Thana, covering a distance of 34 km. During these years, Indian railways have grown into a vast network. The following table may give you an idea about the growth of the railway system during the post-independence era.

Table 20.1 Indian Railway- at a glance

Description	1950-51	2019-20
Total routes (in kilometre)	53,596	67,956

Notes

Electrified routes (in kilometre)	388	39,329
Number of Stations	5,976	7,325
Number of persons originating (in millions)	1,284	8,086
Passengers kilometre# (in millions)	66,517	10,50,738
Total Freight Traffic tonnes km.* originating (in millions)	93	1,212.22
Number of Steam locomotives	8,120	39
Number of Diesel locomotives	17	5,898
Number of Electric locomotives	72	6,792

Source-

- Summary sheet - Annual Report 2021-22, indianrailways.gov.in, Ministry of Railway, Govt. of India
- India, 2021, A reference annual

1 passenger-km = when one passenger travels one km.

*1 tonne km = when 1 tonne of goods is carried over one km.

You can observe from the above table that Indian railways has made tremendous progress over 75 years. In the first place the total route length has increased very slightly. However, the routes are not totally electrified but it is continuously increasing. Approximately 60% route lengths are electrified. It means over this track the traffic is far cleaner and faster. Similarly, the route length has increased only marginally but the passenger- km traffic has increased multiple times. Even the goods traffic in terms of tonne-km has increased by well over ten times. This also speaks of qualitative increase in the efficiency of the railways. This has become possible by electrification of part of the route and dieselisation of the track.

The railways have undertaken to convert metre gauge railway tracks into broad-gauge (1.68 metres) enhancing the capacity of railways to carry more goods and more passengers with an increased speed. Indian Railways also run several fast trains. Earlier there were passenger and express or mail trains, the only two categories. Now there are Super fast Expresses, Rajdhani Expresses, Shatabdi Expresses, Vande bharata, Hamsafar, Duronto, Jan shatabdi, Garib rath, Tejas, Gatiman, Double decker etc.

Let us have a glance at the regions of dense, moderate and sparse railway networks.

The Regions of Dense Network

- The northern plains and eastern coastal areas possess a dense network of railways. The level land, fertile soils, dense population and spread of industries are the reasons for this dense railway network.
- The plains of Gujarat and Saurashtra, Central Tamil Nadu and Chota Nagpur Plateau are the other regions. These regions have well developed industries.

Regions of Moderate Railway Network

- The whole of the peninsular region except Tamil Nadu and Chhotanagpur has a moderate network. The hilly and plateau terrain provides unfavourable conditions for laying railway lines.
- There are long trunk routes which connect the important industrial cities and ports. The railway lines either pass through the large gaps between hills or through the tunnels.

Regions of Sparse Railway Network

- The Himalayan mountain region, comprising Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh have hardly a line here and there. The hilly terrain, rugged topography are the main reasons responsible for the very sparse network. However, now efforts are being made to develop or extend the rail network in these hilly terrain.
- The North eastern region also has a sparse railway network. All hilly states in this region are almost without a railway line. The hilly terrain, thick forest cover, heavy rainfall, low level of economy and sparse population are the main factors for the absence of railway lines.
- Desert region of western Rajasthan also has a sparse network of railways.

20.4 ROAD TRANSPORT

Road transport is one of the most ancient means of transport. It plays a significant role in carrying goods and people in all parts of the country. Particularly, the rural economy depends upon road transport. The importance of roads has increased with the advent of auto vehicles. The relative importance of roads is much more than that of railways.

Importance of road transport

- Railway transport is limited to the railway heads while the roads provide door to door services.

- Roads can negotiate higher gradients of slopes and can traverse the mountainous regions. Construction of railway lines is difficult and expensive in hilly regions.
- Road transport is flexible, reliable and quick,
- It is more suitable for carrying perishable goods like milk, fruit and vegetables.
- Its cost of construction and maintenance is far less than that of the railway.
- For short distance journeys, roads are more suitable. They supplement the railways by linking the interior areas with railway heads.
- Roads are ideal for the promotion of tourism in the country.

Surfaced and Unsurfaced Roads

Surfaced roads are the metalled roads and are made up of cement, concrete or bitumen. These are all weather roads. The total route length of roads in India till March, 2019 was 63,71,847 km. It included a surface road of 41,16,390 km. Unsurfaced roads are 'Kutcha roads made up of earth. They provide tracks for the bullock carts and link the rural areas with the urban centres. They play an important role in the development of the rural economy. During the rainy season these roads are of little use. The total length of these roads was 22,55,457 km. till march 2019.

