

INDIAN AVIATION INDUSTRY: AN OVERVIEW OF GROWTH AND OPPORTUNITIES

Dr. Kiran Bala

Assistant Professor in Commerce, Mata Sundri University Girls College, Mansa, Punjab

Preeti

Research Scholar, Department of Commerce, Punjabi University Patiala, Punjab

ABSTRACT

India's civil aviation industry has expanded substantially over the past decade, supported by rising passenger demand, increasing airport capacity, regional connectivity initiatives, and improved airline operations. This study analyses the growth and structural development of the Indian civil aviation industry, with particular emphasis on passenger traffic, airline demand and capacity utilization, market concentration, opportunities, challenges, and policy implications. The study uses secondary data primarily from the Directorate General of Civil Aviation (DGCA), Ministry of Civil Aviation (MoCA), Airports Authority of India (AAI), and other relevant sources. Data covering FY 2014–15 to FY 2024–25 are examined using CAGR, comparative analysis, and trend analysis. The findings indicate that domestic passenger traffic increased from 70.1 million in FY 2014–15 to 165.5 million in FY 2024–25, registering a CAGR of 9.0%, while international passenger traffic increased from 46.2 million to 73.9 million, with a CAGR of 4.8%. The analysis further indicates growth in both airline demand and capacity, reflected through increases in Revenue Passenger Kilometres (RPK) and Available Seat Kilometres (ASK). The domestic airline market also remains highly concentrated, with IndiGo accounting for 63.0% of the market in FY 2024–25. Despite strong growth prospects, high operating costs, capacity constraints, regulatory requirements, and environmental sustainability remain significant challenges. The study concludes that sustained growth will depend on balancing capacity expansion with competition, regional connectivity, operational efficiency, MRO development, regulatory strengthening, and environmental sustainability.

Keywords: Indian aviation industry, passenger traffic, airline capacity, RPK, ASK, market concentration, MRO, sustainability.

INTRODUCTION

India's civil aviation sector has undergone substantial transformation over the past few decades, moving from a highly regulated system towards a more competitive and commercially oriented industry. Liberalization, the expansion of low-cost carriers, rising household incomes, growth in tourism and business travel, digitalization, and investment in airport infrastructure have contributed to the expansion of air transport. Beyond passenger mobility, aviation supports tourism, trade, employment, regional connectivity, and the movement of high-value and time-sensitive goods. Consequently, developments in the aviation sector have implications for both transport connectivity and broader economic activity (Das, 2018; Kumari & Aithal, 2020).

The scale of India's air transport market has expanded considerably, particularly in the post-pandemic period. India is currently recognized as the world's third-largest domestic aviation market after the United States and China (Press Information Bureau [PIB], 2024). Government statistics indicate that Indian airports handled approximately 37.6 crore passengers in FY2023–24, including around 30.6 crore domestic and 7 crore international passengers (PIB, 2024). Further, scheduled carriers carried approximately 239.4 million passengers in FY2024–25, of which about 165.5 million were domestic passengers (Ministry of Civil Aviation [MoCA], 2025). These figures indicate a substantial recovery in air travel and provide a current empirical basis for examining the industry's growth and performance.

The expansion of passenger traffic has been accompanied by developments in airport infrastructure and regional connectivity. Public investment, private participation, and airport modernization have contributed to the expansion of aviation infrastructure across the country. The Regional Connectivity Scheme—UDAN (Ude Desh ka Aam Nagrik), launched in 2016, has sought to improve air connectivity to underserved and unserved regions by supporting regional routes. The continued development of airport infrastructure and regional connectivity is therefore an important component of the sector's expansion and its potential contribution to more geographically balanced economic activity (MoCA, 2024).

Despite the expansion of the sector, Indian aviation continues to face several structural and operational constraints. These include high fuel and operating costs, substantial capital requirements, infrastructure capacity pressures, regulatory requirements, aircraft and component supply constraints, and exposure to external economic shocks. At the same time, rising passenger demand, airport expansion, regional connectivity, technological adoption, and the growing integration of aviation

with tourism and logistics create opportunities for further development. The coexistence of these growth opportunities and structural constraints makes a systematic assessment of the sector necessary.

REVIEW OF LITERATURE

Liberalisation, Privatisation and Market Development

Earlier research on Indian aviation emphasized the transition resulting from economic reforms, private entry, and the expansion of low-cost business models.

Krishnakumar & Baby (2011) identified growth potential associated with lower costs, improved infrastructure, and supportive government regulations. **Behera (2016)** examined the challenges airlines faced in relation to taxation, competition, and infrastructure following economic reforms. **Das (2018)** showed that government policies and aviation infrastructure played an important role in the growth of civil aviation; **Kumari & Aithal (2020)** found that the growth of the aviation industry was closely connected with economic reforms; **IATA (2025)** highlighted the importance of better infrastructure, skilled labor, efficient policies, and coordination for the future growth of the aviation industry.

Regional Connectivity, Airport Accessibility and Efficiency

Das, Bardhan and Fageda (2022) investigated the factors affecting passenger demand on new regional air routes using a gravity model. **Bansal and Sen (2022)** studied the accessibility and connectivity of Tier-II city airports. **Thomas and Jha (2022)** studied the efficiency of regional airports. **Chand, Mohapatra and Jena (2024)** analysed the efficiency of major Indian airports.

Airline Demand, Efficiency and Financial Performance

Airline performance is assessed through traffic, capacity, and utilisation measures. RPK (Revenue Passenger Kilometers) capture passenger demand by combining the number of passengers carried with the distance travelled. ASK (Available Seat Kilometers) measures available seat capacity over the distance flown. The ratio of RPK to ASK provides the Passenger Load Factor (PLF), which indicates the proportion of available capacity utilized by passengers. **Seth, Saxena and Arora (2021)** found that airline size, resources used, and operating results should be considered jointly when measuring passenger-airline efficiency. **Thomas and Jha (2024)** studied the factors affecting airline profits and revenues, while **Jayathilakan et al. (2024)** examined the determinants of Indian airline revenues.

RESEARCH GAP

Previous studies have examined airline liberalisation, privatisation, regional connectivity, airport efficiency, and airline performance. However, these themes have generally been studied separately, and there is limited research examining the Indian aviation industry over a long period within a common reporting framework. In particular, an integrated analysis is needed to examine: (1) Changes in domestic, international, and total schedule passenger traffic over time; (2) Airline demand, and capacity utilisation using RPK, ASK and PLF; and (3) Changes in domestic airline market share.

