



Role of transportation in Indian economy

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Abstract

Transport or transportation is the movement of people, animals and goods from one location to another. Modes of transport include air, rail, road, water, cable, pipeline and space. The field can be divided into infrastructure, vehicles and operations. Transport is important because it enables trade between people, which is essential for the development of civilizations. The transport and the communication sector or also, known as tertiary sector is the main sector which contributes maximum in our GDP (gross domestic product) also increase our national income and the scientific advancement and technology has revolutionized the system of communication and transport and brought people very close to each other, to be in touch all the time and making the world a global village.

Keywords: infrastructure, shifted, deficient, cargo, perishable

Introduction

Transport or transportation is the movement of people, animals and goods from one location to another. Modes of transport include air, rail, road, water, cable, pipeline and space. The field can be divided into infrastructure, vehicles and operations. Transport is important because it enables trade between people, which is essential for the development of civilizations.

So the transport facilitates trade and commerce by carrying goods from the areas of production to that of consumption. Goods from the areas that have surplus are shifted to those areas which are deficient in those items. Movement of people from one place to another in search of job, education, tourism, visiting relatives home, and emergency through transport facility. Communication keeps us informed about the world's events and trends. It brings positive changes in the life of the people positive changes in the life of the people and thereby enhancing their economic conditions.

Modes of Transport

A mode of transport is a solution that makes use of a particular type of vehicle, infrastructure and operation. The transport of a person or of cargo may involve one mode or several of the modes, with the latter case being called intermodal or multimodal transport. Each mode has its own advantages and disadvantages, and will be chosen for a trip on the basis of cost, capability, and route.

Main modes of Transportation are Road lines, Air, Rail and water and others like pipelines, cable transport, space flight etc.

Road transportation

Road play an important role in connecting people and also in ensuring socio economic growth of a country as under:

1. Roadways

Provide door to door service by means of a rickshaw, car,

bicycle, bus, scooter or a truck. The construction, repair and maintenance cost is less than other means of transport. It is the cheapest and the most convenient mode of transportation for a few people and relatively smaller amount of goods over shorter distances. It is through roads that we reach railway stations, airports and seaports. perishable goods like milk, fruits and vegetables are quickly carried from nearby villages to the cities or metropolis or to other destinations. Roads connect rural areas to the urban areas and can be constructed in all types of terrains like hills, deserts, mountain and plateaus.

Classification of roads do you find same kind of roads everywhere? Obviously not, some roads may be kuchcha, and others pakka, then narrow while others broad. Roads are classified on the basis of:

1. Materials used for construction.
2. Constructing and maintaining authority.

2. Railways

Indian Railways is an Indian states owned enterprise, owned and operated by the Government of India through the Ministry of Railways. It is one of the world's largest railway networks comprising 115,000 km (71,000 mi) of track over a route of 67,312 km (41,826 mi) and 7,112 stations. In 2015-16, IR carried 8.101 billion passengers annually or more than 22 million passengers a day and 1.107 billion tons of freight in the year. In 2014–2015 Indian Railways had revenues of ₹1.709 trillion (US\$25 billion) which consists of ₹1.118 trillion (US\$17 billion) from freight and ₹451.26 billion (US\$6.7 billion) from passengers tickets.

It also owns locomotive and coach production facilities at several places in India, with assigned codes identifying their gauge, kind of power and type of operation. Its operations cover twenty nine states and seven union territories and also provide limited international services to Nepal, Bangladesh and Pakistan.

Indian Railways is the world's seventh largest commercial or

utility employer, by number of employees, with over 1.376 million employees as of last published figures in 2013. IR's rolling stock comprises over 245,267 Freight Wagons, 66,392 Passenger Coaches and 10,499 Locomotives (43 steam, 5,633 diesel and 4,823 electric locomotives). The trains have a 5 digit numbering system and runs 12,617 passenger trains and 7,421 freight trains daily. As of 31 March 2016, 27,999 km (17,398 mi) (41.59%) of the total 67,312 km (41,826 mi) route length was electrified.

3. Waterways

It is the cheapest means as compared to other means of transport because it involves no expenditure on construction other than maintenance. It is very useful for transporting heavy and bulky goods. A ship can carry lakhs of tones of goods at a time. It is a better mode of transportation for petroleum and its products as it involves cross-continental transfers. India lacks in petroleum deposit and most of it is imported from Middle East countries. It is fuel-efficient and environment friendly means of transportation.

Inland waterways

India has inland navigable waterways measuring 14,500 km which include canals, rivers, backwaters and narrow bays etc. But only 3,700 km of river length is suitable for mechanized boats in river Ganga and Brahmaputra in the north and Godavari, Krishna and Kaveri in the south. The following three waterways have already been declared as National Waterways, - NW - River Ganga from Allahabad, Uttar Pradesh to Haldia, West Bengal (1620 km)- NW 2 - River Brahmaputra from Sadiya to Dhubri in Assam (891 km) -NW 3 - Kollam to Kotapuram stretch of canal in Kerala (205 km).

