

Transport and Communication System

Transport and communication is an important element of infrastructure, based on which the progress of a region may take place. Till date, the North- Eastern region presents a dismal picture in terms of transportation networks. It has the lowest road and railway density in the country. Inadequate road and rail links have left many areas inaccessible and their great potential in forest products, cash crops, hydropower, animal husbandry and tourism remain unexploited. There are some physical and socio-economic causes for the backwardness of transport and communication in the region.

- 1) Two-third of the region is under hills, mountain and plateaus, where laying of roads and railways is a very expensive and difficult proposition.
- 2) North-East India is linked with the mainland of India through a narrow corridor on the west and this has caused difficulties in the expansion of transport network.
- 3) As the region experiences heavy rainfall for more than 6 months of a year, the roads and railways suffer from surface and gully erosion. Therefore, to be constantly repaired and maintained in serviceable condition of the roads and railway lines, needing a huge expenditure.
- 4) The region, especially its plains, annually experiences devastating floods which often breach and damage roads and railway lines.
- 5) Due to numerous turbulent rivers and hill streams in the region , the roads and railway lines need to be frequently bridged and many culverts, retention walls, spurs, etc. have to be constructed needing labour and huge expenditure.
- 6) Apart from tea and oil industries, there is practically no large industry in the region. Therefore, a well-knit network of transport and communication has not been laid so far.
- 7) The national and foreign investment in the region shows a declining trend due to some social and political unrest arising out of ethnic, communal and insurgency problems emerging from time to time. As a result, the expansion of trade and commerce has become limited and the transport sector has suffered a lot.

- 8) Rapid development of transport sector has not become possible in the state, because the schemes undertaken by the governments for development and expansion of transport system are not executed in time and in proper way.
- 9) Although the transport system has developed quantitatively, its qualitative expansion is not up to the mark. Lack of operative and technical efficiency is usually noticed in the case of road, railway, water and air transport.
- 10) Due to lack of large market in the region the transport system has not developed. North-East region has failed to be actively associated with the field of trade and commerce at national as well as international level and consequently the infrastructure of transport system has not developed.

Roadways

Roads are the nucleus of economic development, more so in the North East. Road transportation is an important mode of travel in the hilly areas as other modes are either too expensive or difficult to construct. However, road infrastructure is relatively deficient in the area. The region, for geographic and sometimes strategic reasons, continued to have a very thin railway network too, and air services cannot be the sole channel to take care of the humungous transport needs of even one state, leave alone eight states. It is only now, after the announcement of India's "Act East" policy, that due importance has been given to the development of the area. Thus, how the surface transportation network takes shape, is more than an integral part of the story of the development of the region, it is the key index.

The road network construction and upgrade had received a boost with the implementation of the Special Accelerated Road Development Programme (SADRP) in 2006. The first phase envisaged a 6,500 km network for completion by 2016, but only about 1,000 km of the proposed network has been completed; a 3,723 km network is planned for the second phase. An uncertain security situation with threats of violence by local insurgent groups demanding pay-offs has resulted in slow progress.

Another significant project under construction is the Kaladan Multi Mode Transportation Project (KMMTP) providing an alternate connectivity for the NE States. It includes improvement of Sittwe port in Arakan province in West Myanmar, construction of an inland waterway on the Kaladan River, and preparation of a highway transportation system linking the Mizoram capital of

Aizwal. This project will reduce distance from Kolkata by approximately 1,300 km and will reduce the need to transport goods through the narrow Siliguri corridor.

Of all the states in North-East India, Assam has the longest kilometer of roads. Assam has about 337777 km of roads (2017). These can be classified into national Highway, State Highway, state PWD roads, district roads and Panchayat roads. Out of this, 3844 km is national highway. A large number of P.W.D roads and district roads are graveled and pitched while the Panchayat roads are mostly Kacha and occasionally graveled.

The highway connect most of the district headquarters of the state. A few highways go beyond the state boundary to the other states of North-East India. While the state P.W.D. roads link the important places, the district roads and Panchayat roads link the larger villages and rural market centres.

