

TENDER HEART HIGH SCHOOL SEC-33 B CHD.

Subject: Geography Class: X

Teacher: Ms. Mini

Topic: Chapter 15: TRANSPORT.

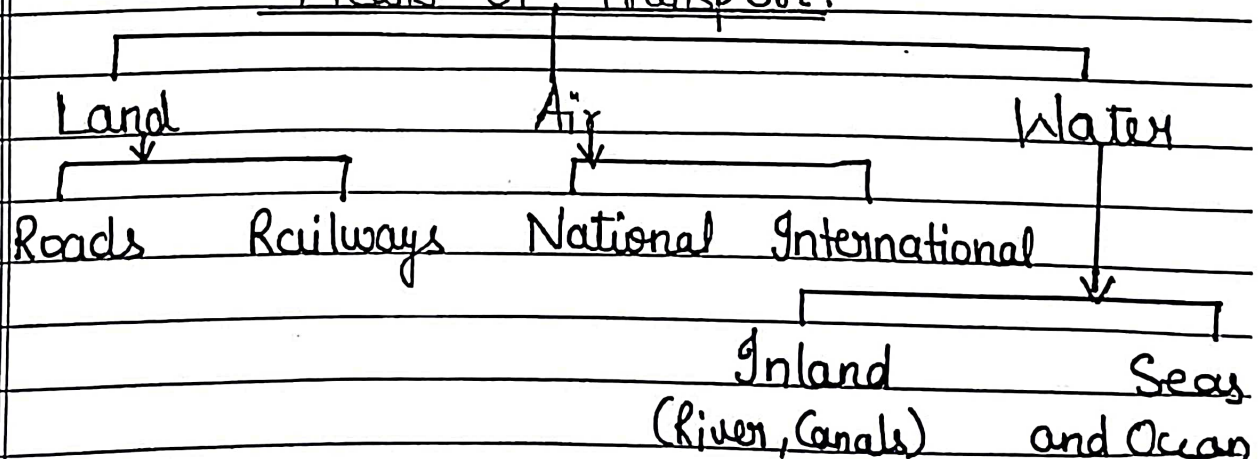
Transport system is like the arteries and veins in human body. It helps in connecting one part of the country with the other; it facilitates the movement of raw material, fuel, machinery etc.

IMPORTANCE OF TRANSPORTATION.

- Transportation helps in better utilisation of resources of the backward areas by linking them with more advanced areas.
- It aids in process of industrialisation and urbanisation.
- It removes scarcity of goods during any crisis.
- It helps in minimising effects of natural disasters.

India, being a vast country, needs an efficient and cheap transport system. It has every mode of modern transport system.

Means of Transport.



I. ROADWAYS:- India had paved roads from ancient times as is evident from the ruins of Mohenjo-daro and Harappa. Sher Shah Suri built the famous Grand Trunk (GT) road to strengthen and consolidate his empire. According to National Highway Authority of India (NHAI), at present India has network of 33 lakh kilometres, making it the second largest road network in the world.

Classification of Roads:-

1. NATIONAL HIGHWAY: The main roads which are constructed and maintained by Central Government are national highways.

- It is meant for inter-state and strategic defence movement.

- National highways in India is designated as NH.

★ Longest NH is NH7 (7,770 km long).

- National Highway Authority of India (NHAI) was constituted in 1988. It is responsible for development maintenance and management of National Highways. Two major Projects Undertaken by NHAI are:

i) Golden Quadrilateral: It is the largest express highway project in India. It connects India's four largest metropolises: Delhi, Mumbai, Kolkata and Chennai and thus forms a quadrilateral of sorts. Its Economic benefits are:-

- This highway interconnects many major ports and cities. So, it enables industrial growth of small towns through which it passes.

- It provides vast opportunities for transport of agricultural produce from hinterland to major cities.

ii) North-South and East-West Corridors: It consists of building four or six lane expressways which connects Srinagar (Kashmir) to Kanyakumari (Tamil Nadu) as North-South Corridor and The East-West Corridor comprising of road connecting Silchar in Assam to Porbandar in Gujarat.

Above two projects are the first and Second phase of National Highway Development Project.

2 EXPRESS HIGHWAY: These highways are six to eight lane controlled access road network where entrance and exit is controlled by slip roads, designed to provide smooth high-speed movement without any on-road obstacles as speed breakers. Eg. Refer Table 15.1 on Page no. 274.

3 State Highway: These are constructed and maintained by state government and join state capital with district headquarter and important towns.

