Development of airports: their economic and strategic role in Assam, India

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Abstract

The first air service in Assam as well as in entire Northeast India was started with the establishment of the Rowriah Airport in Jorhat. However, most of the airports in the state developed during the World War II. These airports connect the north eastern part with the rest of India and also with the various places of the world. Though Assam has several airports, except the international airport (LGBI) of Guwahati, all are presently facing several problems due to many reasons, which are discussed in this paper. The necessity for development of the airports is not only realized from passenger traffic development point of view but also extremely important from rescue and rehabilitation during the time of disasters and also strategic point of view as the region is surrounded by number of foreign countries. In spite of facing many problems in data collection for too many restrictions, revenue earning, cargo and mail handling data along with the primary data in regard to the historical development of the airports presented here to understand the issues related to the air service in the state.

Keywords: Northeast India, Rowriah, World War II, LGBI.

1. Introduction

Transportation is an organized service industry created to satisfy the basic needs of society. The social, political as well as economic development of a country is largely depends on quick and smooth means on transport. Some essentials of transport are speed, safety, regularity, flexibility, cost and adaptability. As the air transport satisfies most of these except the cost factor, it is gaining importance day by day. Among all modes of transport air transport is the fastest mode of transport. Air transport has brought about a connectivity revolution throughout the world. In modern economy, air connectivity is vital. This means is of supreme importance in difficult terrain, where the laying of roads and railways has been an almost prohibitive proposition.

In the present context of Indian Airspace, Airport Authority of India (AAI) shoulders the responsibility for providing safe and efficient air traffic and aeronautical communication services. This Airport Authority of India was formed on 1st April, 1995 by merging the International Airport Authority of India and the National Airport Authority with a view to accelerate the integrated development expansion and modernization of the air transport operation, and also promotion of terminal and cargo facilities at the airports in the country conforming to international standards.

All the airports of Assam are brought under the study, which are spread over the entire state. Among all the north eastern states, only the Assam state is located in a plain topography. Probably because of this reason, it has the highest number of airports. It has also an international airport viz. Lokpriya Gopinath Bordoloi International (LGBI) Airport, Guwahati. The Rowriah Airport of Jorhat is the first airport of entire north eastern region.

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Most of the other airports in the state developed during the World War II. These airports connect the north eastern part with the rest of India and also with the various places of the world. Though Assam has several airports, except the international airport of Guwahati, all are presently facing several problems due to many reasons, which are also discussed in this paper. We know, Northeast India is surrounded all sides by foreign countries like Bhutan, China, Myanmar, Bangladesh and Nepal. Under such situation it needs efficient connectivity with rest of the country. Moreover, the north eastern region falls in economically backward regions of India in spite having huge potentiality for natural resource development, tourism and industries (Goswami P.C., 1988). As such the role of the air service is found to be important for all-round development of entire Northeast India. Therefore the study aims at evaluating the present scenario of the air transport in respect of their revenue earning and the problems and prospects of their proper functioning. Moreover, the historical development and strategic importance of the airports of Assam have brought under the study for proper understanding the role of this means of transport in the region.

Fig. 1 : Location of Airports of Assam
2. Objectives

The main objectives of the study are—

(i) To know the historical background for establishment of the airports
(ii) To assess the revenue earning and its role in economic development of Assam as well as Northeast India, and
(iii) To evaluate the strategic importance of the airports.

3. Methodology

The study is based on both primary and secondary data sources. As it is known to all that the databases regarding airport is highly sensitive in connection with its security purpose, many problems have been faced while collecting the primary and secondary data. Historical background and information regarding development of the airports have been collected partly from secondary sources like different journals published by the airport authority of India and partly through interviewing persons and heads of some organizations associated with airports and tea industry. The information regarding the economic aspects like revenue both traffic and non traffic associated with the airports collected from different sources like airport authority of each airport of Assam, different airlines and defense organizations etc. A study specific questionnaire has been designed to collect the information about the different problems of different departments in smooth functioning of the works. The heads of the different departments have been randomly selected and data have been collected which further analyzed with the help of simple charts and graphs.

