**CHAPTER ONE**

 **INTRODUCTION TO TRANSPORTATION**

**1.1. Historical overview of Transportation in Tourism**

Introduction

Tourism involves the movement of people from their place of residence to a tourist place and, in consequence, the relationship between transport and tourism development is a vital area of tourism studies. Tourism is the outcome of the travel and stay of people, and as we have seen, the development of transport, both private and public, has had a major impact on the growth and direction of tourism development. Transport is a fundamental component of the tourism industry. The provision of adequate, safe, comfortable, fast, convenient and cheap public transport is a prerequisite for mass market tourism.

For development of any destination, adequate and efficient transportation infrastructure and access to generating markets is one of the most important aspects. The destinations which can be reached by efficient transport systems are the ones which receive the maximum number of tourists. Within the country, efficient modes of transport are vital for movements of domestic tourists. So, transport is the necessary pre condition of travel: it facilitates mobility and the movement of tourists from the place of origin to their destination and back. No tourism activity can take place without tourist transport.

In the ancient times the mode of transport used by travelers’ was a horse, a horse carriage, a hand driven carriage or a boat. This was followed by ships. It was however in the 19th c that mechanized transport flourished all over the world. Developments of road transport in the post world war I period and air transport in the post world war II period were the major factors which were responsible and continue to be so for the great support in modern tourism. The war necessitated innovations in the fields of motor and air transports for the purpose of initially using them for the war itself. After the war was over, they were utilized as modes of transport for travel. Many road systems and airports which were initially built for transporting men and material for use in the war were subsequently utilized for transporting passengers for the purpose of travel and tourism.

According to *Burkart* and *Medlik,* transportation can be defined as *‘the means to reach the destination and also the means of movement at the destination.’* This broad definition allows us to distinguish between the numerous types of transportation services. It also emphasizes the functional element of transportation services: that is passenger movement from point A to point B. increasingly, as transport is viewed as a part of the leisure, the quality of the journey is at least as important as act of movement itself. For some categories of visitors, the trip is therefore seen as an attraction in itself and certainly as a part of the tourist experience. The view from the coach or the excitement of flying is both examples of utility of travel.

Transport is frequently neglected in the analysis of tourism, often being relegated (down grade) to a passive element of tourism and in some cases it can form the focus of the tourism experience. Various forms of transport have been associated with the development of tourism and technological development in transport combined with the rise in personal disposable incomes have led to the expansion of both domestic and international tourism. A tourist always thinks of safe, comfortable and convenient mode of transportation. Transportation can be divided into three types:-*Surface* (road and rail), *Air* (aero plane and helicopters) and *Water* (cruise and passenger ships).

1.2. Roles and Importance of Transportation

As tourism involves movement from one place to another so, the role of transportation becomes very important. Following are the importance of transportation in tourism.