Therefore, the present research paper addresses this gap by analyzing the Indian civil aviation industry from FY 2014–15 to FY 2024–25 using a consistent data framework and descriptive statistical measures.

OBJECTIVES

- To measure the long-run growth of domestic, international and total scheduled passenger traffic in India during FY 2014-15 to FY 2024-25.
- To examine airline demand, available capacity, and capacity utilisation using Revenue Passenger Kilometres (RPK), Available Seat Kilometres (ASK), and Passenger Load Factor (PLF) over a common financial-year period.
- To evaluate major opportunities, constraints, environmental issues and policy implications for the Indian civil aviation sector.

DATA AND METHODOLOGY

Research Design

The study adopts a descriptive-cum-analytical research design based exclusively on secondary data. The descriptive part of the study looks at passenger growth, airline capacity, utilisation, and market structure. The analytical part evaluates growth rates and dispersion measures. The study does not involve primary surveys or causal estimation of the effect of individual government policies on traffic growth.

Data Sources and Reporting-Period protocol

The study uses secondary data obtained primarily from the Directorate General of Civil Aviation (DGCA), Ministry of Civil Aviation (MoCA), and Airports Authority of India (AAI), Department for Promotion of Industry and Internal Trade (DPIIT) and official airline records. These sources are used to verify passenger traffic, airport capacity, airport activity and market structure. The core passenger-traffic, RPK, ASK and PLF analysis covers **FY 2014-15 to FY 2024-25**. FY 2024-25 values are treated as provisional where the source marks them as provisional. Domestic airline market-share analysis is reported for FY 2023-24 and FY 2024-25, consistent with the DGCA/Competition Commission of India Source.

A consistent reporting-period method is used. **Calendar-year and financial-year data are not mixed within the same time series.** Part-year data are not used to calculate long-run growth rates. If published figures differ slightly because of rounding, totals are calculated using the same rounding convention.

Variables and Measures

The principal variables examined include domestic passenger traffic, international passenger traffic, total scheduled passenger traffic, Revenue Passenger Kilometres (RPK), Available Seat Kilometres (ASK), Passenger Load Factor (PLF), and airline market share. Passenger traffic is measured by the number of passengers and reported in millions. RPK is measured in passenger-kilometres and represents passengers carried multiplied by the distance flown. ASK is measured in seat-kilometres and represents available seats multiplied by the distance flown. Passenger Load Factor (PLF) is calculated as RPK divided by ASK, multiplied by 100, and indicates the proportion of available capacity utilised by passengers. Passenger Market Share is calculated as Passengers carried by an airline divided by total domestic scheduled passengers carried, multiplied by 100.

Analytical Techniques

Compound Annual Growth Rate (CAGR): CAGR is used to estimate the average annual rate of growth over the selected period.

$$\text{CAGR} = [(\text{Ending Value} / \text{Beginning Value})^{(1/n)} - 1] \times 100$$

Where n denotes the number of annual intervals between the beginning and ending observations.

Year-on-Year Growth: Annual changes in selected indicators are examined using:

YoY Growth = $[(\text{Current Year Value} - \text{Previous Year Value}) / \text{Previous Year Value}] \times 100$

Descriptive statistics include the Mean, standard deviation (SD) and Coefficient of Variation (CV)

Passenger Load Factor: Capacity utilization is assessed using:

PLF = $(\text{RPK} / \text{ASK}) \times 100$

Domestic-to-International Passenger Ratio: The relative scale of domestic and international passenger traffic is examined using:

Domestic-to-International Ratio = $\text{Domestic Passengers} / \text{International Passengers}$ **Comparative and Trend Analysis**

Comparative analysis is used to examine changes in passenger traffic, airline demand, available capacity, airport development, and market structure across comparable periods. Trend Analysis is used to identify the direction and pattern of changes in the major indicators over time.

Tables and figures are used to present the observed trends, while CAGR, YoY growth, ratios, and capacity-utilization measures are used to support interpretation.

RESULTS AND ANALYSIS

The results are interpreted by linking observed quantitative trends with changes in passenger demand, airline capacity, capacity utilisation, infrastructure development, and sectoral policy. Government initiatives and industry developments are considered as contextual factors rather than being treated as direct causal determinants of traffic growth.

Growth and Performance of the Indian Civil Aviation Industry

The Indian civil aviation industry has experienced substantial growth during the last decade, driven by increasing passenger demand, expansion of airline capacity, and improvements in aviation infrastructure. The present analysis focuses on realised growth during FY 2014–15 to FY 2024–25.

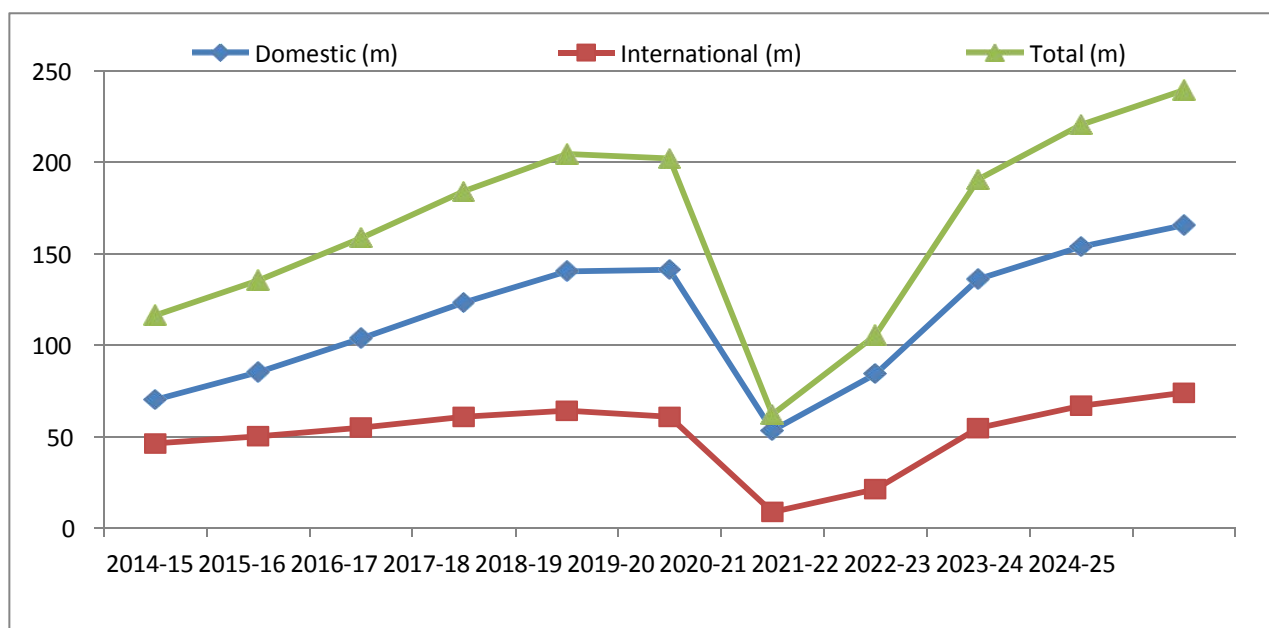
Table 1: Scheduled Passenger Traffic in India, FY 2014-15 to FY 2024-25