Arunachal Pradesh has a lower density of road because of its high hills and mountains and very deep valleys and gorges. Though the main Himalayan range here runs from the south-east to the north-east, all other hills and valleys run from the north to the south. So, no road has so far been constructed across the state from east to west. The various places and towns of the state have to be linked with the Brahmaputra valley by north-south roads. Of such roads i) Tezpur-Bomdila-Tawang Road, ii) North Lakhimpur-Kimin-Ziro-Daparjio Road, iii) Likabali-Along Road etc.

Table: North-East India: Total road length (as on 31-03-2017)

State	National Highways	State Highways	District Roads	Rural roads	Urban Roads
Arunachal Pradesh	2513	8123	5345	15872	576
Assam	3844	2530	4379	300123	6319
Manipur	1745	715	9467	14642	151
Meghalaya	1203	772	5095	14640	170
Mizoram	1382	170	1750	6369	312
Nagaland	1173	722	6467	26886	100
Tripura	806	329	1189	38560	602

Source: Basic Road Statistics of India (2016-2017)

Meghalaya has about 22939 km of roads. The hilly nature of the state has impeded the growth of roads in this state. The state, however, has an old road from Dawki, at Bangladesh border, via Shillong to Guwahati. Before partition this road used to go to Sylhet. New roads have been constructed after independence linking various important places with Shillong and Tura, as also linking Assam and this state.

Nagaland is also poorly developed in roadways. Its main road is National Highway No. 39 that runs from Numaligarh in Assam via Dimapur, Kohima and Mao to Manipur. Manipur has about 36239 km of roads. Mizoram has many parallel hill ranges and deep valleys running in the north-south direction. Therefore, it is difficult to construct roads across the state in the east-west direction. The state has about 11012 km of roads including National Highways, State Highways, District Road, Rural and Urban Roads.

Tripura is very much isolated from the view-point of transport and communication. The only all-weather road linking the state with the rest of the north-eastern region is national highway No.44 that runs from Shillong via Badarpur, Karimganj, Dharampur to Agartala. The eastern hilly part of the state is poorly developed in road communication.

WATER TRANSPORT

N-E India has many large and small rivers providing facilities for water transport, especially in its plain parts and in the flat river valleys of the large rivers in the hills. From the ancient period until the roads were constructed, the rivers of the Brahmaputra and Barak plains were commonly used as the medium of transport. When the Britishers came, they used the Brahmaputra and Barak-Surma rivers extensively for transport and trade between north-east India and the Kalkata port. With the growth of tea industry, these rivers became important carriers of trade.

It is estimated that the north-eastern region has about 1800 km of river routes that can be used by streamers and large country boats. The river Brahmaputra now has several small river-ports at Dibrugarh, Disangmukh, Nemati, Biswanath, Silghat, Guwahati, Goalpara and Dhubri. Besides, there are more than 30 pairs of ferryghats on the Brahmaputra, transporting men and materials between its two banks. The river Barak also has small ports at Karimganj, Badarpur and Silchar and ferry services at several places across it.

In Arunachal Pradesh the rivers Luhit, subansiri, Burhi Dihing, Noa Dihing and Tirap are used for navigation by small country boats. The rivers Dhaleswari, Sonai, Tuiliapuri and Chintuipui in Mizoram are also used for navigation with small country boats in convenient stretches.

Similarly, in Manipur, the Manipur River, along with its three main tributaries, Iril, Imphal and Thoubal are used for transporting small quantities of merchandise by country boats.

Problem of water transport

- i) The hill and mountains, abundantly present in the region, have rendered the river beds uneven, thus hindering navigation.
- ii) The rivers in the plains are often wide, shallow and braided and large boats carrying heavy loads of freight cannot ply.
- iii) After the great earthquake of 1950, the bed of the Brahmaputra has become shallow, and therefore, wide and braided, preventing large streamers from plying.
- iv) The partition of India has isolated the region completely so far rivers route are concerned. The two large rivers viz. Brahmaputra and Barak now cannot be used up to the sea-ports.
- v) As the region is industrially underdeveloped, the quantity of goods to be transported is also less which can be handled by road and rail transport. This has also deterred the growth of inland water navigation.