* *Historical Significance*
* Transportation made people to search basic needs like food, water and shelter through hunting and migration.
* It played a major role in the conquest and discovery of lands and nations during the exploration period.
* Religious or evangelical expansion happened because of transportation, moving the emissaries or missionaries over distant lands by foot, animals or simple-wheeled carriage and boats.
* It played a role in the leisure, recreation and social activities of people especially the elite or belonging to the high-class.
* It played a role in the information exchange among kings and leaders, between nations.
* Barter system or trading of basic and luxury goods has not been possible without transportation during the times of early civilizations in Greece, Rome and Mesopotamia.
* It helped in the construction of big monuments and buildings of kings, pharaohs and great leaders to symbolize man’s feat in engineering and architectural designs.
* It developed towns and cities to prosperity and growth, as cultural and social interaction among various tribes and peoples took place.
* It moved people for studies in other places like in the times of the Crusades and Grand Tour, to search for more experience and knowledge in European institutions and organizations.
* Through transportation, kingdoms and states have been defended from enemies by constructing strong walls, blockades and founding of armies with the used of carriages, chariots and horses to shield the entire kingdom.
* *Economic Significance*
* It promotes trade and commerce in a place.
* Contribution to Government revenue (GDP) in the form of taxes, duties and tariffs.
* It creates employment for many people through flow of traffic and movement of carriers in every destination.
* Dispersion of development happens as better roads and infrastructure are laid out or created to towns and rural areas.
* Access to and utilization of natural resources through developed infrastructure and transportation networks, allowing a nation to accumulate wealth and power.
* Earning foreign exchange through exportation of goods. The same that the movement of people or tourism gives the desired dollar earnings for a country.
* Development of a place as a town, city or destination, which adds to the overall national growth of a country.
* *Social Significance*
* It makes the lives of people much easier and better.
* Cultural and social enrichment due to contacts, travel and migration by means of transportation;
* Marketing and promotions of a place or destination indirectly to people and other places;
* Promotes peace, understanding and friendship among nations through bilateral relationships and cooperative agreements;
* Bringing people to cities and towns, having the access to basic services and facilities like churches, schools, hospitals, business establishments and shops, etc.
* *Environmental Significance*
* Proper utilization of land resources and nation’s wealth by turning idle land into usable lands for construction of projects and infrastructure;
* Awareness of environmental destinations and sites for protection and preservation by bringing people to the actual sites;
* Creates new innovations and technologies on how to use resources in a better way and not compromising the environment like usage of better energy resource in running vehicles or transport carriers such as batteries, solar power and electric;
* Protects and saves forests and natural ecosystems from illegal loggers, poaching and pollution by having strict transportation security and laws under city or municipal planning and development;
* *Tourism Significance*
* It moves tourists to reach the destination and within the destination.
* It helps the country in earning the much needed foreign exchange.
* It creates employment.
* National air carriers help showcase country’s culture and traditions.
* It markets the places of the country locally and abroad.
* It brings tourist during the off-peak season.
* It helps in the visitor’s satisfaction and thereby enhancing better image of the country.
* It helps in an overall development of country by connecting remote areas with the city centers or tourist destinations.
* It protects, preserves and creates tourist destinations whether of natural or of man-made appeal.
* It helps in transportation of passengers, mails and cargo internationally.
* It brings tourist during the off/peak season.

Modes of Transportation

The four modes of transportation are:

* Road,
* Rail,
* Air, and
* Sea

*The characteristics of transport modes:*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Mode |  Way | Carrying unit | Motive power | Advantages | Disadvantages | Significance for tourism |
| ROAD | Normally a surfaced road, although ‘off road recreational vehicles’ are not restricted | -car, bus, or coach(lower capacity for passengers) | -petrol or diesel engine-some use of electric vehicles | -Door- to-door flexibility-Driver in total control of vehicle-Suited to short journeys | Way shared by other users leading to possible congestion | -Door-to-door flexibility allows tourist to plan routes and allows carriage of holiday equipments.-Acts as a link b/n terminal and destination-Acts as mass transport for excursions in holiday areas  |
| RAIL | Permanent way with rails(railways) | -passenger carriages-high passenger capacity | -Diesel engines(diesel/ electric/hydraulic)-also steam or electric locomotive | -sole user of the way allows flexible use of carrying units suited to medium or long journeys, and to densely populated urban areas | High fixed costs | In mid 19th opened up areas previously in accessible for tourism special carriages can be added for scenic viewing, etc. trans-continental routes and scenic lines carry significant volume of tourist traffic |
| AIR | Sky-natural  | Aircraft(high passenger capacity) | -Turbo-fan engines; turbo-prop or piston engine | -Speed and range-Low fixed costs-Suited to long journeys | -High fuel consumption and stringent safety regulations make air an expensive mode , Highterminal costs | -Speed and range opened up most parts of the world for tourism-Provided impetus for growth of mass international tourism |
| SEA | Water-natural | -ships can have high degree of comfort-high passenger capacity | Diesel engine or steam turbine | -low initial investment-suited to either long distance or short sea ferry operations | -low speed-high labor costs | -confined to cruising(where luxury and comfort can be provided) and ferry traffic |

*Factors affecting Choice of the modes of transportation*:

 In general the choice of visitor for the mode of transport is affected by the following:

* Distance and time factor
* Status and Comfort
* Safety and utility
* Comparative price of services offered
* Geographical position and isolation
* Range of services offered
* Level of competition between services.

1.3. Elements of Transportation:

If interaction does take place, a transport system will be needed. Faulks(1990) has identified four basic physical elements in any transportation systems. These are the way, the terminal, the carrying unit, and the motive power. These elements vary for each transportation mode and vehicles.

