ROLE OF NATIONAL HIGHWAYS IN ECONOMIC DEVELOPMENT OF INDIA

¹Akula Raviteja, ²Pachimatla Yashwanth Kumar, ³M. Bhuvaneswara,
⁴Gandu Nagarjuna, ⁵Papayagari Manish Reddy, ⁶Mihir Lal
¹B-Tech Student, ²B-Tech Student, ³B-Tech Student, ⁴B-Tech Student,
⁵B-Tech Student, ⁶Assistant Professor,
¹School of Civil Engineering,
Lovely Professional University, Phagwara, Punjab, India.

Abstract:-
National highways are playing a vital role in the Indian economy in terms of carrying passengers or goods from one place to another. India is a highly underrated country for having plenty of natural resources like Limestone, Coal, Red sandalwood, Gold, Herbal Products, etc. So, Highways are the key to transportation of these natural resources from origin to other places of India and any international trades in India. National highways are spread only 2% of Indian roads but carry 40% of traffic like goods or movement of people in India. There are 599 national highways in India among then national highway 44, golden quadrilateral highway, national highway 48, national highway 52, national highway34, etc are on top. The major economic development generated by national highways is toll plazas, tourism, business, and other trade marketing strategies. This paper deals with the role of national highways on the Indian economy by point outing the revenues generated through national highways.

Keywords:- National Highways, Tourism, Transportation, Economy, Business, Toll Plazas, Revenue, Natural Resources.

INTRODUCTION:-
Roads are the backbone of any country’s economy. There are most important infrastructures of any place as they provide door to door services. In those National Highways are most important in all types of roads. They link main cities and capitals of different states. The National Highways Authority of India (NHAI) and the National Highways and Infrastructure Development Corporation Limited (NHIDCL) are the authorities responsible
for the development, maintenance and management of the National Highways in India. India has 151,019 km (93,839 mi) of National Highways as of March 2021.

National Highways constituted 2.7% of India’s total road network, but carried about 40% of road traffic, as of 2013. The majority of existing highways are now four-lane roads (two lanes in each direction), though much of this is being expanded to six or more lanes. In fact, some of the countries are struggling to make an impact in the world trade markets because of their poor road and highway network and its condition. Poor road connectivity makes it very costly due to long time, greater risk and more amount labour hours spent on transport, sometimes even impossible for the producers to reach their goods to international markets.

**METHODOLOGY:**

**ROLE OF NH'S IN ECONOMIC DEVELOPMENT:**

The pulsating economy of a country depends on the roads that serve as its arteries. Therefore, road transport has emerged as a dominant segment with a share of 4.8 per cent in India’s GDP.

As we know that national highways are play a major role by providing mobility for the efficient movements of people and goods, as well as providing availabilities to a wide variety of commercial and social activities. National Highways are connecting all the major cities and state capitals, forming the economic backbone of the country.

This Economic development is categorized into 4 types:

1. Tourism
2. Transportation
3. Employment
4. Toll plaza

1. **Tourism:**

National Highways and the tourism industry are indivisible. National Highways are an essential component of the tourism industry which can give safe rides and great offices to the guests. Transportation is the amateur of the tourism industry business which brings vacationers picking from beginning spot to drop in their separate traveller location. There are various models where great availability changed over an ordinary spot into a-list fascination.

Transportation is the fundamental means to convey Tourister's, or at least, the vacationers, to the genuine site where the tourism industry administrations are performed. The improvement of transportation, vehicles, foundation, and involving new advances in this area accelerate the tourism industry improvement.

The tourism industry in India is economically vital and is developing quickly. The World Travel and Tourism Council determined that the tourism industry produced ₹14.02 lakh crore (US$180 billion) or 9.6% of the country's GDP in 2016 and upheld 40.343 million
positions, 9.3% of its all-out work. The area is anticipated to develop at a yearly pace of 6.8% to ₹28.49 lakh crore (US$370 billion) by 2027 (10% of GDP).

In India every state had at least one tourist place which helping Indian economy. In this most tourism states are

By comparing every year of the tourist arrivals in India.