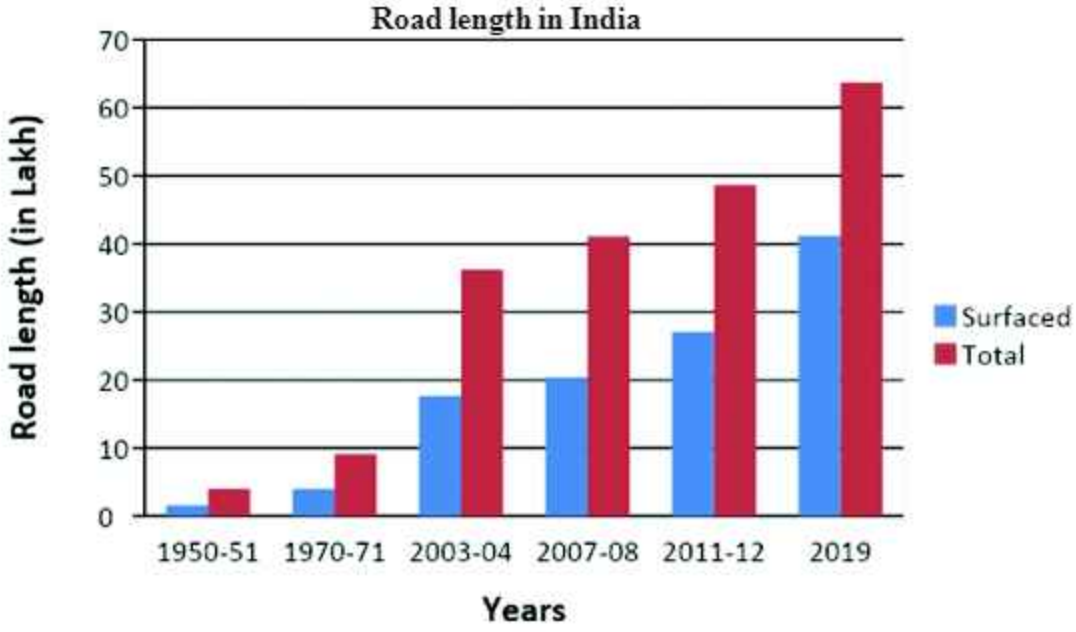


Fig. 20.2 Development of Road length in India

Development of Road Transport

There has been considerable development in the road length after independence. Route length of surfaced roads has increased from 1.571akh km. (1950-51) to 41.16 lakh km. in 2019. The length of unsurfaced roads during the same period has increased from 2.42 lakh km. to over 22.55 lakh km.

Not only has the route length of roads has increased but the number of commercial heavy vehicles, particularly the buses and trucks has also shown a tremendous increase since Independence. Vast increase in the road traffic has posed serious problems in handling it smoothly. The number of road accidents has also shown a steady increase. With increased road traffic, pollution of air has been on the rise.

Geographical Distribution of Roads

Road density refers to the average length of roads per 100 square km. area. The road density in India is increasing continuously but still comparatively low to the developed countries. High concentration of road network is found in the Northern Plains because of level land, fertile soil and high density of population. In these parts, unsurfaced roads are more common than surfaced roads. Peninsular plateau has a higher proportion of metalled roads because of the easy availability of road building materials. In the North eastern states; the road network is very sparse due to hilly terrain, thick forest cover and heavy rains causing frequent floods. Sparse population is also another important reason.

The pattern of road density is also uneven in the country. Tamil Nadu, Kerala, Punjab and Haryana have higher road density. It is because of the growth of agriculture, manufacturing industries, urbanisation and dense population. Karnataka and Maharashtra also fall in this category, the reason behind this is concentration of industries and urbanisation.

The states of Karnataka, Maharashtra, Andhra Pradesh and Telangana have moderate density of roads. In Rajasthan, Madhya Pradesh, Bihar, Jharkhand and Chhattisgarh, the density of roads is comparatively low.

