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Anita Rani Kamboj

Research Scholar (Department
of Mathematics) Tania
University, Sri Ganganagar,
India.

Applications of Different Modes of Transport in Daily Life Travel and Transportation: A Study

Anita Rani Kamboj

Abstract

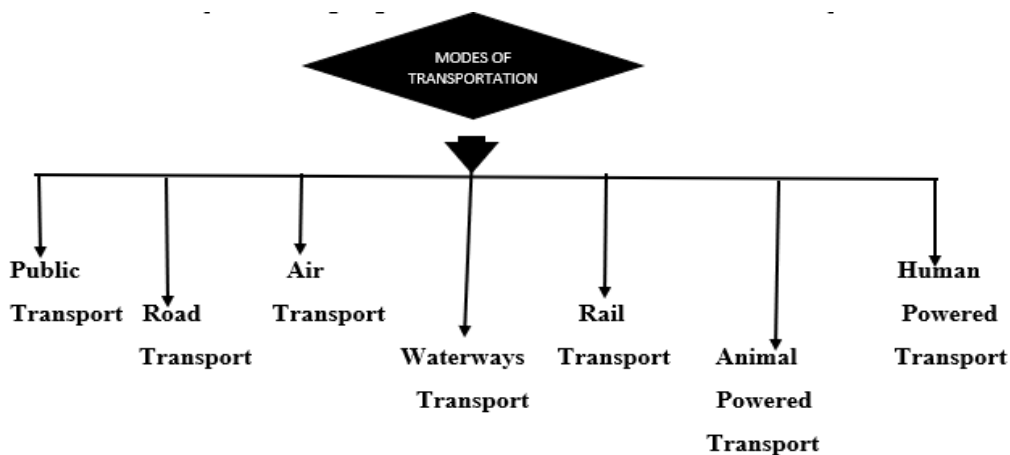
In today's daily life transportation of goods and things have important in both way collective system and individually. For the development of infrastructure and planning, it is important to improve their uses such that the maximum possible profit out of them also minimizing the total cost whatever that's money time and environment. In this paper we are trying to find the optimal solution of transportation problem to minimizing the total cost for maximizing the profit. In operation research there are many useful tools for the optimization of transportation problem. Industries are required planning for transporting their products from one place to another place. It is a type of distribution. If the number of origins and destinations are low then that's easy to take decision but if the number of origins and destinations are relatively large then that's difficult to take any decision.

Keywords: Transportation, Minimizing the cost, Maximizing Profit, Different modes of transport, Travelling.

1. Introduction

India is a country full of amazement and travelers are gratify by whatever they have around them. Transport word is used in British English and transportation is used in American English but both meaning is same that's the movement of humans, animals and goods from one destination to another destination. Transportation is the movement of people, animals, goods from one place to another place. There are different modes of transport i.e. air, rail, road, water, pipeline, cable and space. That's separated by infrastructure, vehicles and operations. Transport is notable because it allows trade between people which is important for the growth of civilizations. Travelling is a major part of going one place to another place. Whether we want to go anywhere different modes of transportation that's we can choose. A great part of travelling we get new form of transportation experience. By walking, biking, cars, buses, trains, boats, subway, aerial tramways, flying, funiculars these are the different types of transport that's we can use.

With the help of following diagram, we will show the different modes of transportation: -



Correspondence:

Anita Rani Kamboj
Research Scholar (Department
of Mathematics) Tania
University, Sri Ganganagar,
India.

2. Applications Of Different Modes of Transport in

Travelling and Transportation in Daily Life



Human Powered Transport



Human-powered transport is the transport of goods by using human muscle power. That's leads to fitness. But now technology is too much vast so this mode of transport

is rarely used. In earlier that is the best mode to transport for carrying goods from one place to another place. That's are ecofriendly. With this transport no pollution produced.

Animal-Powered Transport



Before 1830 walking (on foot) was frequently used as a mode of human transportation. From the earlier of nineteenth century mostly they used animals for the moving of goods and themselves. Animal-powered transport is the vast category of the human use for the movement of persons and goods. On the back of animal human can ride an used them as pack animal for the moving of goods from one place to another place. Transportation is an easier to people rely on animals. There are various animals that's are used by the persons for transportation. In the different areas different types of animals are used for transportation like Camel's ride in Rajasthan, Horse ride at Matheran, Yak

ride in Sikkim, Elephant ride at Dubare, Mule ride in Gulmarg, etc.

The advantages of animal-powered transport are following:

- They are easily available at lowest price.
- That's can be used for those areas which are esoteric.
- They can feel danger.
- Accident chances are rare so that's are safe more than other mode of transport.
- They are helpful to reach the goods and people door to door.
- They have low maintenance.
- They are used for multipurpose.

The disadvantages of animal-powered transport are following: -

- They can finish a limited work daily.
- Their speed of moving is too much slow.
- They can carry small loads.
- They want rest on way.
- That's are not suitable for covering long distance.