Financial year	Domestic (m)	YoY	International (m)	YoY	Total (m)

2014-15	70.1	-	46.2	-	116.3
2015-16	85.2	21.5%	50.2	8.7%	135.4
2016-17	103.7	21.7%	54.9	9.4%	158.6
2017-18	123.3	18.9%	60.8	10.7%	184.1
2018-19	140.3	13.8%	64.1	5.4%	204.4
2019-20	141.2	0.6%	60.8	-5.1%	202.0
2020-21	53.3	-62.3%	8.8	-85.5%	62.1
2021-22	84.2	58.0%	21.2	140.9%	105.4
2022-23	136.0	61.5%	54.6	157.5%	190.6
2023-24	153.7	13.0%	66.8	22.3%	220.5
2024-25	165.5	7.7%	73.9	10.6%	239.4

Source: Directorate General of Civil Aviation (DGCA), Handbook on Civil Aviation Statistics 2024–25.
FY 2024-25 Figures are provisional wherever marked as such by DGCA.

Figure 1: Scheduled Domestic, International and Total Passenger Traffic



Source: Directorate General of Civil Aviation (DGCA), Handbook on Civil Aviation, Statistics 2024–25, Ministry of Civil Aviation, Government of India.

Table 2: Descriptive Statistics and Long-Run Growth, FY 2014-15 to FY 2024-25

Series	Mean (m)	SD (m)	CV	CAGR
Domestic	114.2	37.0	32.4%	9.0%
International	51.1	19.6	38.4%	4.8%
Total	165.3	54.8	33.1%	7.5%

Source: Directorate General of Civil Aviation (DGCA), Handbook on Civil Aviation Statistics 2024-25.

Tables 1 and 2 show that domestic passenger traffic increased from **70.1 million in FY2014–15 to 165.5 million** in FY2024–25, recording a **CAGR of 9.0%**, while international passenger traffic increased from **46.2 million to 73.9 million**, with a **CAGR of 4.8%**. Combined scheduled passenger traffic recorded a CAGR of about **7.5%** over the same period. These results indicate that domestic aviation expanded considerably faster than international passenger traffic over the full decade. **Table 2** also shows that International traffic had the highest coefficient of variation (**38.4%**), indicating relatively greater variability around its mean. The domestic series had a lower, though still substantial, CV of **32.4%**. These dispersion measures confirm that the decade was characterised by marked fluctuations rather than smooth, uninterrupted growth.

Table 3: Domestic Airline Demand, Capacity and Utilisation FY 2014-15 to 2024-25

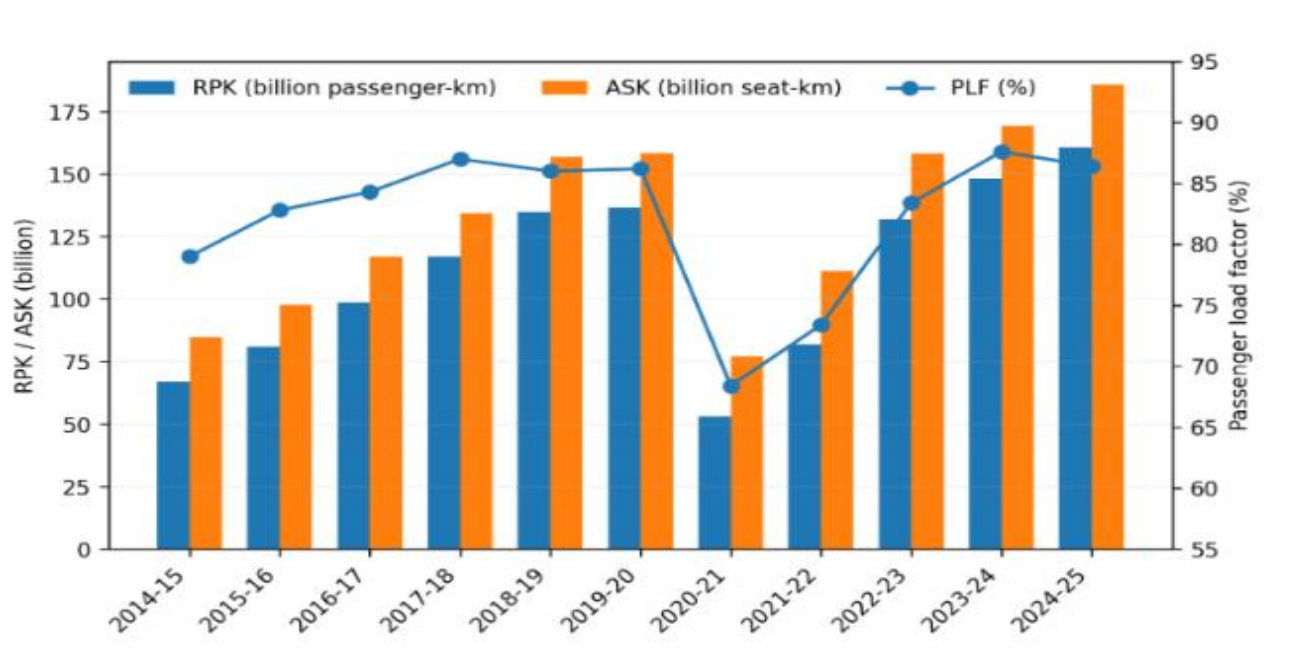
Financial year	RPK (bn passenger-km)	ASK (bn seat-km)	PLF
2014-15	67.0	84.8	79.0%
2015-16	81.0	97.7	82.8%
2016-17	98.6	116.9	84.3%
2017-18	117.0	134.5	87.0%
2018-19	134.9	156.8	86.0%
2019-20	136.7	158.6	86.2%

2020-21	52.9	77.3	68.4%
2021-22	81.8	111.5	73.4%
2022-23	132.1	158.3	83.4%
2023-24	148.3	169.3	87.6%
2024-25	160.5	185.8	86.4%

Source: Directorate General of Civil Aviation (DGCA), Ministry of Civil Aviation, Government of India, Handbook on Civil Aviation Statistics 2024–25.