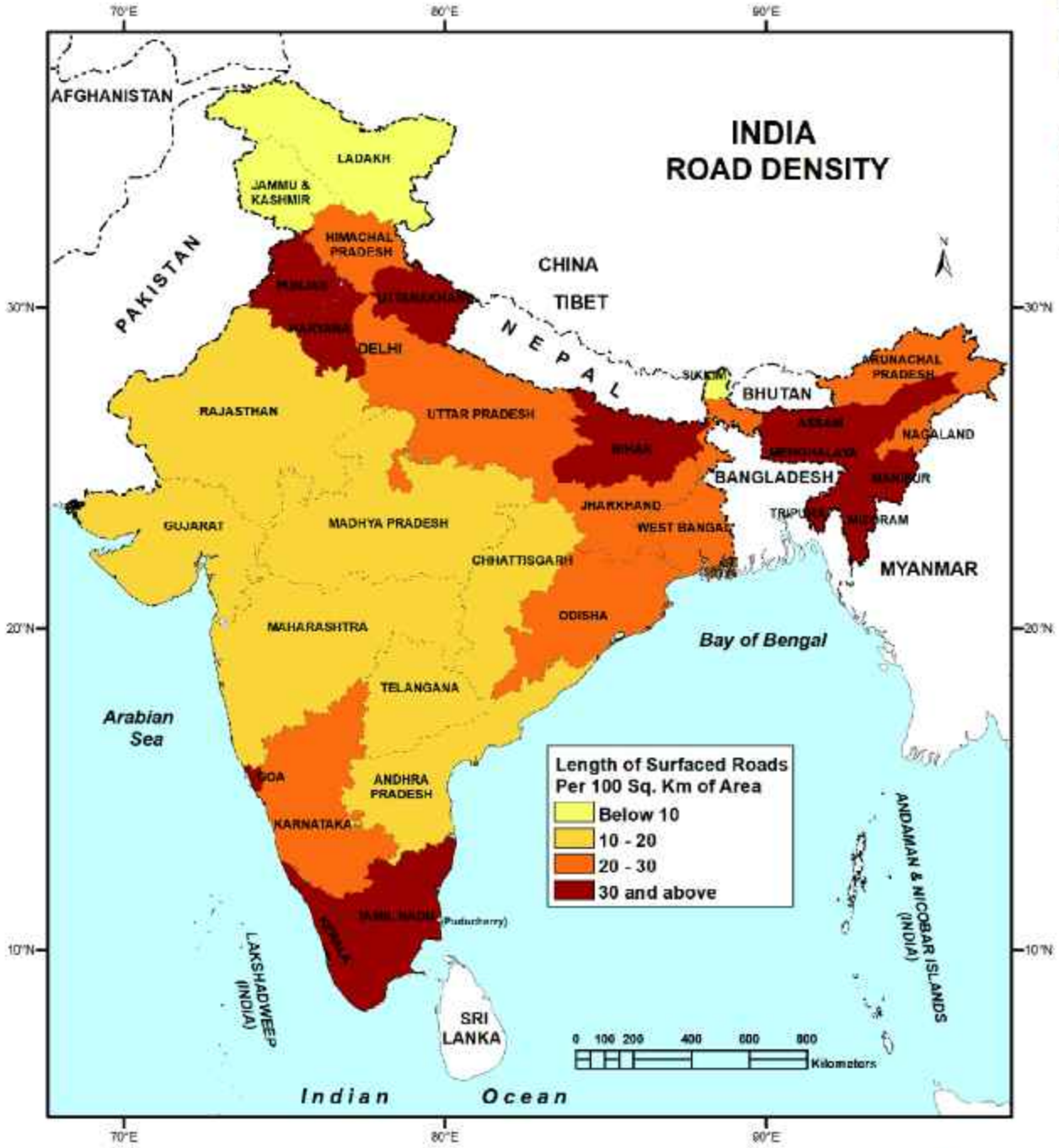


Fig. 20.2 India: Road Density

The Himalayan region and North Eastern states have a very low density of road network, which is below 20 km. per 100 square km area. As regards the pattern of surfaced roads, Punjab in the north and Kerala and Tamil Nadu in the south have the highest road density. The southern states have a good network of metalled roads. The pattern of surface road density is more or less the same as the total density of roads.

Road density in India is not uniform. It varies from region to region depending upon its relief and climatic conditions, economic development and density of population. Roads are divided

into three categories: (i) National highways (ii) State highways, and (iii) District and village roads.

i. National Highways

National Highways are the trunk roads linking major cities of the country. They are built and maintained by the Central Government. Their total length of National Highways (2019) is 1,32,499 km. Although the national highways comprise only about 2 percent of the total length of surfaced roads in India, they carry about 40% of goods and passenger traffic. Maharashtra has the highest share of National Highways (17,757 km) followed by Uttar Pradesh (11,737 km) and Rajasthan (10,342 km). National Highway 44 is the longest national highway in India. It is 4,112 kilometres long running from Srinagar in the north to Kanyakumari in the south. It connects 11 states in its

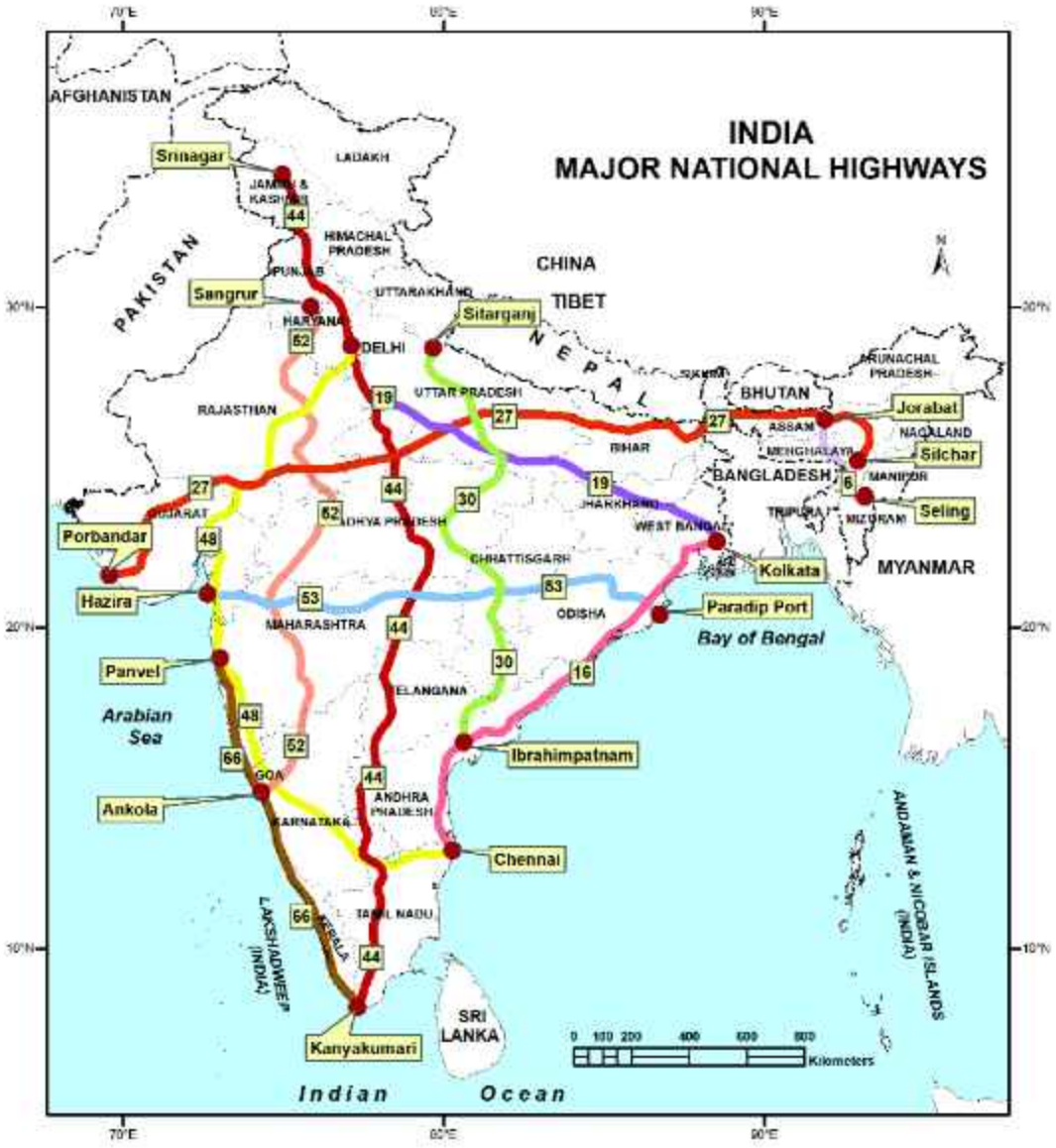


Fig 20.3: India: Major National Highways

Notes

ii. State Highways

The state highways are built and maintained by the State Governments. The total length of State Highways is 1,79,535 km (in 2019), out of these 1,78,384 km were surfaces and remaining 1,151 km were un-surfaced.

iii. District Roads

The District Roads comprise Major District Roads & Other District Roads constructed and maintained by State PWD. The District and village roads are looked after by the local bodies with some financial assistance coming from the states. The total length of District Roads (in 2019) were 6,12,778 km. It included 5,87,004 km of surfaces and 25,773 km of un-surfaced roads.