Public Transport



Public transport plays an important role in cities and towns across the world. The greatest part of public transported is running and invested by local government. That's include buses, cable cars, underground rail system, railways, ferries etc. The mainly purpose of expanding is to increases the ways of using public movements at the same time and reduce the traffic obstruction. Transport charges depends accordingly travelling distance.

Advantages of Public transport are listed below: -

- Improve community health.
- Economic benefits to the community
- Improves fuel efficiency
- Reduce air pollution
- Road congestion improved
- Community mobility improved
- Provides an Equitable Transport System
- Commuters Productivity improved

Disadvantages of Public transport are following: -

- Waiting time is long
- Not reliable in some areas
- Full of crowded
- Not suitable for heavy goods.
- Fear of infection with diseases
- Breakdown of public transport vehicles
- Slower than personal vehicles

Air Transport



Air transport is an aircraft design for transporting passengers from one place to another place. Air transport is the fastest means of transport. It is able to carrying a large number of passengers at a same time. Mostly domestic flights have two classes which are first class and economy class. There are different types of transport like Commercial airplanes, Helicopters, Private planes, Blimps, Gliders, hang gliders, Zeppelin, Parachute etc. it is a safe, efficient, affordable and reliable mode of transport. It provides various opportunities for the those who have professional qualifications. That is one of the fastest modes of transport. It requires rapid action in case of natural disaster, armed conflicts and comparable situations.

Air transport advantages are listed below: -

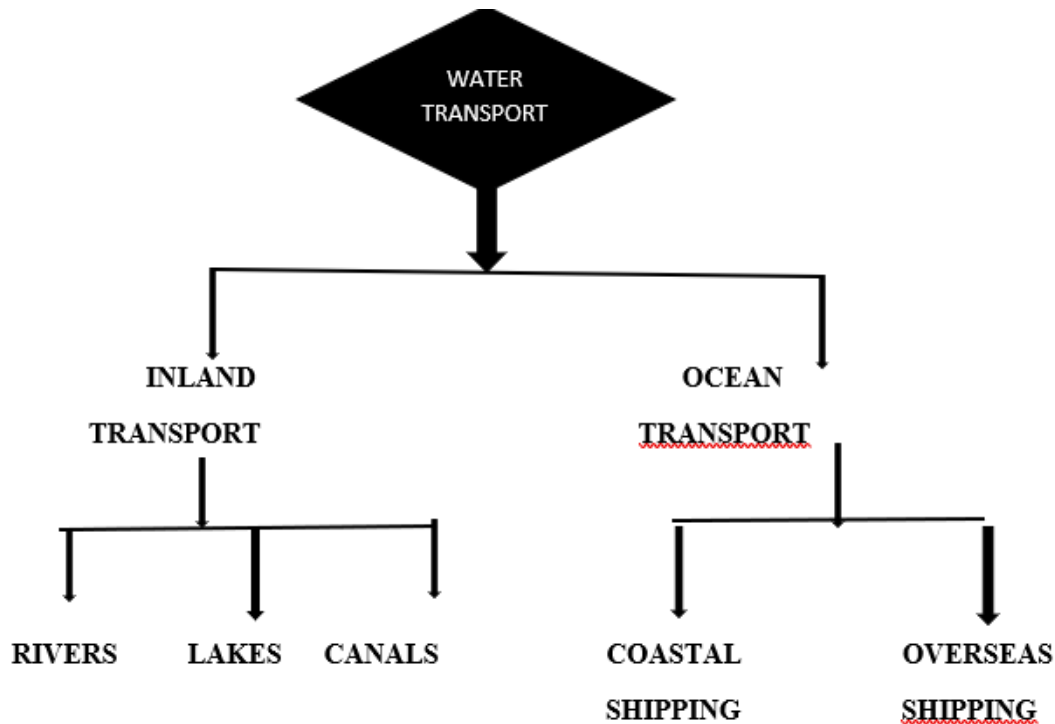
- It is the one of the fastest modes of transport.
- It is best mode of transport for perishable goods.
- It gives an efficient, comfortable and quick transport service.
- In any case of the barricade of land air easily accessible.
- This mode of transport has no physical barriers because all the formalities are already completed.
- It is helpful in national defense because all the modern wars are controlled with the help of aero planes.
- That's suitable covering for long distances.
- It provides high levels of security for sensitive items.
- It provides unbroken journey over land and sea
- It does not require great amount for investment over maintenance and construction of tracks.
- It has no physical barriers so the shortest routes use for covering long distance. Not any sea, mountains and forest come on the way of air transport.
- It is helpful in emergency like floods and other natural disaster.

In spite of so many advantages there are some disadvantages of air transport: -

- It requires great investment for the construction and maintenance of aerodromes.
- It is not ecofriendly for every person and suitable for all goods because its transportation charges are highest

than other modes of transport.

- Fuel and currency surcharges will be included in transportation cost.
- At each and every airport that's we used their charges are added.