### Table: Share of top 10 states/UTs of India in number of domestic tourist visits in 2017

<table>
<thead>
<tr>
<th>Rank</th>
<th>State/Union Territory</th>
<th>Number</th>
<th>Share in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tamil Nadu</td>
<td>345,061,140</td>
<td>20.9</td>
</tr>
<tr>
<td>2</td>
<td>Uttar Pradesh</td>
<td>233,977,619</td>
<td>14.2</td>
</tr>
<tr>
<td>3</td>
<td>Karnataka</td>
<td>179,980,191</td>
<td>10.9</td>
</tr>
<tr>
<td>4</td>
<td>Andhra Pradesh</td>
<td>165,433,898</td>
<td>10.0</td>
</tr>
<tr>
<td>5</td>
<td>Maharashtra</td>
<td>119,191,539</td>
<td>7.2</td>
</tr>
<tr>
<td>6</td>
<td>Telangana</td>
<td>85,266,596</td>
<td>5.2</td>
</tr>
<tr>
<td>7</td>
<td>Madhya Pradesh</td>
<td>78,038,522</td>
<td>4.7</td>
</tr>
<tr>
<td>8</td>
<td>West Bengal</td>
<td>79,687,645</td>
<td>4.8</td>
</tr>
<tr>
<td>9</td>
<td>Gujarat</td>
<td>48,343,121</td>
<td>2.9</td>
</tr>
<tr>
<td>10</td>
<td>Rajasthan</td>
<td>45,916,573</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>Total of top 10 states</td>
<td>1,380,896,844</td>
<td>83.6</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>271,588,513</td>
<td>16.4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,652,485,357</td>
<td>100</td>
</tr>
</tbody>
</table>

### Table 2: Share of top 10 states/UTs of India in number of foreign tourist visits in 2017

<table>
<thead>
<tr>
<th>Rank</th>
<th>State/Union Territory</th>
<th>Number</th>
<th>Share in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Maharashtra</td>
<td>5,078,514</td>
<td>18.9</td>
</tr>
<tr>
<td>2</td>
<td>Tamil Nadu</td>
<td>4,860,455</td>
<td>18.1</td>
</tr>
<tr>
<td>3</td>
<td>Uttar Pradesh</td>
<td>3,104,062</td>
<td>13.3</td>
</tr>
<tr>
<td>4</td>
<td>Delhi</td>
<td>2,379,169</td>
<td>10.2</td>
</tr>
<tr>
<td>5</td>
<td>Rajasthan</td>
<td>1,489,500</td>
<td>6.4</td>
</tr>
<tr>
<td>6</td>
<td>West Bengal</td>
<td>1,475,311</td>
<td>6.3</td>
</tr>
<tr>
<td>7</td>
<td>Kerala</td>
<td>977,479</td>
<td>4.2</td>
</tr>
<tr>
<td>8</td>
<td>Bihar</td>
<td>923,737</td>
<td>4.0</td>
</tr>
<tr>
<td>9</td>
<td>Karnataka</td>
<td>636,502</td>
<td>2.7</td>
</tr>
<tr>
<td>10</td>
<td>Goa</td>
<td>541,480</td>
<td>2.3</td>
</tr>
<tr>
<td></td>
<td>Total of top 10 states</td>
<td>20,620,863</td>
<td>88.4</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>2,705,300</td>
<td>11.6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>23,326,163</td>
<td>100</td>
</tr>
</tbody>
</table>
National Highways are very important for transportation of goods across the lengths and breadths of India. Presently, the length of National Highways in India is about 151,019 km (93,839 mi). They spread through every one of the states like an organization, giving street availability all through the country. National Highways form only 2.91% of the total length of roadways in India. They help to transport about 40% of the total transport plying through roadways in the country. They are supported by the central government of India.

Transportation can be roughly grouped into two types

i. Transportation of goods.
ii. Transportation of people.

i. Transportation of goods

National highways play a key role in the transportation of goods like agricultural products, industrially manufactured products, market closets, and naturally produced products, etc. Faster transportation of goods will increase and customers are also receiving the products without any damage within time without any delays.

In India, 29 states and 773 districts are recorded in the 2022 Census of India. In every state, we can get at least one unique product is manufacturing and transported to other states, districts, and other border countries like Bangladesh, Afghanistan, etc.

For Example:

1. Andhra Pradesh: - Budithi Brassware

The craft of Budithi Brassware started in Budithi Village, in the Srikakulam area of Andhra Pradesh. They are popular for making delightful metal handiworks from compounds.
2. Arunachal Pradesh: - **Handcrafted woods and bamboo products**

Half of this state is covered with woodland and bamboo is the fundamental material utilized in their grasp makes. They make items home like-wooden trimmings, caps, stick photograph outlines, bins, cut bamboo mugs, etc.

3. Assam: - **Tea farming**

Assam is genuinely a paradise for tea sweethearts. Assam's tea is well known overall in light of its solid, weighty tasting, malty flavour.

4. Maharashtra: - **Kolhapur chappals**

They are prevalently known for their customary flat designs which are accessible in a wide scope of varieties and plans and both for people.

5. Odisha: - **Pattachitra painting**

This workmanship has been followed since the 5th century BC. This is a customary painting done on a material-based scroll. It holds authentic significance making this one of the well-known keepsakes from the territory of Odisha.

Similarly, like above mentions every state had their unique products in India.