Border roads have been constructed on Indian international borders and its nearby areas. They connect these areas with the interior parts of the country. It's constructed and maintained by the Border Road Organisation. These roads have economic as well as strategic importance. 20,949 km of roads were under border roads in 2019.

Major Programmes/Projects

- **The Bharatmala Pariyojana :** The Bharatmala Pariyojana is a flagship programme of Government of India for the highways sector. This programme focuses on optimising efficiency of freight and passenger movement all over the country through bridging critical infrastructure gaps. To achieve this objective, the programme aims to initiate different ways i.e. development of Economic Corridors, Inter Corridors and Feeder Routes, National Corridor Efficiency Improvement, Border and International connectivity roads, Coastal and Port connectivity roads and Green-field expressways. In the first phase the programme envisages development of about 26,000 km length of Economic Corridors. It is expected to carry the majority of the Freight Traffic on roads along with Golden Quadrilateral (GQ) and North-South and East-West (NS-EW) Corridors.

- **Char Dham Pariyojna :** It is another important programme designed for improvement in connectivity for Char-Dham -Kedarnath, Badrinath, Yamunotri & Gangotri in Uttarakhand. The total length of the project is 889 km. This project after completion will make the journey safer, faster and more convenient. This project may also be strategically important due to its closeness with the international border.

20.5 PIPELINE TRANSPORT

Pipeline transport has been developed recently in India. It is the most convenient mode of transport for mineral oil, petroleum products and natural gas. Pipe lines connect oil and natural gas fields with refineries and the main market centres. Now solids are also being transported

through pipelines after converting them into slurry.

There are certain advantages of pipelines over other modes of transport (i) Pipeline can be laid through difficult terrain as well as under water. (ii) Initial cost of laying pipeline is high but subsequent cost for maintenance and operation is low. It ensures steady supply and minimises transshipment losses and delays. (iv) Pipeline operation involves very low consumption of energy. There are some limitations of pipeline transport such as the capacity of the pipeline cannot be increased once it is laid. The security of pipelines in certain areas and the detection of leakage are difficult.

Some of the important pipelines are:

- Petroleum pipelines in Assam connect oil fields with the oil refineries of Assam and Bihar.
- The Mumbai-Ankleshwar-Koyali Pipeline: This pipeline connects the offshore of Mumbai and Gujarat with the Koyali refinery in Gujarat.
- The Salaya-Koyali-Mathura Pipeline: This pipeline runs from Salaya (Gulf of Kachchh) to Koyali and Mathura through Viramgam, It is 1075 kilometre long.
- Mathura-Delhi-Ambala-Jalandhar Pipeline: This 513 km long pipeline was built to transport refinery products from Mathura to the nearby major cities..
- The Hazira-Vijaipur-Jagdishpur (HBJ) Gas Pipeline: This pipeline transports natural gas from Hazira to Vijaipur and Jagdishpur. This pipeline is the longest oil pipeline in India with a total length of 1750 kilometres.

INTEXT QUESTIONS 20.2

1. State the number of railway stations in India in 2019-20.
2. Write any two regions with dense rail network.
3. Why road network is not uniform in India?
4. What is the total length of Char-Dham Pariyojna.

20.6 WATER TRANSPORT

India has a long coastline including island groups which is over 6100 km. This long coastline is dotted with 12 major ports managed by the central government. Then there are 200 minor ports operating under the jurisdiction of the state governments. These major ports alone handled 672.68 million tonnes of sea traffic. Out of the 200 non-major ports, around 65 ports

Notes

are handling cargo. The remaining ports have "Port Limits" and no cargo is handled. These ports are used by fishing vessels and by small ferries to carry passengers across the creeks etc. The capacity of the ports has increased five times since 2001-02. In the year 2001-02, the port capacity was 343.95 million tones which increased to 1560.61 million tones in the year 2020-21.

The major ports along the western or Arabian Sea coast are Deendayal Port (at Kandla), Mumbai, JawaharLal Nehru Port (at Nhava Sheva on the opposite side of Mumbai harbour), Marmugao, New Mangalore and Cochin. Thus all the states on the western coast have at least one major port. The remaining five ports are Tuticorin, Ennore, Chennai, Visakhapatnam, Paradeep (Paradip) and the Joint port of Kolkata - Haldia. These ports connect India with the world and play a major role in the success of international trade and commerce.