*PLF values shown are based on the reported RPK and ASK figures.

Figure 2: Domestic RPK, ASK and Passenger Load Factor, FY2014-15 to FY2024-25

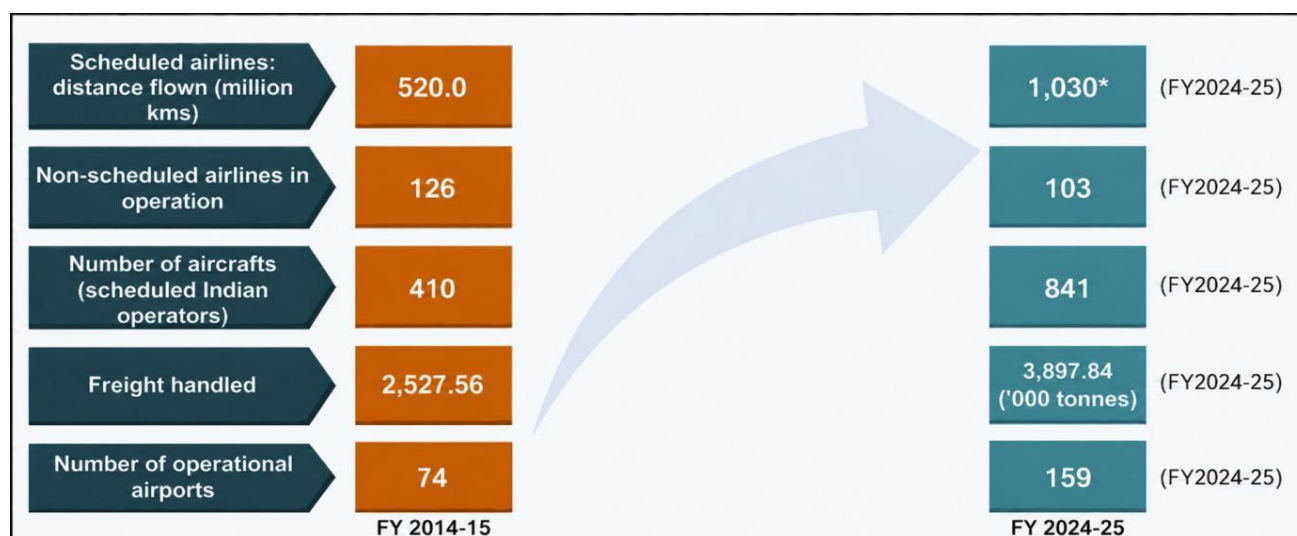


Source: Directorate General of Civil Aviation (DGCA), Ministry of Civil Aviation, Government of India, Handbook on Civil Aviation Statistics 2024–25.

Figure 2 presents the relationship between airline demand, available capacity, and capacity utilisation in the Indian domestic aviation sectors during FY 2014–15 to FY2024–25. Revenue Passenger Kilometres (RPK) increased from 67.0 billion passenger-km to 160.5 billion, while ASK rose from 84.8 billion seat-km to 185.8 billion. Over the study period, RPK recorded a CAGR of **9.1%**, while ASK recorded a CAGR of **8.2%**, indicating that passenger demand grew slightly faster than available seat capacity over the full decade.

Data for the latest two years also show continued growth in airline demand and capacity. Domestic departing passengers increased from **153.7 million** in FY 2023–24 to **165.5 million** in FY 2024–25, while RPK increased from **148.3 billion** to **160.5 billion** passenger-km and ASK increased from **169.3 billion** to **185.8 billion** seat-km. Based on the RPK-to-ASK ratio, the Passenger Load Factor (PLF) declined slightly from **87.6% to 86.4%**, indicating that available seat capacity increased faster than passenger demand between FY 2023-24 and FY 2024-25. **PLF declined does not mean airline demand declined**; it means the **capacity denominator expanded faster than demand**. The decline was modest and capacity utilisation remained high. Overall, the data demonstrate strong expansion in passenger traffic, demand, and airline capacity, while also highlighting the need to maintain a balance between capacity growth and utilisation.

Figure 3: Comparison of Selected Indian Aviation Indicators: FY 2014-15 and FY2024–25



Source: Airports Authority of India, Ministry of Civil Aviation.

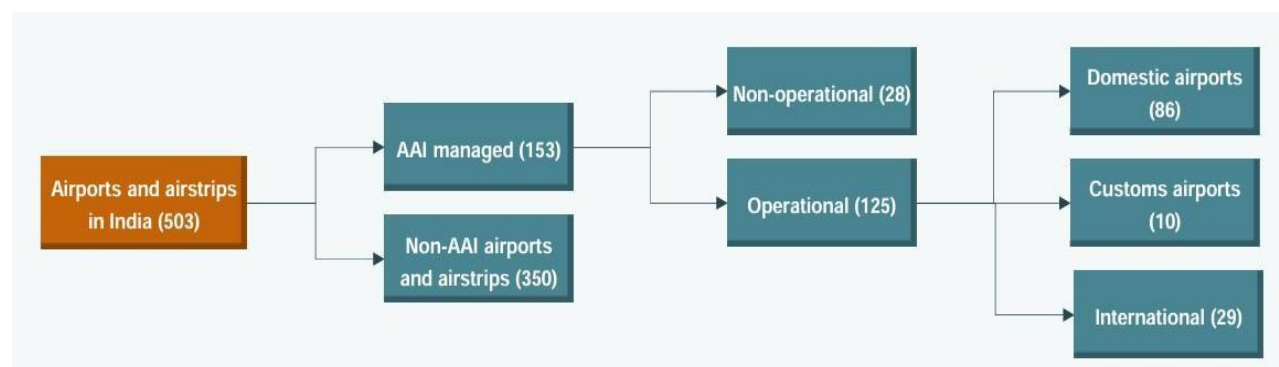
Note: -*Scheduled Domestic Service, mn km-million kilometers.

