

A SUSTENANCE AND GROWTH MODEL FOR REGIONAL AIRPORTS IN INDIA

ABSTRACT

Air travel is the fastest mode of transportation, giving it the ability to stretch access and mobility to remote areas, overcoming challenges of geography and topography. It is for these reasons that India has an extensive air transportation sector. The Indian aviation sector has experienced tremendous growth in the past few decades with deregulation, liberalization, and privatization. But the enormous demand for air travel has not been complemented by an equivalent increase in supply in India. A burgeoning population, developing economy, and growing middle class have put a massive strain on the major airports. As a result, the airport infrastructure is forced to stretch far beyond its existing capacities. This is where regional airports could help by alleviating traffic congestion in hub airports. Their efficient management could better exploit the existing airport infrastructure.

Despite India being the third-largest domestic civil aviation market globally and having massive potential due to its geographical spread, little research has been conducted on regional aviation. The regional airports are growing and relatively under-utilised due to inadequate infrastructure and limited demand. Although the new regional aviation policy in India-Regional Connectivity Scheme has connected regional and major airports, only around 40% of the routes allocated are operational after four rounds of bidding because airlines skip the majority of routes due to poor demand and infrastructural constraints. To address this problem, a structured approach is devised to evaluate the regional airports in India and sustain them through four objectives.

The first objective identified the driving factors for sustaining regional airports through literature review and expert opinion. A hierarchical model was developed amongst the factors.

The population of the region, national subsidies, and airport infrastructure development have been found to be the strongest drivers for promoting regional airports. The identified driving factors point towards three criteria for the sustenance and growth of regional airports-demand, efficiency, and profitability. The air traffic demand of Indian regional airports was analyzed in the second objective. The results highlighted that distance to the nearest airport and accessibility of the airport significantly affected traffic volumes in regional airports. The efficiency assessment in the third objective emphasized that most airports have increasing returns to scale. This implies that the landside and airside capacity of the airports needs to be upgraded with the growth in demand. Determining the efficiency of regional airports is critical because it helps in investigating existing airport problems, evaluating current airport performance, and developing strategies and action plans for improving efficiency. The factors which had a significant impact on the efficiency scores were distance to the closest airport, distance from the city centre, per capita income, accessibility, and profitability of the airport. The productivity growth of the sample airports over the same period was also calculated using Malmquist Productivity Index.

The effect of possible determinants on regional airport profits and revenue was studied in the fourth objective. Regional airports can expand their profits and revenue primarily by increasing domestic and international passenger flow. Lower levels of seasonality contribute to airport revenue. Airport capacity utilisation has a favourable and considerable impact on airport profits but not airport revenue. Civil enclaves and the number of direct connections substantially affect airport profits. These four objectives contribute towards the sustenance and growth of regional airports and provide managerial implications to policymakers and regional airport operators.

Keywords: Regional airports, sustenance, demand, efficiency, profitability.