4. Findings and Discussion

4.1.1. Historical Development of the Airports

In 1928 an aircraft landed at the Gymkhana Club, Jorhat to evacuate an ailing patient to Calcutta. This heralded the history of aviation in Jorhat and probably the whole of Northeast India. This was followed by a few flight planes owned by the British Tea Planters (Barpujari H.K. 1980). Jorhat was an important district in tea production from the earlier times of British rule in Assam. After the outbreak of World War II in September 1939, the potential for a strategic military airbase in Jorhat was recognized (Handique B. 2000). It was known as the first airport in Northeast India. During the World War II a team of Royal Indian Air force officials came to Jorhat. In early 1940 the USAF (United States Air Force) came to Rowriah Airbase to help the Chinese General Chiang Kai Shek, who was fighting the Japanese and the Communists. Military stores were airlifted from Rowriah to China. Air Force station Jorhat came into existence on 1st August 1952 as the first Indian Air Force base in the eastern region and was subsequently renamed as 10 Wing Air Force in 1958. Airbase Rowriah played an active role during the Chinese Aggression of 1962. It was one the main rear bases for air maintenance support in the Eastern sector. In the year of Indo-Pak War, 1971, transport aircraft from this airbase took part in the famous ‘Tangail Paradrop’. The Taingail Paradrop was a classic airborne assault operation of the Pakistani Force in East Pakistan. During “Operation Pawan” aircraft from Air Force Rowriah did a commendable job in support of the Indian Peace Keeping Force (IPKF) in Sri Lanka during the period 1987-1990. An aircraft from this base transported troops, arms, ammunition, vehicles and evacuated casualties during the ‘Operation Cactus’ in November 1988 to restore the popular Government in Maldives. On 10th March 1992 Shri R.Venkatraman, President of India, presented the colours to 43 Squadron Air Force. The Air Force Rowriah was judged the best operational airbase in the whole of Eastern Air command for the year 1995-96.

The LGBI (Guwahati) airport, which earlier known as Guwahati airforce station and Borjhar airport came in to existence during the World War II. It was named after Late Lokpriya Gopinath Bordoloi, the well known freedom fighter and the first chief minister of Assam. In its early phases it acted as a defense base but as the capital of Assam shifted from Shillong, the importance of Guwahati airport has also gained importance and it has been taken over by the civil aviation department. Now it is being acting as the main
airport of Assam in respect of the passenger movement, flight movement and revenue earning.

42 Wing at Air Force Station Mohanbari in Assam is the premier logistics base in the Eastern Air Command of the Indian Air Force. It was first laid down as an airfield in 1942 and was initially called Lahoal Air Force Base. As with many airfields in the north east of India, World War II operations saw the airfield very busy with carrying cargo in trips over the hump to Burma and China. After Independence, Mohanbari was instrumental in creating an air bridge to the most forward areas of the north east region. The Director General of Civil Aviation took over the airfield in 1951, with the Indian Air Force continuing to operate transport aircraft from dispersal. Mil 4’s, Dakotas and later Caribous operated from here until they were replaced by the Mil 17 in 1987, which were sent on detachment from Chabua. In October 1992 the move from Chabua was made permanent. Now it is functioning as a full fledged airport.

The civil aerodromes of Lilabari in the North Lakhimpur sub-division was taken over as a regular airport by the Indian Airlines Corporation in 1953, situated at a distance of about 5 kilometers from the North-Lakhimpur town (Dutta, K. N. and Dutta, N. C. 1976). During the summer season, air services remain suspended for days together on account of inclement weather. However, it becomes one of the important passenger airports in Assam. It provides flight connectivity for many destinations. It also serves the Arunachal Pradesh (state) too.

Air communication plays an important role in the transport and communication system of the Cachar district, especially during the rainy season when the surface communications remain disrupted. The air service with Kumbhirgram (Silchar) was started by the War Department during the World War II. After the cessation of war, this aerodrome was taken over by the Civil Aviation Department and developed to meet civil requirements. This aerodrome is now maintained by the Civil Aviation Department. A new terminal building and other essential technical buildings have been built and communication navigational facilities provided depending upon the requirements of Indian Airlines.

In the same way the Salonibari airport was constructed during the World War II in 1942. It was constructed by the British Royal Air Force. It became a full-fledged air force base in 1959. The first aircrafts flew at this base were Vampires and Toofani 101 reconnaissance squadron. In fact, in the last 25 years, it was home to the IAF MiG-21 fleet which was used extensively to train rookie pilots for the Indian Air Force. The aircraft continues to serve the air force, operating from other bases in the Northeast (Dutta N. C. 1978). Two other airfields of limited use are located at Misamari and Kalabari.