Figure 3 presents the expansion of the Indian aviation sector from **FY 2014–15 to FY 2024–25** across key operational and infrastructure indicators. Scheduled airlines' distance flown increased from **520.0 million km to 1,030 million km**, while the number of aircraft operated

by scheduled Indian operators rose from **410 to 841**. The number of non-scheduled airlines/operators in operation changed from **126 to 103**. Freight handled increased from **2,527.56 thousand tonnes to 3,897.84 thousand tonnes**, showing considerable growth in air-cargo activity. Similarly, the number of operational airports increased from **74 to 159** during the period. Overall, the figure shows

substantial growth in aviation capacity, airport infrastructure and freight activity in India during FY 2014–15 to FY 2024–25.

Figure 4: AAI - Managed Airports and Airstrips



Source: Airports Authority of India.

Figure 4 presents the status of airports and airstrips in India, highlighting the airport infrastructure managed by the Airports Authority of India (AAI). The figure shows that AAI managed 153 airports, of which 125 were operational and 28 were non-operational. Among the operational airports, 86 were domestic airports, 10 were customs airports, and 29 were international airports. This distribution indicates the diverse nature of India's airport infrastructure and the role of AAI in supporting domestic and international air connectivity. Overall, the figure highlights the extent of airport infrastructure available in the country and its importance in supporting the continued expansion of the Indian aviation sector.

Tax incentives and FDI

Government policies have supported investment in the Indian aviation sector through foreign direct investment (FDI) liberalisation and tax-related measures. For Greenfield airport projects, and Brownfield airport projects up to 100% FDI is permitted through the automatic route. For scheduled air transport services and domestic scheduled passenger airlines and regional air transport services, up to 100% FDI is permitted, with up to 49% under the automatic route and investment beyond 49% under the government route; up to 100% FDI is permitted under the automatic route for NRIs, subject to applicable policy conditions. In addition, 100% FDI through the automatic route is permitted for Maintenance, Repair and Overhaul (MRO) services.

FDI has become an important source of private and foreign capital for airport development, airline services, and aviation-related activities. According to the DPIIT, cumulative FDI equity inflows into

India's air- transport sector, including air freight, amounted to **Rs. 37,633 crore** between April 2000 and March 2025. During FY 2024- 25, the sector received Rs. **11465.20 crore** in FDI equity inflows, accounting for 2.7% of total equity inflows during the year.

Tax-related measures are particularly relevant to the development of the MRO segment, where tax rationalisation and streamlined customs procedures can improve the competitiveness of domestic maintenance facilities. However, FDI liberalization alone may not ensure sustained investment. Its effectiveness also depends on infrastructure, regulatory efficiency, skilled manpower, certification capacity, component availability, and efficient customs and logistics processes. Therefore, FDI policy should be supported by complementary measures that strengthen the overall aviation ecosystem.

Table 4: FDI Provisions Relevant to Civil Aviation

Civil Aviation Activity	Maximum FDI	Entry Route
Greenfield airport projects	100%	100% automatic
Existing/Brownfield airport projects	100%	100% automatic
Non-scheduled air transport service	100%	100% automatic
Maintenance, Repair and Overhaul (MRO)	100%	100% automatic
Scheduled air transport / domestic scheduled passenger airline / regional air transport	100%	Automatic up to 49%; government route beyond 49%; up to 100% automatic for NRIs, subject to policy conditions

Source: Department for Promotion of Industry and Internal Trade (DPIIT), Govt. of India FDI Statistics FY 2024-25; Ministry of Civil Aviation Annual Report 2024-25.

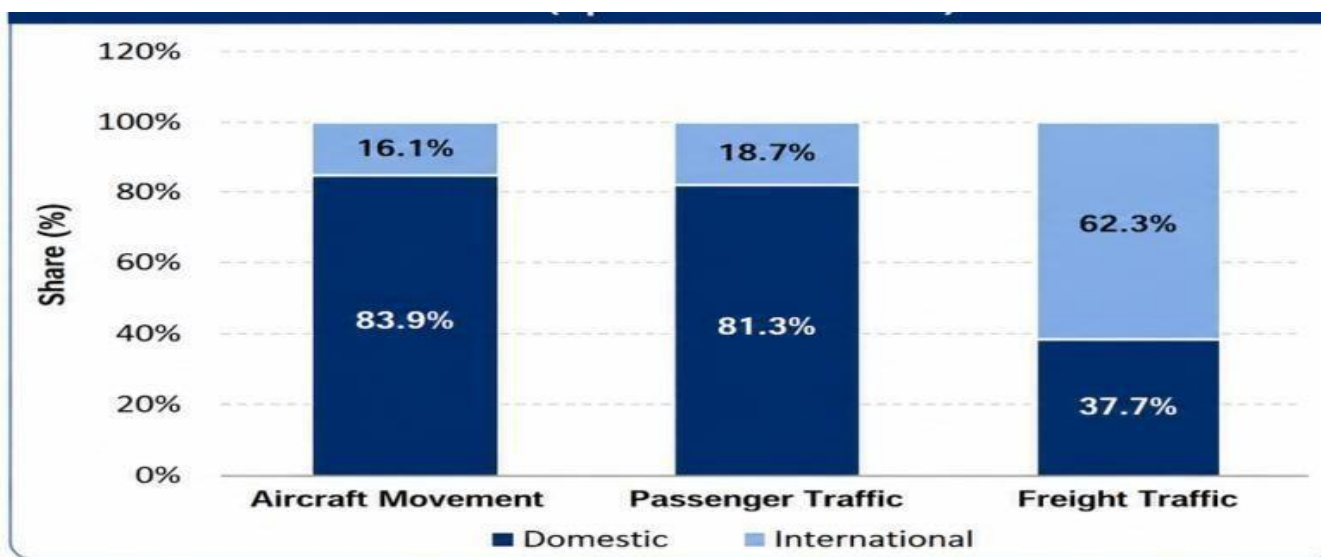
Table 5: Domestic and International Air Traffic at Indian Airports, April-December 2024 (9 Months FY 2024-25)

Indicator	International	Domestic	Total	Domestic %	International %
Aircraft Movements	346,101	1,801,894	2,147,995	83.9%	16.1%
Passengers	56.88 million	246.76 million	303.63 million	81.3%	18.7%

Source: Airports Authority of India (AAI), Air Traffic Report – December 2024 (April- December 2024).