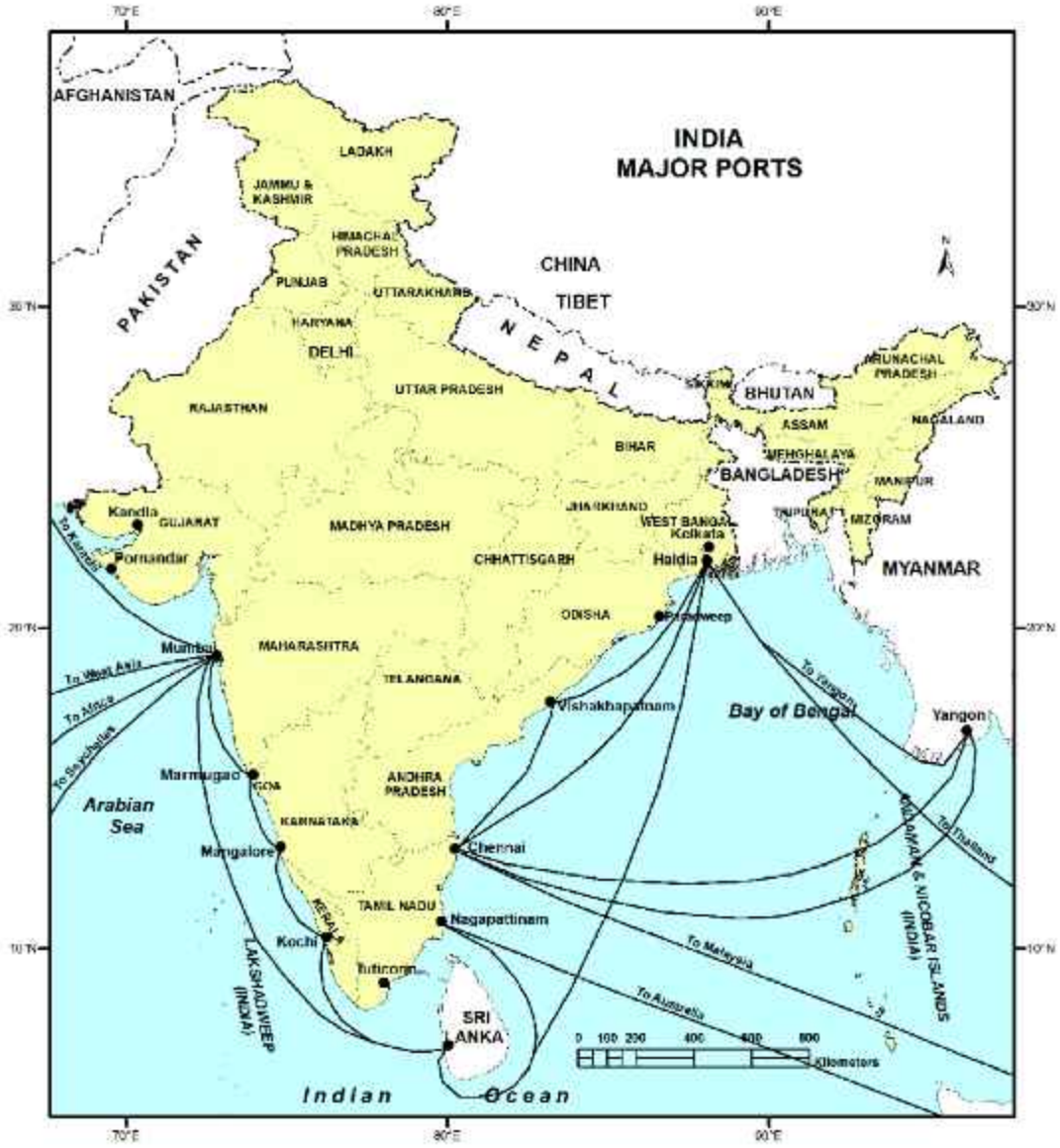


Fig. 20. 4: India: Major Ports

Notes

Inland WaterWays

India has the potential of extensive waterways in the form of rivers, canals, backwater etc. The waterways may be cost effective in comparison with other modes of transportation. However, this potential is not fully developed and underutilised. Under the National Waterways Act, 2016, 111 inland waterways have been declared as 'National Waterways' in the country to promote shipping and navigation on them. The total length of National Waterways is 20,275 km spread across 24 States in the country.

Major National Waterways (NW)

NATIONAL WATERWAY 1 (NW-1)- The Ganga river system between Haldia and Prayagraj was declared as National Waterway-1 (NW-1) in 1986. It covers a distance of approx 1620 km.

i. **NATIONAL WATERWAY 2 (NW-2)**- The river Brahmaputra having a length of 891 Km between Bangladesh Border and Sadiya has been declared as National Waterway no. 2 (NW-2) in 1988.

ii. **NATIONAL WATERWAY 3 (NW-3)**- The network of canals in Kerala with the total length of 205 km has been declared as National Waterway-3 in 1993.

iii. **NATIONAL WATERWAY 4 (NW-4)**- The stretch of Canals between Kakinada-Puducherry, integrated Bhadrachalam - Rajahmundry stretch of River Godavari and Wazira Vijayawada stretch of River Krishna with the total length of 1078 km was declared as National Waterway-4 in 2008.

iv. **NATIONAL WATERWAY 5 (NW-5)**- The Talcher- Dhamra stretch of river Brahmani, Geonkhali- Charbatia stretch of East Coast Canal, Charbatia- Dhamra stretch of Matai river and Mangalgadi-Paradip stretch of Mahanadi delta rivers with the total length of 623 km was declared as National Waterway-5 in 2008.

The following factors affect the inland waterways in India:

- Diversion of water of rivers for irrigation.
- Silting of river beds reduces the depth of river water.
- Seasonal fluctuations in the water level of the rivers.
- Presence of bridges, waterfalls and cataracts in the course of rivers.
- An unequal competition with railways and road ways.

India's inland waterways have not been developed as they can not compete with the railways and roads.

Notes

Major Programmes/Projects

Sagarmala

India has 7500 km long coastline and 14,500 km potential navigable waterways but still this potential is underutilised. Last mile connectivity to the ports is one of the major hurdles for movement of cargo to/from the hinterland. The location of industries and manufacturing centres may also be away from the port area and not well connected. Sagarmala project is an ambitious national initiative aimed at bringing about a step change in India's logistics sector performance, by unlocking the full potential of India's coastline and waterways. As per the Ministry of Ports, shipping and Waterways, Govt. of India, the vision of the Sagarmala is 'the vision of Sagarmala is to reduce logistics cost for both domestic and EXIM cargo with optimised infrastructure investment.' It includes-

- Reducing cost of transporting domestic cargo through optimising modal mix
- Lowering logistics cost of bulk commodities by locating future industrial capacities near the coast
- Improving export competitiveness by developing port proximate discrete manufacturing clusters
- Optimising time/cost of EXIM container movement

The components of Sagarmala are-

- Port Modernization and New Port Development
- Port Connectivity Enhancement
- Port-linked Industrialization
- Coastal Community Development
- Coastal Shipping & Inland Waterways Transport

20.7 AIR TRANSPORT

Air transport is the fastest and highly convenient mode of transport, although it is more costly than other modes. However, it is one of the growing modes of transportation. You can visit places which are far away in a shorter time in comparison with other modes. If you are residing in Uttarakhand and want to go to Chennai, you can reach within a few hours by an aeroplane while this distance is covered in more than one day by a railway express train.

