

UNIT III SERVICE BUSINESS - I

CHAPTER

14

TRANSPORTATION



Learning Objectives

To enable the students to

- understand the different types of Transport
- explain the services of transport to business
- know the documents used in transport
- know about Common Carrier

Introduction

Transport service facilitates the smooth carriage of goods from the place of producer to the place of consumer. Transport also facilitates travelling of people from one place to another place. The different types of transport are given below.



14.01 Meaning and Definition of Transport

The term 'transport' includes all the clerical, mental and manual occupation involved in the operation of road, rail, canal, sea and air transport. Goods have no use unless they are made available at a place where

and when they are wanted. Transport is an integral part of Commerce. It is a means to carry men and materials from one place (production) to another resulting in creation of place and time utilities. It removes the hindrance of place.

According to K.K. Sexena, "the transport system acts with reference to the area it serves in the same way as a candle does in a dark room".

14.02 Types of Transport

Transport system can be classified in different ways depending on the types of transport, the ways and means of transport and also the motive power used in transport.

A. Surface Transport

Transport of people and goods by land vehicles is known as Surface transport. It is also called as 'Land Transport'.

1. Pack Animals

Animals like horse, mule, donkey camel, and elephant etc., are used for carrying small loads in backward areas, hilly tracks, forest regions and deserts known as pack animals. Generally, the pack animals serve areas which are inaccessible to modern means of transport. Animal transport has also played a significant role where there is no road and railway transport.

2. Bullock Carts

It constitutes the predominant form of rural road transport in India for goods traffic and to some extent for passengers' traffic. It links up the villages with the nearby markets and railway stations. It carries the produce for sale to the market and consumer goods to the villages.

Pathways Transport

It is the oldest form of transport found in hilly areas, forest areas and in remote places. These are used by human beings for transport.

3. Road Transport

Road Transport is one of the most promising and potent means suitable for short and medium distances. It provides the basic infrastructure for bringing the majority of the people who are living in far-off villages into the mainstream of nation like by connecting them to different places. It offers a number of advantages such as flexibility, reliability, speed and door-to-door service, besides supplementing and increasing the efficiency of the other modes of transport.

4. Motor Lorries and Buses

From the dawn of civilization, people have been endeavoring to form roads and use wheeled vehicles to facilitate transport of men and materials. The credit of revolutionizing the road transport and introducing the elements of speed and greater carrying capacity into the system goes to motor lorries and buses. Introduction of petrol engine and later diesel engine vehicle has been offering good competition to the railways.



Pack Animals



Bullock Carts

5. Tramways

It made their appearance in the 19th century as a form of transport suitable for big cities. Tramways were initially horse drawn later steam-powered and now electrically operated. Its carrying capacity is large. They are able to cope up with the peak hour traffic in big cities with the greater popularity of motor buses, tramways slowly declined. Madras city had tramways till 1933.

6. Railway Transport

The invention of steam engine by James Watt, revolutionized the mode of transport all over the world. Railway, as a mode of transport is the most organized transport undertaking all over the world. Railways are the cheapest and quickest means of transport for carrying heavy goods over long distance.

Railways render an essential public service. It requires a huge capital outlay for laying



Tramways



Railways

Indian Railway is the largest Railway Organization in the world. The Indian Nationwide network, the 4th longest in the world, is owned and operated by State-Owned Indian Railways and includes an operating route length of more than 65,000 Kms. The network carried about 8 billion passengers (the highest in the world) in 2013.

of tracks, construction of bridges, purchase of locomotives etc. Railways are among the biggest public utilities of a country. Rail transport is a means of transferring of passengers and goods on wheeled vehicles running on rails (tracks). Rail transport stated to be important in the Industrial Revolution.

There are three types of tracks that are in operation. They are (I) Meter gauge (ii) Broad gauge and (iii) Narrow gauge

Advantages of Railway Transport

1. Railways are well suited for carrying heavy and bulky goods over long distances.
2. It can provide long distance travel throughout the day and night with unbroken services.
3. It can provide better production and safety to the goods than motor transport. The goods generally carried in closed wagons are not exposed to sun, rain etc.
4. Though initial investment is large, in the long run the operating expenses will be very low in railways and it will prove a cheaper mode of transport.

It requires less time than motor transport for carrying goods over long distance with greater speed

5. It has regular schedule of timing and is available throughout the year.
6. It provides unaffected services whether rainy or shinny weather conditions.

Disadvantages of Railway Transport

1. Railway rates are relatively higher than motor transport for transporting light weight articles over short distance.
2. It is inflexible, as it is operated to a particular track which cannot deviate from the set routes.
3. In rural areas, it cannot offer adequate traffic because of uneconomical operating cost.