Table 5 reports passenger movements handled at Indian airports based on AAI statistics. Airport statistics count passenger movements at airports, including arrivals and departures, and the figure of 303.63 million passengers (246.76 million domestic and 56.88 million international) relates to April–December 2024, i.e., the first nine months of FY 2024–25, rather than the complete financial year. It provides a snapshot of passenger traffic and shows that domestic passenger traffic forms the major share of total air traffic in India. Therefore, it supports the broader analysis of the strong dominance of domestic aviation in the country.

Figure 5: Domestic and International Air Traffic at Indian Airports, April-December 2024 (9 Months FY 2024-25)



Source: Airports Authority of India (AAI), Air Traffic Report – December 2024 (April-December 2024)

Figure 5 presents the cumulative distribution of domestic and international activity at all operational Indian airports during April-December 2024 as reported by the Airports Authority of India (AAI). Domestic activity accounted for 83.9% of total aircraft movements, while international activity accounted for 16.1%. In passenger traffic, the domestic share was 81.3%, compared with 18.7% for international traffic. In contrast, international freight accounted for a larger share (62.3%), while domestic freight accounted for 37.7%. Thus, domestic operations dominated aircraft movements and passenger traffic at AAI, whereas international operations accounted for the larger share of freight traffic.

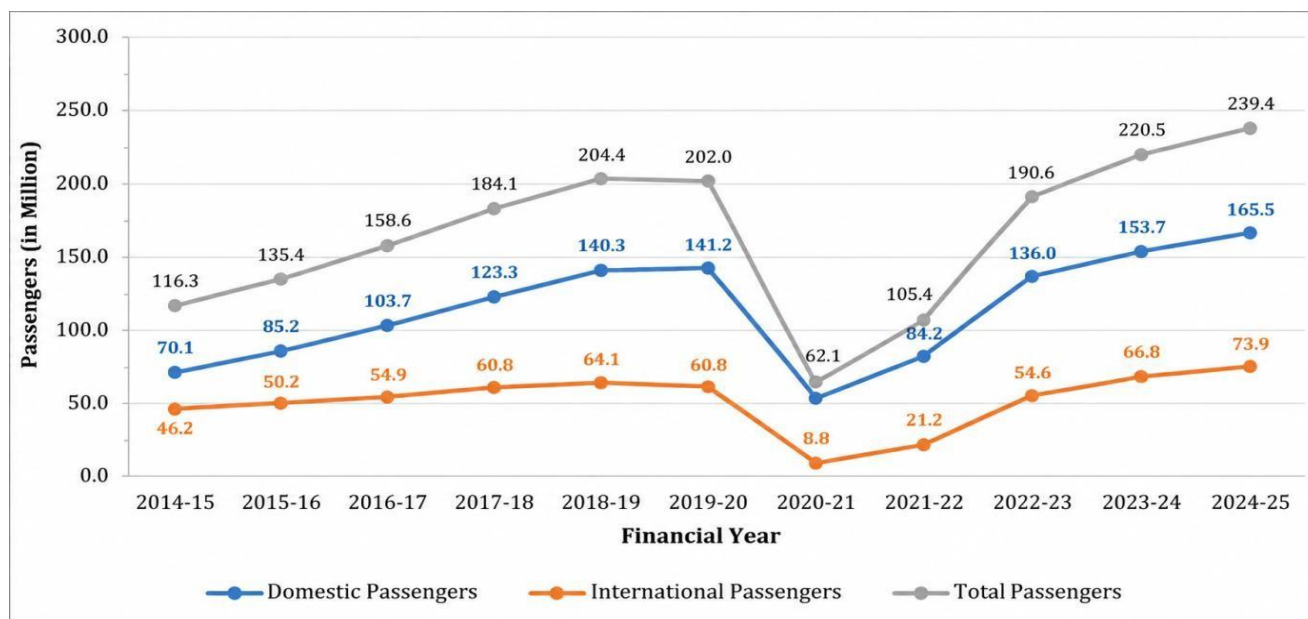
Table 6: Passenger Traffic Carried by Scheduled Carriers, FY 2014-15 to FY 2024-25

Financial Year	Domestic Passengers (Million)	International Passengers (Million)	Total Passengers (Million)
2014–15	70.1	46.2	116.3
2015–16	85.2	50.2	135.4
2016–17	103.7	54.9	158.6
2017–18	123.3	60.8	184.1
2018–19	140.3	64.1	204.4
2019–20	141.2	60.8	202.0
2020–21	53.3	8.8	62.1
2021–22	84.2	21.2	105.4
2022–23	136.0	54.6	190.6
2023–24	153.7	66.8	220.5
2024–25	165.5	73.9	239.4

Source: Directorate General of Civil Aviation (DGCA), Handbook on Civil Aviation Statistics 2024–25.

Note: The 303.63 million airport-passenger total in Table 5 and the 239.4 million scheduled-carrier total in Tables 1 and 6 are not directly comparable because they differ in **both reporting period and statistical concept**.

Figure 6: Passenger Traffic Carried by Scheduled Carriers, 2014-15 to FY 2024-25



Source: Directorate General of Civil Aviation (DGCA), Handbook on Civil Aviation Statistics 2024–25.

Figure 6 presents the long-term movement in passenger traffic carried by scheduled carriers. Domestic passengers increased from 70.1 million in FY 2014-15 to 165.5 million in FY 2024-25, while international passengers increased from 46.2 million to 73.9 million. Over the same period, domestic passenger traffic registered a CAGR of 9.0% compared with 4.8% for international passenger traffic.