Air transport becomes very important in the regions where surface means of transport are difficult to develop due to difficult terrains i.e. dense forests, marshy land, hilly terrain and high mountains.

India is favourably situated on a busy international air route, connecting North America, Europe and South-west Asia on the one hand and East and South-east Asia together with Australia on the other.

As on 31st December 2022, there were fifteen (15) scheduled commuter operators viz. Air India Ltd., Alliance Air, Air India Express Ltd., Jet Airways(India) Ltd., SpiceJet Ltd., Go Airlines (India) Pvt. Ltd., InterGlobe Aviation Ltd. (Indigo), Air Asia Pvt. Ltd., Tata SIA Airlines Ltd. (Vistara), SNV Aviation Pvt. Ltd. (Akasa Air), Ghodawat Enterprises Pvt. Ltd. (Star Air), GSEC Monarch and Deccan Aviation Pvt. Ltd. (IndiaOne Air); Aviation Connectivity and Infrastructure Developers Pvt. Ltd.(AIR TAXI), Big Charter Pvt. Ltd.(Fly Big) and Pawan Hans Ltd. These operators are operating in the domestic sector and provide wide choices of flights and connectivity to various parts of India. Some of these are also operated on international routes.

Fig. 20.5: India: Major Airports

Notes

There are two cargo airlines viz. Blue Dart Aviation Ltd. and Quick Jet Cargo Limited operate scheduled cargo services in the country. Further, SpiceJet Ltd. was also operating Cargo Operations with five (5) B737 Freighter aircraft.

The Airport Authority of India is responsible for providing safe and efficient air traffic services. It also provides aeronautical communication services for control of air traffic in the Indian air space. There are 131 operational airports in India. This include 29 international airport.

Major Programmes/Projects

Regional Connectivity Scheme (RCS-Udan)

The Ministry of Civil Aviation has started the Regional Air Connectivity under Regional Connectivity Scheme (RCS) -Ude Desh ka Aam Nagrik (UDAN) on 21.10.2016. It is a flagship programme of the Government of India. 459 RCS routes have been operationalised till date. It connects 72 RCS airports (including 9 heliports and 2 Water Aerodromes). 113 lakhs passengers have used the services of UDAN yet.

20.8 COMMUNICATION AND ROLE OF ICT

Communication is one of the important pillars of the development of a country. It is a system which contributes to the development of the economy, social relationships and also helps in promoting cultural unity. On the other hand, it brings diverse people and cultures of the world close to one another. It is also very important during any accident; calamity or emergency because instant means of communication flash the news across the globe so that relief can be rushed to the spot immediately. Let us discuss some of the major means of communication in India:

Postal Services

It is the most commonly used mode of communication in India. The postal services play a vital role in the rural areas of the country. About 99% of the villages are enjoying postal services today. At present (2021) the postal department is working with a network of 1,59,392 post offices including 808 Head post offices, 24281 Sub post offices and 1,34,303 Branch post offices to provide postal services covering every part of the country. 4,28,773 letter boxes have been installed across the country. It is providing a wide range of services i.e. delivery of mails, issuing of stamps, deposits under Small Savings Schemes, life insurance cover under Postal Life Insurance (PLI) and Rural Postal Life Insurance (RPLI) and retail services like bill collection, sale of forms, Post Office Passport Sewa Kendras etc.

It also acts as an agent for the Government of India in discharging other services for citizens such as old age pension payments etc. In tune with the rest of the world the Indian postal services are also being modernised.

Telecommunication

Innovation has changed the faces of modern day's communication. It provides individual as well as group communication at a very affordable cost and is easy to access. Telephone and Fax are the main means of telecommunication. With the launching of 4G and 5G services, telecommunication has become fast and effective. India currently has the world's second-largest subscriber base of 1.17 billion.

Telephone: There has been a very fast progress in telephone facilities. As of October, 2022 India has a total 117.02 crore telephone connection. India also has 114.4 crore mobile connections in October 2022. For the same period, India has 84.67% tele-density.

Telecommunication has observed a big change in technology. 5G services were launched in India on 1st October 2022. 5G use cases developed by Telecom Service Providers and start-ups in Education, Health, Worker safety, Smart agriculture etc. are now being deployed across the country. The telecom services are provided by both the public and private sector. Presently, India has 6 telecom service providers.

Mass - Communication

The mass communication includes radio, television, newspaper, magazines and internet based websites and portals. Radio and television are the electronic media of mass communication. They play an important role in individual and social life. Later on June 8, 1936, the Indian State Broadcasting Service became All India Radio. There are 470 Broadcasting centres located across the country. These stations cover about 92% of the country's area and 99.19 % of the total population. All India Radio offers programmes in 23 languages and 179 dialects. Now, FM Radio services have given a new face to radio transmission.

Television service was started in 1959 in India. However, the real expansion of T.V. Service began after 1980. Several channels on television have been made available to private parties. This has promoted keen competition to improve the quality of programmes even of Doordarshan. Doordarshan's network consists of (i) 66 Doordarshan Kendra (studio centres) including 17 major studio centres at state capitals. Doordarshan has a network of 34 satellite channels. DD1 provides services in more than 79% of area and about 91% of the total population.