* The way: The way is the medium of travel used by a transport mode. It may be purely artificial, such as roads and railways, or natural, such as air or water or it can be a combination of the two, such as inland waterways. Roads, Railways and inland waterways restrict vehicle to move to a specific pattern, national regulations delineate both sea and air corridors and routes such that standard operating procedures are applied worldwide to limit the freedom of these ways. In considering transport modes, the availability of way is very important in the case of roads, railways and inland waterways, where substantial investment would be needed to provide them. In the case of water and air, this is not an issue except for air traffic control procedures.
* The terminal: It represent the second important element of transport mode, giving access to the way for the users, or acting as an interchange between different types of way. It is the furthest point to which the transport system extends literally the end of line. Probably, the simplest terminal is parking for private cars, while the most complex one is an airport. In fact, most terminals are becoming integrated transportation points as they can act as interchanges where travelers can transfer between vehicles modes. Airports, for example, can be used as transfer points between two aircrafts, or between other modes of traveling, such as the car or train. The design of the terminal and the amenities they offer depends heavily upon the type of journey and transportation involved. Although we can observe a general tendency towards the development of integrated terminals which caters for all potential needs of the travelers, not all modes need to have sophisticated points as terminals; coaches, for example, can and do operate from road side locations.
* Carrying units: It is the actual transportation media: the vehicle, which facilitates the movement. Each way demands a distinct carrying unit: aircraft for the sky, ship for the sea, vehicles for the roads, and train for rails. The nature of carrying units has been influenced by the numerous factors, which include travel demand, and the technology employed, as well as the other elements of the mode (such as motive power). In the last few decades, developments have occurred in the carrying units, which are designed towards greater efficiency and consumer orientation. Flexibility is also important, as vehicles increasingly need to be altered easily and quickly, in order to accommodate changing tourist demand. Executive style coaches with on board services are an example of the same.
* The motive power: Motive power is perhaps the key element in transportation development. The natural power of horse – drawn carriage and sailing vessels provided the initial energy for transportation. The exploration of steam power provided the opportunity for the introduction of steam ships and railways, while the internal combustion engine stimulated the development of road and air transportation. Finally the jet propulsion enables air transportation to be competitively priced and gave aircraft both speed and range.

However, even in the 1900’s a number of activity holidays such as cycling, pony trekking and sailing involve human generated motive powers as part of the recreational activity. Motive power is closely related to a number of issues, such as the capacity and type of carrying unit, demand, and the desired speed and range of the vehicle. As costs of operation have been modified, the engine has had to become more fuel-efficient and for safety reasons more reliable.

**1.4. The Changing Role of the Transportation Element**

The easiest way in which to demonstrate the four basic elements are to consider the historical changes which have occurred over the time. Except for being quieter due to the continuous welded tracks, railways are little different from when first designed, although like airways they have become much busier and more congested. Roadways have become more continuous and now provide functional means of movement; however the view from the road is less interesting.

Terminals, especially airports, have become not only design pieces in them selves, but in some instance the center of hub and spoke traffic. In some cases they have grown to the size of small town to deal with transit traffic (as at Changi airport, Singapore). Also the shopping mall concept has been merged with the terminal as, for instance, at London Gatwick’s North Terminal. However, the concepts of complete inter – modal transfer for baggage and people is not yet a reality at all airport terminals.