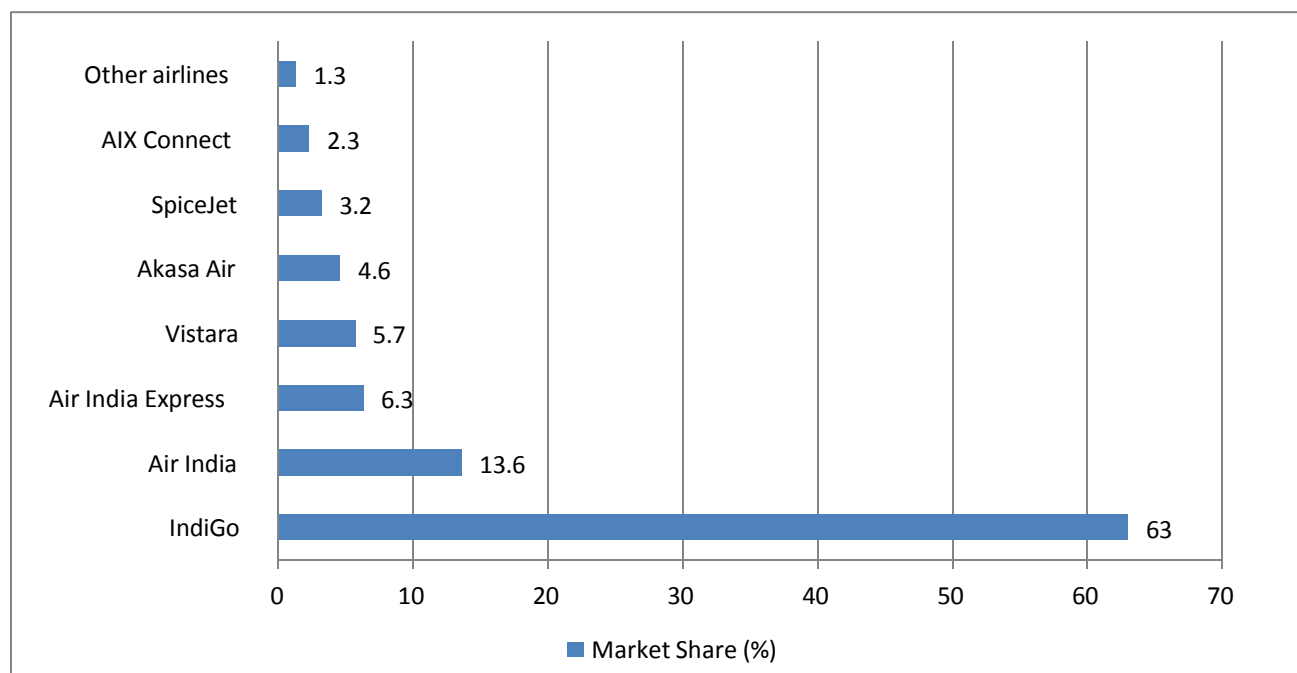
Overall, the domestic segment expanded faster than the international segment over the study period. This pattern coincides with the expansion of domestic routes, rising air-travel demand within India, and improvements in connectivity across large and smaller cities.

Table 7: Domestic Scheduled Airline Passenger Market Shares, FY 2024-25

Airline operators	Market share based on passengers carried (FY 2024-25)	Passengers carried (FY 2024-25) (Million)	Passengers carried (FY 2023-24) (Million)
 IndiGo	63.0%	104.25	94.63
 AIR INDIA	13.6%	22.50	14.98
 AIR INDIA express	6.3%	10.49	13.60
 vistara	5.7%	9.38	14.38
 Akasa Air	4.6%	7.68	6.85
 SpiceJet	3.2%	5.31	7.89
 AiX CONNECT	2.3%	3.76	10.48
 ALLIANCE AIR	0.8%	1.28	1.62
 STAR-air	0.4%	0.68	0.42
 FLY91	0.1%	0.17	0.00
 GO FIRST	0.0%	0.00	8.80
 flybig	0.0%	0.02	1.60
 IndiaOne Air	0.0%	0.03	0.02

Source: DGCA FY 2024-25 Statistics; Competition Commission of India, Case No. 44 of 2025, order.

Figure 7: Domestic Airline passenger market share, FY 2024-25



Source: Directorate General of Civil Aviation (DGCA), Statistics 2024-25.

Figure 7 presents the passenger market share of major Indian domestic scheduled airlines in FY

2024–25, along with their passenger volumes in FY 2023–24 and FY 2024-25.

IndiGo remained the leading airline in the Indian domestic aviation market, accounting for 63.0% of passenger traffic and carrying approximately 104.25 million passengers in FY 2024–25, compared with 94.63 million passengers in FY 2023-24. Air India ranked second with a 13.6% market share, carrying around 22.50 million passengers, showing an increase from 14.98 million passengers in FY 2023–24.

Air India Express recorded a 6.3% market share and carried approximately 10.49 million passengers in FY 2024–25. Vistara accounted for 5.7% of the market, with 9.38 million passengers carried in FY 2024–25, compared with 14.38 million in FY 2023–24. However, Vistara ceased operations as a separate airline following its merger with Air India on 12 November 2024. The FY 2024–25 data source continues to report Vistara separately because the airline operated independently during part of the financial year. Therefore, the reported passenger traffic and market share represent Vistara operations prior to the merger and should not be interpreted as indicating that Vistara remained an independent airline throughout FY 2024–25. Akasa Air, despite being a relatively newer participant in the market, achieved a 4.6% market share and carried 7.68 million passengers, compared with 6.85 million in FY 2023-24. SpiceJet held a 3.2% market share and carried 5.31 million passengers, lower than its FY 2023–24 passenger volume of 7.89 million.

Overall, the data highlight the highly concentrated nature of India's domestic airline market, with IndiGo holding the largest share. The data also show the changing competitive structure, particularly the growing presence of Air India Express and the effect of consolidation during FY 2024-25. The source reports AIX Connect separately for traffic operated before its merger with Air India Express on 1 October 2024. These categories therefore reflect transitional source reporting during the financial year.

OPPORTUNITIES

- **MRO Sector Development:** Rising aircraft numbers and passenger traffic create strong potential for the expansion of Maintenance, Repair and Overhaul (MRO) services in India.
- **Airport Infrastructure Expansion:** Increasing passenger demand creates opportunities for airport modernisation, capacity expansion, and greater private-sector participation through PPP models.
- **Technology Adoption:** Technologies such as satellite-based navigation and digital aviation systems can improve operational efficiency and passenger services.