4. It requires heavy investment for installation of tracks and maintenance that increases its fare on the users.
5. If railways are not fully utilized and if wagons and coaches are to half empty to its capacity, a heavy financial burden will be cast on the railway.

14.03 Recent Trends in Transportation

a) Metro Rail

Metro Rail is a Mass Rapid Transport System (MRTS). It is a convenient, fast, efficient, reliable, comfortable mode of urban transport. Rapid transit also known as heavy rail, metro, subway, tube or underground is a type of high capacity public transport generally found in urban areas.



Metro Rail



Monorail

b) Monorail

A monorail is like a train, but instead of having two sets of wheels that balances on a railway track, the monorail is balanced on top of one rail. Monorails are often used to transport people around large cities. Some monorails utilize magnets to hover on their rails, reducing friction between the train and the rail. The first monorail was invented in the 19th century.

c) Bullet train

High-speed rail is a type of rail transport that operates significantly faster than traditional rail traffic, using an integrated system of specialized rolling stock and dedicated tracks. The first such system began operations in Japan in 1964 and was widely known as the bullet train. High-speed trains normally operate on standard gauge tracks of continuously welded rail.

d) Pipeline Transport

It is the mode of transportation of goods or materials through pipe. Liquids and gases are transported in pipelines. Pipeline exist for the transport of crude and refined petroleum, fuels such as Oil, Natural gas and Bio-fuel etc., and other fluids including sewage, slurry and water. It requires heavy investment to install.

e) Conveyor Transport

It is the broad category of transport mode that includes modes developed from the idea of a conveyor belt. Examples include Conveyor belt, two or more Pulleys with a continuous loop of material that rotates about them, Escalator, Elevator which is used carrying people among floors of building, etc...



Bullet Rail



Pipeline Transport



Ropeway Transport



Hyperloop

f) Ropeway Transport

A Ropeway is another means of transport in naval lifting device. It can be operated in the place where road construction is impractical and costly. Certain limit of goods or people can be transported with the help of (naval lifting device) electricity. In the hilly remote areas ropeway system of transport may be suitable means of transport.

g) Hyper loop Transport

Hyper loop is a proposed system of transport that would see pods or containers travel at high level speed through a tube that has been pumped into a near vacuum. The train pods would either float using magnetic levitation technology or float using air caster “Skis”, similar to how pucks travel across an air hockey table. With so little friction in the tunnel, the pod would be able to travel at immense speed with projected top speeds of 760 mph. Hyper loop is a futuristic transport system. Tunnels for the Hyper loop would be built either above or below ground, at only around 3 meter in diameter, lacking up a smaller ground footprint than traditional rail or road. Elon Musk an entrepreneur had proposed this mode of transport as a “fifth mode of transport” in 2012.

B. Water Transport

“Water is a free gift of nature”. Human civilization through gradual application of science and technology, have utilized water resources for economic, political and military activities. Remarkable advancements are taking place in water transport due to considerable improvement in the construction, design motive power, speed and safety of ships and boats.





Water transport is the process of moving people, goods etc. by barge, boat, ship or sailboat over a sea, ocean, lake, canal, river, etc. This category does not include articles on the transport of water for the purpose of consuming the water. Water Transports are of two types

(i) Inland Waterways ii) Ocean Waterways

(i) Inland Waterways

Inland Waterways comprise of rivers, canals and lakes. It is also known as internal water transport. Rivers that are naturally navigable are called natural waterways. Canals and canalized rivers belong to the category of 'Artificial Waterways'. Generally small boats and steamers are operated on rivers to transport people and goods. Where rivers are deep enough, large ships can also ply on them. Canals are man-made waterways, constructed for the twin purposes of navigation and irrigation.



Boat-House



Yatch

Advantages of inland waterways

- a) It is considered as the cheapest mode of transport among the other modes of transport.
- b) It carries goods smoothly due to the absence of shaking and jolting during transit. It is eminently suitable for the carriage of fragile goods like glassware, earth ware etc., without causing damage.
- c) It is most suitable for heavy loads.
- d) There is lesser pollution in water transport.
- e) Initial investment on river services as well as expenditure on their maintenance is much lesser as compared to road and rail transport.

Disadvantages of inland waterways

- a) It is the slowest means of transport. As compared to this, railways are quicker, safer and cheaper means of transport.
- b) Floods caused during rainy season, lack of flow of water during summer season affect to ply boats and steamers.
- c) Sometimes rivers also change their way. It leads to stoppage and uncertainty in usage of this means of transport.