The television industry is also functioning in private sectors and many channels in the area of entertainment, news, infotainment etc in various languages are operational. Cinema is yet another means of mass communication. It entertains millions of people everyday.

Print media

Newspapers, periodicals and journals fall in the category of print media. Print media expanded very rapidly after independence. The total numbers of registered publications as on 31st March, 2018 were 1,18,239. Out of these 17,573 were under newspaper category and remaining 1,00,666 were periodicals. The largest number of newspapers and periodicals

Notes

registered in any Indian language is in Hindi (47,989) followed by English (14,626).

Role of ICT

The world is changing so fast and so are the technologies. Information and Communication Technology (ICT) has made a significant impact on human lives. It gives an opportunity to its users to be a part of a very fast changing world. It also allows connecting with other advanced technologies around the world.

India has witnessed the effective use of ICT in different aspects of life and economy. India's core digital economy has added 8.5 % of Gross Value Added (GVA) in 2019. Its growth is 2.4 times faster than the Indian economy. Around 62.4 million workers are employed in a digitally dependent economy. The contribution of the digital economy in India's GDP was approx 8.49% in 2019. It included the three main sub-sector - (i) computer, electronics, and optical products; (ii) telecommunications; (iii) computer and ICT services.

Use of ICT is not limited to certain sectors but it has been widely accepted and expanded its role in industry and economy. Construction, food and beverage, textile, electrical and other electronic equipment, education, retails trade, finance etc are some examples where ICT is playing a crucial role. As per RBI Bulletin, December 2022, 4.9 million people were employed in the core digital sector. The report also says that in the total digitally dependent economy, around 62.4 million workers are employed in sectors that are digitally disrupted.

ICT has touched various aspects of life. The Digital India programme is one of such programmes which has made significant changes. It is a flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy. This has changed the face of digital payment in India and is continuously increasing. The number of transactions has been increased from 2071 crore in 2017-18 to 8840 crore in 2021-22.

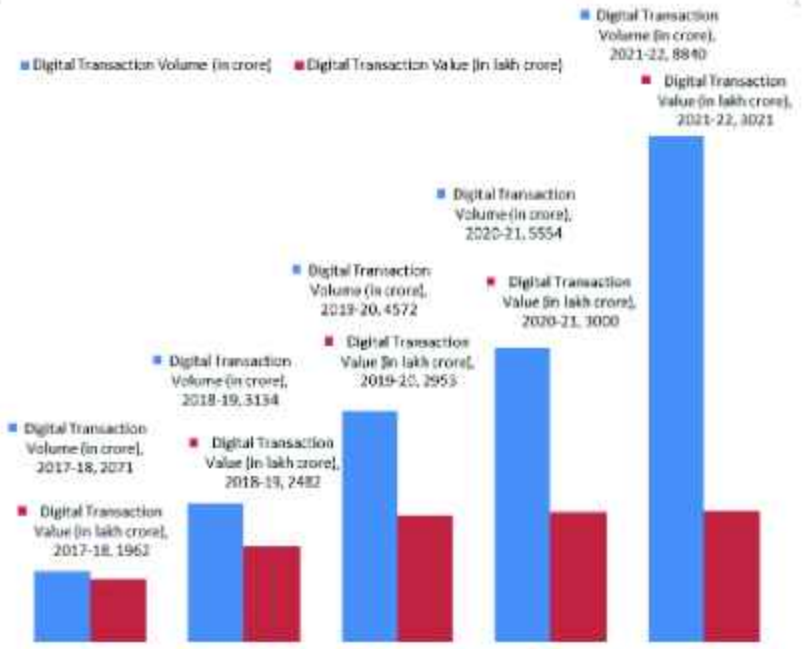


Fig. 20.6 Digital Payments in India

20.9 TRADE

The services which involve the activities of buying and selling of goods are termed as trade. Like transport, communication, banking etc. it is also a tertiary service and an important infrastructure for the development of the economy including agriculture and industry in the country. Trade may take place at various levels -local, regional, national or international.

The growth of trade depends on accessibility of a well developed market and well advanced communication system.

International Trade

International trade involves the selling and buying of various commodities at the international level. International trade may be multilateral or bi-lateral; depending upon the number of parties involved. India's international trade has grown very rapidly after Independence. India's total international trade in the year 1950-51 stood at Rs. 1,214 crore. Since then this has witnessed continuous increase with occasional downwards twins. The opening of the economy, liberalisation and globalisation have boosted international trade. During the year 2021-22 the value reached Rs. 77,19,796 crores. Though India has trade relations with all the major trading blocs and all the geographical regions of the world, the major trade partners are the USA, Russia, countries of West Europe, Japan and Oceania. Europe (6,42,717 crore) and North America (6,29,080 crore) are important trading blocs which comprise large parts of India's exports. North East Asia, Commonwealth of Independent States (CIS), Africa and Oceania are other important trade blocs.

Export

Major commodities of our exports before independence were either raw materials like cotton, jute, leather, spices, minerals or food items like wheat, tea, coffee and spices etc. All the trade was channelised through Britain. After Independence there have been significant changes in the items of export because of the rapid industrial development in the country. Now India exports more than 7500 commodities. There has been an appreciable growth in exports since 1950-51 when it was worth only Rs. 607 crores. It has increased to Rs. 31,47,021 crores by 2021-22.

There are year to year variations in the commodities exported. However, petroleum products remain on top of exported principal commodities from the last few years. Top five principal commodities exported from India are petroleum products; pearls, precious and semi-precious stones; iron and steel; drug formulation and biological; and gold and other precious metal jewellery. There has been a significant change in the export products since Independence. The top five countries where commodities were exported are the USA, UAE, China, Bangladesh and Netherland.