4.1.2. Development Trend of the Airports

The imports of items like consumer goods, medicines, machineries to Assam, and the export items like orange, tea, supari, and tejpat etc. are gradually increased from the days of pre-independence period (Medhi, S.B. 1978). The import and export of these items was done through air and water routes. The potentiality of air transport came to light by the end of 1949 when Pakistan prohibited transshipment of cargo to Assam by waterways. As a result emphasis has been made on air transport to and from Assam. By 1958, the total air movement to and from Assam was calculated to be about 2,300,000 miles. However this effort was found to be a losing game. In 1959, in an report of Government of India, it was stated that the Indian Air Lines Corporation was running a large number of services both passenger and freight in Assam area and that the losses incurred on the Assam area were the heaviest, about Rs. 21 lakhs a year, in passenger services. This loss was mainly attributed to the competition that existed between the Indian Air Lines Corporation and private operators, which carried about 30 per cent to 40 per cent of the total air freight in 1959. In fact, air transport played a more important part than any other modes of transport in supplying essential consumer goods to this area. The three airports in
Assam, namely, Jorhat, Mohanbari, and North Lakhimpur played an important role till two decades ago, which has reduced substantially in the recent past. In fact the LGBI airport has existed as the main airport in the recent past because of its location, connectivity and facilities. Passenger and freight traffic carried by the Air lines to and from stations in Assam have been increased significantly during the recent years. The demand for air transport has been increased manifold in last couple of years. In spite of the introduction of Boeing 737 passenger services since 1971, the air transport has not been adequate for meeting the needs of increasing volume of passengers, mail and goods to and from Assam.

### 4.1.3. Revenue Earning

Revenue earning is the most important element of airport because it links to the development of the state or country where it is being located. The collection of revenue of the airports has come from four different sources, which are (1) Traffic Revenue, (2) Non Traffic Revenue, (3) Cargo Revenue and (4) Public Admission Fee. Of these entire four sources highest amount comes from traffic revenue because, it is related with the movement of the passengers. The relevant data of revenue generation of all the airports in the state have been presented in the Table No. 1, which reflects the trend of revenue earnings in the airports during the period from 1997 to 2010.

#### Table - 1 : Showing the Total Revenue Earning of Airports of Assam (1997-2010)

<table>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kumbhirgram</td>
<td>24.83</td>
<td>24.26</td>
<td>36.35</td>
<td>41.12</td>
<td>48.01</td>
<td>34.24</td>
<td>114.45</td>
<td>171.56</td>
<td>222.55</td>
<td>131.3</td>
<td>133.79</td>
</tr>
<tr>
<td>LGBI</td>
<td>458.62</td>
<td>768.96</td>
<td>1423.27</td>
<td>1597.03</td>
<td>1229.39</td>
<td>1367.42</td>
<td>2155.42</td>
<td>3081.93</td>
<td>3935.9</td>
<td>3386.59</td>
<td>4094.3</td>
</tr>
<tr>
<td>Lilabari</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6.54</td>
<td>10.21</td>
<td>11.01</td>
<td>8.66</td>
<td>14.51</td>
<td>19.87</td>
<td>15.92</td>
<td>14.22</td>
</tr>
<tr>
<td>Mohanbari</td>
<td>82.37</td>
<td>104.95</td>
<td>193.63</td>
<td>182.53</td>
<td>178.21</td>
<td>233.31</td>
<td>271.79</td>
<td>347.09</td>
<td>271.56</td>
<td>333.74</td>
<td>680.39</td>
</tr>
<tr>
<td>Rowriah</td>
<td>27.24</td>
<td>29.8</td>
<td>48.39</td>
<td>39.36</td>
<td>37.93</td>
<td>48.17</td>
<td>70.67</td>
<td>79.32</td>
<td>88.15</td>
<td>107.71</td>
<td>115.56</td>
</tr>
<tr>
<td>Salonibari</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>10.07</td>
<td>10.09</td>
<td>7.79</td>
<td>13.8</td>
<td>7.03</td>
<td>5.24</td>
<td>1.9</td>
<td>3.43</td>
</tr>
</tbody>
</table>

Fig. 2 : Showing the Total Revenue Earning of Airports of Assam (1997-2010).
It is clear from the table that in all the airports of Assam the revenue earning is increasing gradually except in Salonibari where high fluctuation is occurred during the period mentioned. The revenue collection in the airports has a close connection with the number of passengers and handling of mail and cargos. The following tables (Tables 2, 3 & 4) show the number of passenger movement and handling of mail and cargos at different airports of Assam.