4 District Roadway: Roads join district headquarter with other places within the district.

5 Village Road: Roads connect village with neighbouring town and cities, maintained by panchayat.

Importance of Roadways:

- Helps in transportation of goods and passengers for short and medium distances.
- It is easy and cheap to construct and maintain
- It provide door to door services.
- Perishable items (fruits, dairy product) are transported easily and quickly.
- It acts as a feeders to railway, airway, ^{and} waterway.

2 INDIAN RAILWAY: Railways constitute principal mode of transportation of freight and passengers.

- Railways were first introduced to India in 1853 Mumbai to Thane covering distance of 34 km.

- At present it is one of the largest and busiest networks in the world.

- Railway system has been divided into 17 zones

Track System: (Based on width of the track)

(i) Broad Gauge - Distance between rails is 1.676m.

It accounts for about 85% of total route length. This system links major ports with interior towns. eg. Konkan Railway line.

ii) Metre Gauge - Distance between rails is 1 metre.

It accounts for about 11% of total route length.

iii) Narrow Gauge - Distance between rails is 0.762m

and 0.610m. Mainly confined to hilly areas.

★ The distance between the two tracks on any railway route is known as railway gauge.

Rail Traffic:

1. Passenger Traffic → Ordinary Passenger train, Rajdhani Express, Superfast train, Shatabdi and Jan Shatabdi trains are some train carries passengers.
2. Freight Traffic - It can carry anything from food grains to automobile parts useful for Industrial and agriculture sector.

Importance / Significance of Railways.

- Cheapest and convenient mode for long distance.
- Agriculture owe its growth to railways as farmers sell their produce to far places.
- It suites long haulage of bulky material as coal.
- Help in reducing sufferings during natural calamities.
- facilitate easy movement of police, troops and defence equipment.

Disadvantages

- Rail transport lacks flexibility of routes as it can not be laid in hilly areas or remote forests.
- It cannot provide door to door service like roads.
- The cost of construction, maintenance are very high.

3. AIR TRANSPORT

- India has both domestic and international airlines, carry passengers, freight and mail.
- Airport Authority of India came into existence on April 1, 1995. It is the nodal Agency

Responsible for providing safe, efficient Air Traffic Services and aeronautical communication.

- The air transport in India was managed by two corporations - Air India and Indian Airlines. were merged into one in 2007 called Air India.
- Three Cargo Airlines - Blue aviation pvt Ltd, Deccan cargo and Express Logistics. (transporting goods)
- Vayudoot provides link with remote and inaccessible areas.
- Pawan Hans Helicopters Ltd. provide helicopter services to petroleum sectors as ONGC, Oil India Ltd. Refer list of International airports page no 282.

- Advantages:
1. It is the fastest mode of transport.
 2. It is significant in terms of hilly and inaccessible areas.
 3. Play a vital role in times of calamities and emergency.

Disadvantage:

1. Expensive than other mode of transport.
2. It depends on weather conditions.

4 WATER TRANSPORT It can be divided into

- 4.1 INLAND WATERWAY:- It includes rivers, canals, backwaters which are deep enough to allow the ships and boats to navigate. The rivers of Peninsular India are not ideal for navigation as these are seasonal as they are rainfed and they are shorter than Northern rivers also these rivers

are marked by a number of waterfalls.

- Inland Waterways Authority of India (IWAI) is the statutory authority in charge of waterways in India. It has declared 5 inland waterways as National Waterways.

4.1.1 National Waterway No. 1: It comprises Ganga-Bhagirathi Hooghly river system. (Allahabad to Haldia along R. Ganga).

4.1.2 National Waterway No. 2: Brahmaputra river from Sadia to Dhubri in Assam.

4.1.3 National Waterway No. 3: West coast canal runs from Kollam to Kottapuram in Kerala.

4.1.4 National Waterway No. 4: Kakinada to Pondicherry through canals and river Godavari and Krishna.

4.1.5 National Waterway No. 5: Connect Odisha to West Bengal.

4.2 Oceanic Waterways:- India has a long coastline with 12 major ports and 187 minor ports. Ocean route handle 95% of India's foreign trade.

4.2.1 PORTS: Ports are man-made commercial places built along the coastline, used for loading and unloading cargo. Major ports are Kolkata, Haldia (W-Bengal), Paradip (Odisha), Vishakhapatnam, Chennai, Mumbai, Kandla, Kochi etc.

Advantages:- • Cheapest means of transport.

- Suitable for carrying heavy and bulky material.

Disadvantages:- • It needs long travelling hours.

- It is limited to areas where rivers are navigable.

HOME WORK:- Do the following question of Back Exercise on the basis of Summary 1, 3, 8, 9, 12, 15, 17

Last Page.