(ii) Ocean or Sea Transport

Ocean transport has been playing a significant role in development of economic, social and cultural relations among countries of the world. International trade owes its growth to ocean transport. Ocean transport enjoys a pride of place in aiding international trade. Cheapness is its great virtue. In the transportation of low-grade, bulky goods among the countries, the role of ocean transport is commendable.

Types of Ocean Transport

Ocean transport may be divided into two broad categories.

a) Coastal shipping

Coastal shipping constitutes an important means of transport in all countries having a long coastline. It is a cheap means of transport for the movement of bulky cargoes like coal, iron ore etc. to domestic ports of country. Usually, coastal shipping



trade of a country is reserved for national shipping. In India, Coastal shipping trade is now exclusively reserved for Indian ships.

b) Overseas shipping

It means the passengers' and goods have to cross ocean. Example India export goods to America.

Ocean going ships may also be divided into two, namely Liners and Tramps:

(i) Liner

An ocean liner is a passenger ship primarily used as a form of transportation across seas or oceans. Liners may also carry cargo or mail, and may sometimes be used for other purposes (e.g., for pleasure cruises or as hospital ship). They sail to schedule, whether they have a full load or not. They follow defined routes with fixed places and times of call. Regularity of service, good speed and luxurious facilities to passengers are the specialties of liners.

There are two types of liners, namely, Passenger liners and Cargo liners.

(ii) Tramps

Tramps are essentially cargo vessels. See the picture above. They have no set routes. They do not follow any timetable. They sail only when they get sufficient load. They sail at any time and carry cargoes for almost any ports.



International shipping Vs Overseas shipping

International shipping can be between countries that are connected by land. For Example, Foreign trade between India and Bangladesh. Overseas shipping means the package has to cross ocean. For Example, International trade between India and South Africa.

The following is the major types of commercial ships

1. General cargo ship
2. Bulk carriers
3. Container ships
4. Auto carrier
5. Tankers
6. Fishing vessels
7. Oil vessels
8. Passengers ships
9. Ferryboats
10. Tow and tug boats
11. Specialized ships

C. Air Transport

Air transport is the fastest and the costliest mode of transport. Commercial air transport is now one of the most prominent modes of overseas transport. The modern air transport has its growth with the invention of Airplane by Wright Brothers.



“Air Rescuers” was established in the year 1999 for superior patient transfer through Air Ambulance and an elevated standard of care and management through Air Ambulance India. The Air Ambulance services are available in Delhi, Mumbai, Kolkata, Hyderabad and Chennai.

Air transport is a form of travel in vehicles such as helicopters, hot air balloons, blimps, gliders, hang gliding, parachuting, airplanes, jets or anything else that can sustain flight.

Domestic and International flights

Air travel can be grouped into two general classifications: national/domestic and international flights. Flights from one point to another within the same country are called domestic flights. Flights from a point in one country to a point of different country are known as international flights. Travelers can use domestic or international flights in either private or public travel.

Advantages of Air Transport

- a) It provides a regular, convenient, efficient and quick service.
- b) Perishable goods like fruits, vegetables, egg, meat, etc., can be transported quickly.
- c) It does not require huge investment for construction and maintenance of track like railways.
- d) They provide comfortable services for passengers and safety for their goods.
- e) It can be used to move goods to areas, which are inaccessible to other means of transport.
- f). It is very much helpful for flood or landslide and war rises to the occasion to save human life from danger.



Disadvantages of Air Transport

- a) It is a very costly mode of transport. The rates and fares charged by which are beyond the reach of common people.
- b) Air craft are not quite suitable for carrying heavy loads and weights.
- c) It is not dependable because of unfavourable weather which may disturb the air service suddenly.
- d) The construction and maintenance of aerodromes involve a huge capital expenditure.
- e) Every country controls the air space above its territory. Therefore, an aeroplane cannot fly over another country without obtaining its prior permission to concern authority.

Services of Transport to Business

The growth and development in the means of transport over the past two hundred years have produced significant economic effects and has revealed how important are the services of transport. It creates place and time utility.

a) It increases the efficiency of production

The object of production is consumption. Effective transport system creates time and place utilities and thereby influences the demand for goods and the value of goods. Thus, transport makes production efficient and purposeful.

b) It stimulates wants by increasing quantity and variety of consumer goods

It helps in getting commodities, which cannot be had or produced in a region

due to unsuitable natural conditions. Without adequate and effective transport, goods cannot be had either in the quantities or varieties required in a complex economy.

c) It develops and expands the market

The primary function of transport is to enable the physical distribution of goods at global level. The distribution of goods must take place easily, economically and speedily. It provides the chance of expanding national land international market.

d) It helps in price stability by distributing goods all over the country

e) It aids to economic growth

The movement of raw materials, fuel, labour and finished products and the mobility of capital and technical know-how, transport playing a remarkable role in the growth of all industries from agriculture to manufacturing.

f) It helps in specialization and mass production

Specialization means the division of complex process of production into a number of separate processes so that each person or group specializes in each and every process. It has been extended to international level too.

g) It encourages innovations in product production and designing

It provides plenty of opportunities to the producers to produce their product in innovative and creative way, to catch up the wider market and reap more profit.