The carrying unit in some instances differs little from previous decades, but in the case of coaches and trains comfort has been built into the design and operation. The last two decades have seen quiter but not necessarily faster aircraft being built; the latest Boeing 747-400 series has a longer range, but takes about as many passengers as previous models. Efficiency of motive power may have changed for all modes of transport, but speed of travel and size of fleet have stabilized in the last decades. The major changes are illustrated in the following table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Mode****of Transport** |  **1930’s** |   1940’s |   1960’s |  1980’s |
| AIR | * Douglas Dc-3 introduced
* Travel is expensive and limited routes.
 | * Propeller technology
* Travel still limited
* Basic air port terminals
* air planes travel 400-480 km/h
* airship enjoys a brief period of acceptance
* Civil-aviation established
 | 🞄Jet aircraft B-707 (180 passengers)🞄air planes travel 600-950 km/h🞄Cheap fuel🞄Charter take off (rapid expansion of charter services)🞄development of CRS and GDS | 🞄Wide bodied Jumbo jet B-747 🞄Extended range 🞄Fuel efficiency🞄No increase in speed except for Concorde.🞄Air Bus- in Europe with the cooperation b/n Britain and France *Concord* introduced which is the 1st Supersonic Transport /SST/🞄Extensive terminal services |
| SEA | 🞄Ocean liners & cruises🞄Short sea ferry speed less than 40 km/h with very basic facilities | 🞄Little competition from air🞄No-increase in speed for passenger liners | 🞄Air over Takes Sea on North Atlantic routes🞄Hover craft & faster craft(hydrofoils) being developed. | 🞄Fly-cruise established🞄Large and more comfortable ferries🞄fuel efficient and low operating cost🞄Fuel cost reduced due to use of diesel engine 🞄flying cruises provide dual purposes:-during winter (*point to point liners)* and during summer *(warm winter cruise ships)* |
| ROAD | 🞄Cars achieve speeds of 55 km/h🞄Coaches developed  | 🞄Cars improve in speed and performance 100km/h🞄Roads improved | 🞄Cars increasingly used for domestic tourism🞄Speed 115 km/h**🞄**Roads improve and motorways introduced | 🞄Speed limit🞄Rise in car ownership rates.🞄Urban congestion🞄Green fuel🞄Improved coaches |
| RAIL | 🞄*Steam era*-the 1st world’s most successful steam power locomotive🞄Speed exceeds cars | 🞄Railways at peak (‘golden age’ of rail)🞄provide goods and modern services🞄made huge profit with extended mileage owners | 🞄Electrification Cuts in Rail systems. (Railway companies decline due to –- growth in car ownership, growth in airline industry, and due to financial structure  | 🞄High-speed network develop in Europe.🞄Business product offered memorabilia **🞄**Dedicated rail tourism products developed based on nostalgia for steam |

Fig. 1. The historical development of transport and tourism

**1.5 Role of International Organizations related with Transportation**

* **United Nations:**  An international organization to which almost all nations belong. Its primary aim is to preserve the international peace and security as the preliminary condition to the progress of humanity.
* **World Tourism Organization (WTO):** Established in 1976, its general purpose is to give tourism the importance it deserves. It is officially recognized by the United Nations for promoting tourism for economic, social and cultural advancement of all nations.
* **World Health Organization (WHO):** Among other things, prepares all the information on communicable diseases and disseminates the information worldwide.
* **International Governmental Maritime Consultative organization (IMCO):**  it’s an intergovernmental organization concerned with the cooperation in sea transport.
* **International Civil Aviation Organization (ICAO):** Concerned with the development of international civil aviation and was responsible for the development of the “Freedoms of Air.”
* **Universal Federation of Travel Agents Association (UFTAA):** This organization represents the interest of travel agents worldwide.
* **Airline Regional Associations:**

There are number of regional airline association throughout the world and these include the following:

* The Association of European Airlines (AEA)
* African Airlines Association (AFFRA)
* Association of Latin American International Airlines (AITAL)
* Orient Airline Association (OAA)
* Arab Air carrier organization (AACO)
* European Regional Airline Association (ERA)

So these organizations are similar in nature and include cooperation and information sharing between the members.

# 1.6. Transport a Competitive Analysis

The consumer behavior variable for competitive analysis can be identified as follows:

* Safety from accidents other dangers like hijacking, diseases
* Price/cost economical trip
* Time/Speed i.e. less travel time with high speed
* Distance whether it is long haul or short haul
* Convenience of using transport
* Reliability in terms of reaching tourism destination on time in comfortable manner.
* Availability of different modes of transportation on a particular route.
* Frequency/Flexibility such as last moment ticket availability or cancellations. More the frequency, more the travelers would going to benefited.
* Service quality provided by the different operators
* Comfort/luxury of the carrying units.
* Incentives or advantages to select a particular mode of transport.
* Ground services such as handling of baggage, providing ticket etc.
* Terminal facilities and locations as easily accessible and comfortable locations.
* Status and prestige associated with the particular mode of transportation.
* Enjoyment of trip as an experience is itself for fun and recreation.