RAILWAYS

Railways are considered the best mode of mass transportation in the country. However, in the hilly terrains of the NE region, it is difficult and expensive to build an exhaustive setup of rail networks. This accounts for the total absence or a nominal presence of railway lines in areas of hilly states like Arunachal Pradesh, Manipur, Meghalaya, and Mizoram. The railways' presence in the North East region of the country is about 135 years old when the first passenger railway system came into being in 1881 between Dibrugarh and Sadiya. Since then, the railway system in the region has grown considerably. Even in Nagaland and Tripura, a railway route has been set up in the plain areas of the region. The Indian Railways is pursuing an ambitious plan to connect all

State capitals with a rail network. Presently, the rail network in NE is 2,600 km long and 11 new projects will add another 880 km.

Two seemingly insignificant events about the NE region received miniscule mention in the national media in 2014. Over the years, however, these would make a significant impact on the development potential of the region. The first was the completion of railway line signifying the connectivity of Meghalaya with the Indian rail network. The second event was the commencement of rail services to Itanagar, on April 07, 2014, making it only the second state capital in the area to have rail connectivity. The daily services are proving a boon to the people of Arunachal Pradesh providing them a rail link to Guwahati. Further development of rail links will lead to bettering the economic status by improving transport efficiency and lowering the cost of transportation of commodities besides increasing tourism in the area.

Rail travel is becoming the lifeline of the NE region transporting essential goods all over. Today, apart from the increased passenger traffic, coal and petroleum products are moved from the region to the rest of India. Railways are also conscious of the strategic importance of this area, as the states of the region share international borders with Bangladesh, China, Myanmar, Bhutan and Nepal. It also provides a railhead for the landlocked Himalayan countries of Nepal and Bhutan and provides interchange facilities with Bangladesh.

AIRWAYS

Compared to the surface transport, air transport is slightly more developed in North-East India. Because the region is isolated and marginally located, surrounded by as many as four foreign countries, a strong air-link is necessary.

A few aerodromes were built up in this region during World War II when the eastern war front reached the Indo-Myanmar border. The allied Forces built up small aerodromes at Kahikuchi (near Guwahati), Mohanbari (Dibrugarh), salanibari (Tezpur), Rawraiya (Jorhat), Lilabari (North Lakhimpur), Dimapur and Imphal. After independence, some of these air-fields were used by private companies like Bharat Airways and Indian Airways for commercial services.

After the nationalization of commercial air transport in India, Indian Airlines Corporation took over the services and new airports were opened at Dimapur, Kumbhirgram (near Silchar) and Agartala. The airport near Guwahati was also shifted to Borjhar. Besides, smaller airports were constructed at Zero and Tezu in Arunachal, at Umroi (near Shillong), Tuirial (Aizawl) and at

Kailashar and Kamalpur in Tripura. Among these regular air transport is confined only to Guwahati, Dimapur, Tezpur, Jorhat, Dibrugarh, Kumbhirgram, Imphal, and Agartala. The services to these airports are to and from Kolkata and Delhi. The smaller airports are rarely used by smaller air transport companies. The Borjhar (Lokapriya Gopinath Bordoloi) airport is the only one in this region and it is upgraded to an international airport. A large size airport was inaugurated at Lengpui, 40 km away from Aizawl. It is the second largest airport in N-E region next to Barjhar airport. The Baljek airport is in west Garo Hills district was inaugurated in 2011.

Problems of airways in North East India

- 1) The North-Eastern region except Assam, is full of hills and mountains restricting the growth of airports needing extensive open flat land.
- 2) The region has heavy rains with overcast sky for a long period of time of the year, keeping the weather inclement for air services. Even in dry winter there are thick layers of fog over the ground, making landing and take-off difficult.
- 3) Economic backwardness and low level of industrialization in the region are the other reason of poor development of airways.

From the above discussion it can be said that for economic growth picking up, a well-developed air transport is very important just because of its geographical location. The far-flung places of Arunachal, Manipur, and Mizoram do need airports for both strategic and commercial reasons.