Fig 2 Pattachitra Painting (Odisha)
ii. Transportation of people

National Highways are playing a crucial role in public transportation by providing beautiful sceneries and safe riding facilities with less time and without any traffic issues by connecting the main states, popular cities, ports and international borders to cross the country. Because of good facilities the people are also choosing the national highway is increasing year by year. Average growth of the number of vehicles has been around 10.16% per annum over recent years.

Now a days travelling of people are increasing for different purposes like Business purpose, job purpose, family vacations, marriage vacations etc.
3. Employment:

National highways and development are using a crucial tool to elevate employment growth by restoring the economic activities and attracting foreign investments.

The ongoing and targeted projects of the national highways Authority of India (NHAI) would generate estimated employment of approximately 50 crore men a day over the next four years on a seasonal basis.

NHAI is aiming to construct approximately 50,000 km of highways over the next four years, this would be averaging to nearly 12.5 crore men a day yearly from 2018 to 2022. Of this, about 1 crore will be a professional man per day, 3.5 crore skilled labour man per day, and 8 crore semi-skilled and in-skilled man per day.

The job opportunities are also increased day by day to the people where the national highways are near to villages and towns in the way of starting own food business, family restaurants or providing the hotels to the travellers.

Not only local people some other manufacturing companies, sales marketing agencies, industrial companies, raw material industries, etc are started the business in those respected areas and automatically nearly villages are cities get job opportunities increases day by day.
4. **Toll Plaza**:

National Highways Authority of India (NHAI) has been the nodal agency tasked with developing national highways and appointing concessionaires for building highways under the Build, Operate and Transfer (BOT) basis.

There is 549 Toll Plazas at various points on national highways, as of November 2016, and till December 31, 2016, the total revenue collected was Rs 5,128 crore. Of this, Rs 3,993 crore was the revenue collection (non-BOT) and Rs 1,135 crore was BOT-shared.

We expect the total yearly toll collection to reach up to Rs 1,34,000 crores in the next three to four years," Gadkari added. In FY2022, the traffic is expected to increase by 5% and toll rates (WPI linked) by 3-4% resulting in an overall increase in toll collections by 14-15% on a low base in FY2021.

Rating agency Ikra had in January said in a report that toll collections in India are likely to grow 14%-15% in 2021-22, while maintaining a stable outlook for the Indian road sector.
In 2016-17, an aggregate of Rs 6,937 crore, in 2017-18, Rs 8,630 crore, and in 2018-19, Rs 9,187 crore is the complete income produced from the 549 functional cost squares the nation over. The highest toll cost charge was gathered from Uttar Pradesh adding up to Rs 1,525 crore in the monetary year of 2018-19.

**RESULTS AND DISCUSSION:**

**1. Better connectivity with local and international markets**

Connectivity with urban markets and trade centers is important for increasing revenue and reducing poverty. NHDP is in the process of connecting India's major urban and trade centers (ports, etc.).

National highways provide farmers with opportunities to access international markets and better transportation routes and markets and reduce transportation costs.
With the development of national highways, land prices have risen and so has the wealth of the people.

2. Increased access to the social sphere

Road connectivity enables better access to primary services such as schools and healthcare facilities and improves quality of life. The development of rural roads has led to an increase in school enrollment and attendance. There has been an increase in middle and high schools and colleges. Those in adjoining areas have better access to public health care centers and health workers and increased childbirth in medical institutions.

The ADB study found that improvements in rural roads have led to a sharp increase in the number of girls going to high schools and colleges outside their villages. There has been a significant drop in primary and secondary school dropouts.

Reduced travel time enables faster access to therapeutic care and better management of medical emergencies. It has reduced neonatal mortality as frequent interactions with health workers have made villagers more aware of maternity risks and essential care for newborns. Vaccination of children has also increased. Overall, the poor have directly benefited from increased mobility and improved access to social and health services.

3. Increase in employment

National highways are considered as a tool to promote employment growth by stimulating economic activities and attracting foreign investments.

4. Other Advantages:
   - Travel Time Saving
   - Fuel Saving / efficiency
   - Benefits to trade especially Movement of perishable goods
   - Saving in maintenance costs
   - Reduced Accidents
   - Area Development
   - These all are the advantages from national highways to boost economic development.

CONCLUSION:

From the above information finally, we are saying that National Highways are playing a dominant role in the economic development of India by providing mobility for the efficient movements of people and goods, as well as providing availabilities to a wide variety of commercial and social activities. Because of upgrading the national highways, the employment opportunities are also increasing year by year people are earning money by keeping local business, foreign companies are starting the investments in India and one
more thing is the development of national highways increasing the job opportunities in a different type of business. In this toll plazas are more important because nowadays every people using their own vehicles like cars, bikes, mini trucks, etc.

**REFERENCE:**