Inland Transport



Inland transport covers all transport activities that's are running over land. Inland waterways do the function of building the necessary infrastructure in these waterways, for example rivers, canals, lakes that's are surveying the economic feasibility of new project and also administration. It is a cost effective, fuel efficient and cost effective. There are five waterways i.e. Ganga, Brahmaputra, Barak river, East coast canal, Kakinada-Puducherry.

Advantages of Inland transport are following: -

- It does not require any type of maintenance and construction so that's are ecofriendly.
- It provides flexible service.
- That's are able to carry heavy goods like coal, timber etc.

- It is the safest way of transportation. No breakdown and accidental chances are there.
- They have their natural routes.
- It is the only means of transport which has thick forest lands of heavy rainfall.

Disadvantages of Inland transport are following: -

- Their speed of transportation is slow.
- It can be operated in limited areas.
- Their sources and services are unreliable because when river changes its course that's causes disruption in the exact route of the trade.
- That's not suitable for small scale businessman.

Ocean Transport



Ocean transport is essential for foreign trade. They have no track so there is no need of construction and maintenance so that's one of the cheapest modes of transport. It has two type one of them is Coastal shipping and second is Overseas shipping. Coastal shipping is the most important means of transport, with the help of this good carrying from one destination to another destination in the country. Further Overseas shipping have three subparts that is Liners, Tramps and Tankers. That's operate on natural tracks.

Advantages of Ocean transport are following: -

- It has the largest capacity of carrying goods.

- It is essential for foreign trades.
- It is cheapest modes of transport.
- It is the safest modes of transport.

Disadvantages of Ocean transport are following: -

- It is a time-consuming means of transport.
- Due to the lack of ports and terminals they cannot receive large ships carrying containers.
- Sometimes delivery may be delay due to weather obstructions. So it is not reliable.
- It is difficult to track goods progress.
- It is not appropriate for biodegradable goods.

Rail Transport



Rail Transport is economically suitable and quicker mode of transport. It's helpful for carrying heavy and bulky goods over a long distance. Rail is running through wheeled vehicles which are located on tracks with the help of that's its move from one place to another place to transferring passengers and goods. This mode of transport is commonly used. Indian railways have vast network of connection in the whole nation. It plays an essential role in national integration. It is one of easiest way of covering large distance. Its services are mostly reliable. There are different types of rail transport like Metro Rail, Mono Rail, Inter-city Rail, High speed Rail, Milk run, Over ground Rail, Funicular Rail, etc.

There are enumerable advantages of rail transport. Some of them are listed below: -

- Rail transport is ecofriendly. It has lower fuel as compare to road transport.
- It burns less fuel as compare to trucks so as compare

that's its less polluted environment.

- Rail transport is helpful for carrying heavy and bulky goods.
- It has systematized transportation schedule so that's more reliable.
- Rail freight is efficient also it can provide very similar transit time for longer draw.
- Weather conditions are less affected rail transportation.
- Accidents and breakdown chances are less.
- Its speed over long distances is highest also that's a best choice for covering long distances.
- The carrying capacity of railways is especially too much large for carrying goods and passengers.
- That's a significant source of an employment it provides opportunities for unemployed and skilled persons.

Disadvantages of rail transportation are given following: -

- It is not suitable for short distance.
- Railways are inflexible because for any specific need adjustment of routes and time is not possible.
- It requires a large investment of capital.
- That's not able to provide door to door service.
- That's are operated in rural areas. It has limited destinations.
- Rail transport is not safe for biodegradable items.
- Different areas have different language sometimes that's difficult to understand for some persons

Road Transport



Road transportation means to transport goods, material and people from one place to another place. That's a path between two destinations. At some places where other modes of transport cannot serve like rural areas which are not establish properly for the using of other modes of transport.

Road transport is the most preferred and popular mode of transport in supply chain used by suppliers and business. There are enumerable advantages and benefits of road transport and other modes of transport.

- Less Capital Outlay
- Door to Door Delivery
- Approachable to small villages and towns
- High speed
- Cheaper than other modes of transport
- Private possess vehicles.
- Suitable for covering small distance.
- Flexible service
- Not expensive
- Best connector other modes of transport
- Easily reachable in rural areas
- Less risk of damage during transportation
- Fast delivery
- Ideal for transporting biodegradable goods

Limitations of road transport are following: -

- Accidents and breakdown chances are grater.
- Unstable and unequal rates
- Material used for making roads can harmful for environment.
- Cause of more pollution
- Toll charges are highest in some nations.
- Irregular
- Lack of corporation and formation.
- Rules and regulation are not same in all countries
- Not suitable for carrying heavy goods.
- Weather condition highly impact
- Leads to delay due to traffic

3. Summary

Modes of Transport means by which people, services and goods achieve ability to move from one place to another place. Each and all transport modes have advantages and as well as disadvantages. With the help of this paper, we get knowledge about which mode of transport we use and attain maximum profit because sometime a little mistake in choosing correct option we face so many difficulties. As the technology is growing so many changes are there. We cannot make a trust at everyone without knowing about it. So that's necessary to know which one option we have choose to reach easily at our destination. We get easily delivery of goods.

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