14.04 Documents Used in Transportation

a) Way Bill

The way bill is an acknowledgement of receipt of goods for transport by the carrier. The carrier, accepting goods for transport, issues waybills in the name of the consignor or consignees. It serves as an evidence of the contract of transport. It is also a document of title of goods. The ownership of goods represented by a waybill can be transferred by endorsement and delivery of the waybill. If a waybill is lost, the consignee will be allowed to clear the goods from the carrier after he executes an indemnity bond.

b) Railway Receipt

Railway Receipt is an acknowledgement of receipt of goods by the railway for transporting. It serves as a document of title of goods, viz., it shows the title of its holders of the goods. It may be issued in the name of the consignor or consignee. Only on presentation of the railway receipt the railways will deliver the goods. If railway receipt is lost, the consignees can obtain the goods from the railway by executing an indemnity bond. Ownership of the goods can be transferred by endorsement and delivery of the receipt.

c) Charter Party

When goods are to be consigned in large quantity, it is advantageous to hire the whole or substantial part of the ship. The document through which this contract is made is known as 'Charter Party' may also be known as 'Voyage Charter' or 'Time Charter'. The person who hires the ship is known as 'Charter'. The charter party brings the vessel and crew under the control of the

charters. The charter becomes responsible to the third parties for the acts of the master and crew of the ship.

d) Bill of Lading

Bill of Lading is a document containing the terms and conditions of the contract of carriage. It is issued by the shipping company and signed by the captain of the ship. It acknowledges the receipt of the goods described in it on board the ship. It also serves as an official receipt of goods. It is a document of title of goods. The main contents are: Name of Exporter, name of the ship, place of loading, particulars of goods shipped, port of destination, freight paid or to be paid, person to whom delivery of goods is to be made, date etc.

If the condition of the packages is good, a clean bill of lading is issued. If some of the packages are found damaged, a foul or clause bill of lading is issued.

e) Air Consignment Note or Airway Note

It is a document prepared by the consignor, which is handed over to the carrier of goods, while transporting goods through Airways. Air Consignment Note is made out in three original parts. One is signed by the consignor and marked for the carrier. The second is signed by both the consignor and the carrier and marked for the consignee (intended to accompany the goods) and the third is signed by the carrier and handed back to the consignor after the goods have been accepted.

14.05 Common Carrier

A common carrier is a person who is engaged in the business of carrying goods for hire indiscriminately for all persons.

There are organizations transporting goods on designated routes according to a fixed regular schedule, offering to transport goods for hire for all people without discrimination. Railways and Sea transport do not come under common carrier because they are covered by separate Acts. The liability of common carrier is governed by Carriers Act 1865.

For example, city buses are a common carrier. Under common law rules, a common carrier is generally liable for all losses which may occur to property entrusted to his charge in the course of business.



The technological advancement will make the transportation highly sophisticated with greatest speed in future. Transport plays a predominant role in the economic development of a country by helping the business community and public in an enormous way.



Air consignment note



Bill of lading

Key Terms

Consignment Note, Bill of Lading, Liner, Tramps



For Own Thinking

Geographical separation between producer and consumer – Comment.

Importing Crude oil from foreign country to Petroleum refineries – transporting through Truck tankers or Pipelines – Suggest with reason.



Exercise



I. Choose the Correct Answer

1. Transport removes the hindrance of

- a. Time
- b. Place
- c. Person
- d. Knowledge

2. Air consignment note is prepared in _____ forms

- a. One
- b. Two.
- c. Three
- d. Four

3. _____ is a document acknowledging the receipt of goods by a carrier

- a. Waybill
- b. Consignment note
- c. Charter party
- d. Bill of lading

4. Which is the fastest means of transport?

- a. Rail
- b. Road
- c. Sea
- d. Air

Answers

1. b 2. c 3. a 4. d

II. Very Short Answer Questions

1. Define Transport.
2. State any two services rendered by transport.
3. Write any two advantages of water transport.

III. Short Answer Questions

1. What is bill of lading?
2. What is Charter Party?

IV. Long Answer Questions

1. Explain different types of transport. (any 5)
2. Discuss the advantages of Railway transport. (any 5)

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