Notes

Imports

After Independence, there has been a sharp increase in the value of imports in India. We now import more than 6000 commodities. During the pre-Independence period, the main items of imports were machinery, manufactured goods, textiles, chemicals, medicines etc. After independence in the early decades, India's import consisted mainly of food grains because of the partition of the country. India's total value of import in 1950-51 was of Rs. 581 crores which had increased to Rs. 45,72,775 crores in 2021-22.

Due to growing demand and insufficient reserves India has to import huge quantities of crude petroleum to fulfil its domestic requirements. The crude petroleum comes on top of important principal commodities. It is followed by gold; petroleum products; coal, coke and briquettes and pearls, precious and semi-precious stones. The other principal imports consist of machinery, project goods, medicinal and pharmaceutical products, organic and inorganic chemicals, artificial resins etc.

Balance of Trade

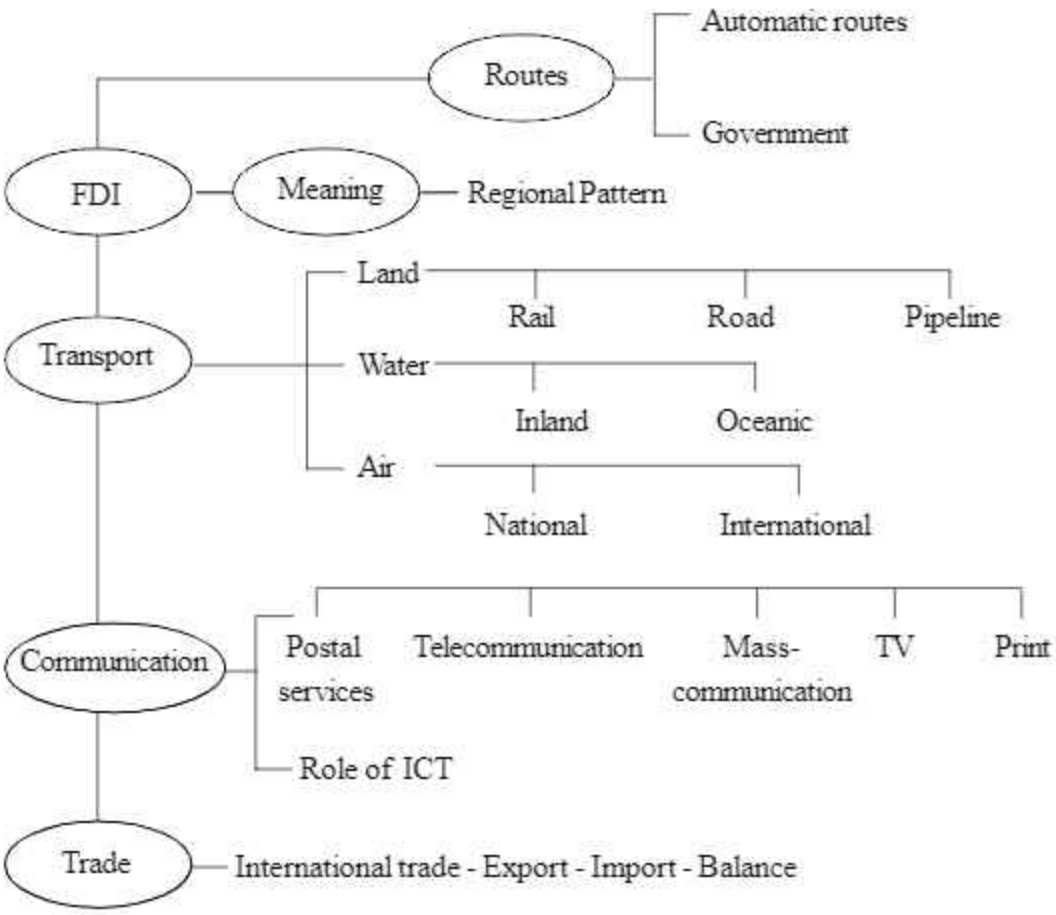
Difference between the value of exports and imports is termed as balance of trade. When the value of exports and imports of a country is equal it is a situation of balanced foreign trade. If exports exceed imports, It is favourable; and on the other hand when imports are more than exports, it is unfavourable trade.

At the time of Independence, our foreign trade was favourable but after Independence, in the first two decades, the imports of India increased rapidly due to the imports of food grains. At present the imports of the country exceed the exports. Thus, our foreign trade has become unfavourable. In rupee terms, the trade deficit in 2021-22 was Rs. (-) 14,25,753 crore. It is worth noting that our exports and imports have increased in volume and value remarkably.

INTEXT QUESTIONS 20.2

1. What is the name of waterways between Haldia and Prayagraj?
2. How may scheduled Computer Operators are in India?
3. In which year RCS-Udan scheme was launched?
4. State the number of Post Office in India.
5. What was the trade defict of India in 2021-22.

WHAT YOU HAVE LEARNT



TERMINAL QUESTIONS

1. Define Foreign Direct Investment.
2. Explain two routs of FDI in India
3. Highlights the regional pattern of FDI in India
4. Explain the distributions of rail network in India.
5. Why road transport is important?
6. Write short not on
   i) National Highways
   ii) Bharatmala Pariyojna

Notes

iii) RCS-Udan

7. How ICT is making Positive changes in India? Explain

8. Write a brief note on trade in India.

ANSWERS TO INTEXT QUESTIONS

20.1

1. b
2. c

20.2

1. 7325
2. Northern Plain, Eastern coastal area, Plains of Gujrat etc
3. Uneven due to relief, climatic condition, density of population
4. 889 KM

20.3

1. National Water way 1
2. 15
3. 2016
4. 159392
5. (-) 14,25,753 crore.

MODULE -9

Human Resource Development in India

21. Population Growth and Distribution
22. Population Composition
23. Human Development