Table - 2 : Showing Passenger Variation from 2007-2010

<table>
<thead>
<tr>
<th>AIRPORT / PASSENGER</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kumbhirgram</td>
<td>149189</td>
<td>146533</td>
<td>161526</td>
<td>165535</td>
</tr>
<tr>
<td>LGBI</td>
<td>158611</td>
<td>155236</td>
<td>180683</td>
<td>215579</td>
</tr>
<tr>
<td>Lilabari</td>
<td>7428</td>
<td>5021</td>
<td>4144</td>
<td>3498</td>
</tr>
<tr>
<td>Mohanbari</td>
<td>120857</td>
<td>121068</td>
<td>168050</td>
<td>233735</td>
</tr>
<tr>
<td>Rowriah</td>
<td>43716</td>
<td>52770</td>
<td>64432</td>
<td>67554</td>
</tr>
<tr>
<td>Salonibari</td>
<td>4135</td>
<td>NA</td>
<td>3232</td>
<td>7928</td>
</tr>
</tbody>
</table>

Fig. 3 : Showing Passenger Variation from (2007-2010).
Almost in all the airports there is an increasing trend of passenger during the period from 2007 to 2010. But the significant change has been observed in the LGBI airport being its location at the capital city of the state and also being declared as only international airport in entire Northeast India.

In case of cargo handling there is clear increasing trend during the same period. However there is fluctuation in mail handling in the airports of Assam. There was significant decline during the years 2008 and 2009 might be due to shift from conventional method to electronic means. The consequence is reflected in the trend graph of the revenue earning in which there is decline in the same span of time.

4.1.4. Strategic Importance

North East India has a strategic significance for its location. All sides of this region are bounded by foreign countries. So there is always a tension in this region in connection with the cross border attacks and terrorism. Government of India is presently increasing the number of
soldiers in the border near Arunachal Pradesh. But it is not enough for country like India. For proper defense it needs strong air bases. So in this respect the airports of Assam can play an important role. Moreover, the position of all the airports is reported to be good from strategic point of view as they are at easy reach with the international borders. At the same time they have also a good connectivity with other foreign countries of south-east Asia in combination with land routes. It is stated in the ‘Mackinder’s Heartland Theory’ that if one can reach and rule the heartland of Eurasia he can control the whole world. In the same way, if we have a strong base in Northeast India centering Assam it is possible for India to control entire south-east Asia. As such the airports in Assam have immense importance from strategic point of view.

5. Problems Faced by the Airport Management

From the primary information collected from various sources mentioned in the methodology the following problems of the airports could be highlighted.

- Manpower shortage, both technical and non-technical have been reported from all the airports
- Employees are over burdened with additional works required to perform the works in the airport
- Sufficient staff quarters are not available and quality rented houses are not found near the airports, for which sometimes manpower management become difficult. As a result the concern authorities have to change the responsibility of the officials frequently.
- Frequent cancellation and rescheduling of the flights due to bad weather and other reasons cause many inconvenience to the passengers. Passenger inconvenience problem is comparatively less in LGBI airport. But in other airports mainly for insufficient infrastructures, passengers face many difficulties.
- Lack of proper technical support and non-availability of spare parts in most of the airports cause several hour delay or even cancellation of flights.
- Inconvenient connectivity with rest of the airports beyond Northeast India, and irregular passenger load slowed down the progress of the air transports development in the state.

6. Conclusion

The Airport development history of Assam is very old. Rowriah of Jorhat was the first airport established not only in Assam but in the entire Northeast India. Including the Rowriah, almost all the airports established initially for strategic reasons. However, later on these have been used as the airports for the civilian. The acquired data are clearly depicting the increasing trend in revenue generation. Cargo and Mail handled by the airports show an increasing trend. But for climatic condition and lacuna in management of airports the expected development could not be achieved so far (Neufville, De 2000). Undoubtedly, for the location peculiarity of the state amidst the foreign countries, the airports of Assam become very important from strategic point of view. As such it needs more attention to improve infrastructures in the airports so that apart from the strategic viewpoints, civilian get good services. From the international trade and tourism promotion point of view these airports can play significant role in entire south-east Asia. Needless to say that as the north eastern states are not well connected with railways and also good motorable roads for its difficult terrain, it is essential to improve air transport network in the entire region with effective connection with the airports of Assam.
References
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