Oceanic water

If you look at the map of India, you will find that India is surrounded on three sides by the Arabian Sea, the Bay of Bengal and the Indian Ocean with a coastline of 7516 km. India had only 49 ships in 1946 with a capacity of 1,27,083 tones. After independence, the Government has taken various measures resulting in procurement of 616 ships in 2004 with a gross tonnage of 700,000 tones of carrying capacity.

4. Airways

Our modern day airplane was designed by the Wright Brothers in 1903. Air transport in India began in 1911. Today it is one of the important means of transportation like roadways and railways. India has facilities of both domestic as well as international airways.

A fixed-wing aircraft, commonly known as airplane, is a heavier-than-air craft where movement of the air in relation to the wings is used to generate lift. The term is used to distinguish from rotary-wing aircraft, where the movement of the lift surfaces relative to the air generates lift.

Two things necessary for aircraft are air flow over the wings for lift and an area for landing. The majority of aircraft also need an airport with the infrastructure to receive maintenance, restocking, refueling and for the loading and unloading of crew, cargo and passengers. While the vast majority of aircraft land and take off on land, some are capable of takeoff and landing on ice, snow and calm water.

The aircraft is the second fastest method of transport, after the rocket. Commercial jets can reach up to 955 kilometers per hour (593 mph), single-engine aircraft 555 kilometers per hour (345 mph). Aviation is able to quickly transport people and limited amounts of cargo over longer distances, but incur high costs and energy use; for short distances or in inaccessible places helicopters can be used. As of April 28, 2009 The Guardian article notes that, "the WHO estimates that up to 500,000 people are on planes at any time."

Role of transportation in Indian economy

India's transport sector is large and diverse; it caters to the needs of 1.1 billion people. In 2007, the sector contributed about 5.5 percent to the nation's GDP, with road transportation contributing the lion's share.

Good physical connectivity in the urban and rural areas is essential for economic growth. Since the early 1990s, India's growing economy has witnessed a rise in demand for transport infrastructure and services.

However, the sector has not been able to keep pace with rising demand and is proving to be a drag on the economy. Major improvements in the sector are required to support the country's continued economic growth and to reduce poverty.

Railways

Indian Railways is one of the largest railways under single management. It carries some 17 million passengers and 2 million tonnes of freight a day in year 2007 and is one of the world's largest employers. The railways play a leading role in carrying passengers and cargo across India's vast territory. However, most of its major corridors have capacity constraint requiring capacity enhancement plans.

Roads

Roads are the dominant mode of transportation in India today. They carry almost 90 percent of the country's passenger traffic and 65 percent of its freight. The density of India's highway network - at 0.66 km of highway per square kilometer of land - is similar to that of the United States (0.65) and much greater than China's (0.16) or Brazil's (0.20). However, most highways in India are narrow and congested with poor surface quality, and 40 percent of India's villages do not have access to all-weather roads.

Rural roads

A Lifeline for Villages in India: Connecting Hinterland to Social Services and markets Ports. India has 12 major and 187 minor and intermediate ports along its more than 7500 km long coastline. These ports serve the country's growing foreign trade in petroleum products, iron ore, and coal, as well as the increasing movement of containers. Inland water transportation remains largely undeveloped despite India's 14,000 kilometers of navigable rivers and canals.

Aviation

India has 125 airports, including 11 international airports. Indian airports handled 96 million passengers and 1.5 million tonnes of cargo in year 2006-2007, an increase of 31.4% for passenger and 10.6% for cargo traffic over previous year. The dramatic increase in air traffic for both passengers and cargo

in recent years has placed a heavy strain on the country's major airports. Passenger traffic is projected to cross 100 million and cargo to cross 3.3 million tonnes by year 2010. Transport infrastructure in India is better developed in the southern and southwestern parts of the country.

Challenges

Recent years have seen considerable changes in the technology of the transportation with the development of high - speed rail network, more fuel - efficient automobiles and aircraft, and the widespread adoption of informatics in disciplines such as traffic management and supply chain logistics. The author in this volume assesses transportation interactions with employment and income, examine some of the policies that have been developed to maximize the economic and social impacts of transportation provision of the local and regions levels and analyze how advances in transportation technologies have impacted, and will, impact future development.

Due in part to the general liberalization of markets there have been major changes in the institutional environment in which transportation is supplied; this changes feedback upon transportation networks.

This book serves as a much-needed bridges between transportation and economic development. As such, it will be of significant interest to students and scholars of economics, transport studies and development, I policy maker, and anyone with an interest in broadening their understanding of the links between economics and transportation.

Conclusion

The development of transport and communication of our country is one of the most important aspects responsible for our country's, development. The transport and the communication sector or also, known as tertiary sector is the main sector which contributes maximum in our GDP (gross domestic product) also increase our national income and the scientific advancement and technology has revolutionized the system of communication and transport and brought people very close to each other, to be in touch all the time and making the world a global village.

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