- **Non-Aviation Revenue:** Expansion of retail, parking, advertising, and other commercial activities can help airports diversify revenue sources and improve financial sustainability.
- **Future Implication:** Realizing these opportunities requires adequate investment, skilled manpower, efficient infrastructure, regulatory support, and improved logistics

CHALLENGES OF INDIAN AVIATION INDUSTRY

- **High Operating Costs and Financial Pressure:** High aviation turbine fuel (ATF) prices and rising operating expenses continue to put pressure on airline profitability. These cost pressures can reduce financial resilience and limit the ability of airlines to expand capacity.
- **Aircraft Supply and Supply-Chain Constraints:** Aircraft delivery delays, shortage of spare parts, and supply-chain disruptions can reduce the effective fleet available for operations. This may constrain capacity expansion despite increasing passenger demand.
- **Skilled Manpower and Regulatory Capacity:** The sector requires adequate numbers of trained pilots, engineers, air-traffic controllers, and other technical personnel. Shortages in skilled manpower and regulatory staffing can increase operational pressure and create challenges for effective safety oversight.
- **Infrastructure, Taxation and Regulatory Bottlenecks:** Rapid growth in passenger traffic creates continuing requirements for airport capacity and supporting infrastructure. High taxation, regulatory requirements, and operational bottlenecks can increase costs and affect efficiency.
- **Market Concentration and Regional Connectivity:** The domestic airline market remains highly concentrated, while connectivity to some Tier-2 and Tier-3 locations remains comparatively limited. This creates a need to balance market competition with wider regional connectivity.
- **Environmental Challenges:** Rising passenger traffic and aircraft movements increase pressure to reduce emissions and improve efficiency.

ENVIRONMENTAL SUSTAINABILITY

Environmental sustainability is no longer a peripheral issue for aviation. Growth in passenger traffic and aircraft movements can increase absolute fuel consumption and carbon emissions even when newer aircraft improve fuel efficiency. The policy response therefore needs to combine airport

energy transition, operational efficiency and lower-carbon fuels rather than rely on a single measure. According to the **Ministry of Civil Aviation (2025)**, as of 31 December 2024, 74 AAI airports were using 100% green/renewable energy. In addition, 63 airports had installed solar-power capacity of 57.4 MW. These measures help reduce pollution and carbon emissions from airport operations. However, aircraft fuel remains the major environmental challenge. Therefore, future policy should encourage cleaner aviation fuels, reliable sustainability standards, increased domestic production of such fuels, proper financing, and transparent measurement of carbon emissions.

DISCUSSION OF FINDINGS

Domestic air travel has grown faster than international air travel over the long term. This is because more people are travelling within the country and airlines have created more domestic routes. Growth is not only happening in the biggest cities; smaller cities and regional airports are also becoming important. Over the decade, RPK generally grew faster than ASK. This means airlines were using their seats more effectively. But in FY 2024–25, ASK grew faster than RPK.

This does not necessarily mean passenger demand was weak. The passenger load factor was still about 86.4%, which is quite high. It mainly means airlines added seats/capacity faster than passenger demand increased. A small number of airlines control most of the domestic passenger market. The leading airline had about 63% market share. The top 4 airlines together had about 88.6% of the market. The Air India group has become larger because different Air India-related brands have been combined.

POLICY IMPLICATIONS

- Regional connectivity policy should become more differentiated. Commercially viable routes can gradually become independent, while socially important but weak routes may need government support.
 - Competition policy should monitor the share of market controlled by major airlines. Also examine barriers to entry, consumer choice and service quality.
 - MRO (Maintenance, Repair and Overhaul) policy should be integrated with industrial and skills policy. FDI needs to be complemented by certification capacity, technical training, component ecosystems and faster customs and logistics processes.
 - Regulatory capacity should grow with the industry. Staffing and technical expertise in DGCA, AAI
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and related bodies need time-bound strengthening so that passenger growth is not accompanied by a widening oversight gap.

LIMITATIONS OF THE STUDY

The study is based on secondary data collected from government and other official sources, and therefore depends on the definitions, revisions and reporting practices of the source agencies. Some data for FY2024-25 are provisional in DGCA/MoCA publications and may be revised later. The domestic airline market-share analysis is based on data for FY 2023–24 and FY 2024–25 from DGCA and CCI sources. Table 5 is different: it reports cumulative airport traffic for April–December 2024 (FY 2024- 25 year-to-date). Because the Air India-Vistara and AIX Connect-Air India Express mergers occurred during FY 2024-25, the source tables retain Vistara and AIX Connect as separate reporting categories for traffic operated before their respective merger dates.

The study does not include primary surveys of passengers, airlines, airport operators or regulators, and it does not attempt to establish a direct cause- and- effect relationship between government policies and growth of airport traffic. Forecasts and policy targets are inherently uncertain and are used only as prospective context, not as achieved outcomes.

CONCLUSION

The analysis demonstrates that the Indian civil aviation industry has undergone substantial structural expansion over the past decade. Domestic passenger traffic increased considerably between FY2014-15 and FY2024-25, supported by rising demand, confirming the growing importance of domestic aviation within India's broader transport and economic system.

However, the findings also reveal important structural challenges. The high concentration of passenger traffic among a small number of airlines, exposure to aviation turbine fuel costs, aircraft supply constraints, infrastructure requirements, and the need for adequate regulatory and technical capabilities may affect the sector's long-term resilience. Therefore, passenger growth alone should not be regarded as sufficient evidence of sustainable aviation development.

The future of Indian aviation will depend on balancing capacity expansion with competition, regional connectivity, operational efficiency, domestic MRO capabilities, skilled manpower, and environmental sustainability. Government initiatives such as UDAN and continued investment in airport infrastructure provide an important foundation for this transition. Overall, India is well positioned to remain one of the world's major aviation markets, but converting rapid expansion into a

resilient and globally competitive aviation ecosystem will require coordinated policy support, industry investment, and evidence-based regulation.

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Appendix A: Data Verification and Reporting-Period Control

Indicator	Reporting Period / Date	Source
Scheduled passenger traffic	FY2014-15 to FY2024-25	DGCA, Handbook of Civil Aviation Statistics 2024-25
Domestic RPK, ASK and PLF	FY2014-15 to FY2024-25	DGCA, Handbook of Civil Aviation Statistics 2024-25
Domestic airline passenger shares	FY2023-24 and FY2024-25	DGCA statistics
Air India group merger dates	1 Oct 2024 and 12 Nov 2024	Air India corporate releases / CCI context
Airport traffic composition (Table 5/Figure 5)	As at 31 Dec. 2024	AAI, Air Traffic Report-Dec.2024
Airport renewable energy	As at 31 Dec 2024	MoCA Annual Report 2024-25