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Executive summary

Expected aviation market ranking by 2024

3rd largest

21.04 million

Air passenger traffic for FY22
(From April 2021 to July 2021)

6.51 million

Air passenger traffic for June 2021

For 2028, forecasted contribution of travel & tourism to GDP

US$ 492.21 billion

Expected expenditure of Indian travellers in 2021

US$ 136 billion

Business and Leisure Travel Spending
(US$ billion)

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2028F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leisure Travel</td>
<td>234.16</td>
<td>432.35</td>
</tr>
<tr>
<td>Business Travel</td>
<td>12.84</td>
<td>24.41</td>
</tr>
</tbody>
</table>

Travel and Tourism Total Contribution to GDP* (US$ billion)

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2028F</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAGR 7.13%</td>
<td>247.30</td>
<td>492.21</td>
</tr>
</tbody>
</table>

Air passenger traffic in India (million)

<table>
<thead>
<tr>
<th></th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
<th>FY22#</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>308.75</td>
<td>344.70</td>
<td>341.05</td>
<td>115.37</td>
<td>21.04</td>
</tr>
</tbody>
</table>

Note: *At real prices, E - Estimated, F - Forecasted, ^As per IATA forecasts, # - Until May 2021
Source: World Travel and Tourism Council, Airport Authority of India
Advantage India
Advantage India

1 Robust demand
► Rising working group and widening middle class demography is expected to boost demand.
► India has envisaged increasing the number of operational airports to 190-200 by FY40.
► Country will become the third-largest aviation market in terms of passengers by 2024^.
► India will need 2,380 new commercial airplanes by 2038.

2 Increasing investments
► Investment to the tune of Rs. 420-450 billion (US$ 5.99-6.41 billion) is expected in India’s airport infrastructure between FY18-23#.
► Growing private sector participation through the Public-Private Partnership (PPP).

3 Policy support
► Foreign investment up to 49% is allowed under automatic route in scheduled air transport service, regional air transport service and domestic scheduled passenger airline.
► Under Union Budget 2021-22, the government lowered the custom duty from 2.5% to 0% on components or parts, including engines, for manufacturing of aircrafts by public sector units of the Ministry of Defence.

4 Opportunities in MRO
► Growth in aviation accentuating demand for MRO facilities.
► Expenditure in MRO accounts for 12-15% of the total revenue; it is the second-highest expense after fuel cost.
► By 2028, the MRO industry is likely to grow over US$ 2.4 billion from US$ 800 million in 2018.

Notes: FDI - Foreign Direct Investment, MRO - Maintenance, Repair and Overhaul; FY - Indian Financial Year (April - March), ^As per IATA forecasts, #As per CRISIL
Source: Ministry of Civil Aviation, MRO India, IATA, Crisil, FICCI, PWC
Market Overview
Evolution of the Indian aviation sector

- India is the 7th largest civil aviation market in the world and is set to become the world’s 3rd* largest by 2024.
- In FY21, airports in India pegged the domestic passenger traffic to be ~105.2 million, a 61.7% YoY decline, and international passenger traffic to be ~10.1 million, an 84.8% YoY decline, over the fiscal year ended March 31, 2020.
- In April 2021, passenger traffic (international and domestic) stood at 16.92 million.
- India plans to open 100 additional airports by 2024.
- In-service fleet size of scheduled Indian operators stood at 643 airplanes as of July 2019. The number of airplanes is expected to grow to 1,100 by 2027.

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduled airlines:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>distance flown (mn km)</td>
<td>199</td>
<td>1,549.7</td>
</tr>
<tr>
<td>Non-scheduled airlines</td>
<td>39</td>
<td>101</td>
</tr>
<tr>
<td>in operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of aircrafts</td>
<td>225</td>
<td>712</td>
</tr>
<tr>
<td>(scheduled Indian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>operators)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cargo handled</td>
<td>703,000</td>
<td>3,328,296</td>
</tr>
<tr>
<td>Number of operational</td>
<td>50</td>
<td>153</td>
</tr>
<tr>
<td>airports</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *As per IATA forecasts, FY - Indian Financial Year (April - March), mn km - Million Kilometers, P - Provisional
Source: Airports Authority of India, Ministry of Statistics and Programme Implementation, Ministry of Civil Aviation, DGCA, News Articles
**Airports and airstrips**

- **Airports Authority of India (AAI)**
  - Established in 1994 under the Airports Authority Act.
  - Responsible for developing, financing, operating and maintaining all Government airports.
  - The Aircraft Act (1934) governs remaining airports.

**Activity in AAI airports - shares (%) - FY21**

- **Aircraft movement**
  - Domestic: 88.7%
  - International: 11.3%
- **Passenger traffic**
  - Domestic: 91.2%
  - International: 8.8%
- **Freight Traffic**
  - Domestic: 61.5%
  - International: 38.5%

**Basic facts**

- Airports Authority of India (AAI) was -
  - Established in 1994 under the Airports Authority Act.
  - Responsible for developing, financing, operating and maintaining all Government airports.
  - The Aircraft Act (1934) governs remaining airports.

**Note:** AAI - Airports Authority of India, JV - Joint Venture, FY - Indian Financial Year (April - March)

**Source:** Airports Authority of India
Key airlines operating in India

<table>
<thead>
<tr>
<th>Airline operators</th>
<th>Market share</th>
<th>Load factor</th>
<th>Passengers ferried (lakh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IndiGo</td>
<td>54.7%</td>
<td>51.2%</td>
<td>17.02</td>
</tr>
<tr>
<td>spiceJet</td>
<td>9.0%</td>
<td>64.0%</td>
<td>2.81</td>
</tr>
<tr>
<td>AIR INDIA</td>
<td>20.3%</td>
<td>39.3%</td>
<td>4.29</td>
</tr>
<tr>
<td>go</td>
<td>8.3%</td>
<td>63.3%</td>
<td>2.58</td>
</tr>
<tr>
<td>AirAsia</td>
<td>3.4%</td>
<td>44.4%</td>
<td>1.07</td>
</tr>
<tr>
<td>vistara</td>
<td>7.2%</td>
<td>40.9%</td>
<td>2.25</td>
</tr>
</tbody>
</table>

Data for June 2021

*Note: Market Share and Passenger Load Data for the month of May 2021*

*Source: Directorate General of Civil Aviation*
Key airports in India

Delhi: Passenger traffic handled
FY16: 48.42 million
FY17: 57.70 million
FY18: 65.69 million
FY19: 69.23 million
FY20: 67.30 million
FY21: 22.5 million
June 2021: 15.06 lakh

Mumbai: Passenger traffic handled
FY16: 41.67 million
FY17: 45.15 million
FY18: 48.50 million
FY19: 48.82 million
FY20: 45.87 million
FY21: 11.0 million
June 2021: 6.94 lakh

Bengaluru: Passenger traffic handled
FY16: 18.97 million
FY17: 22.88 million
FY18: 26.91 million
FY19: 33.31 million
FY20: 32.36 million
FY21: 10.9 million
June 2021: 5.24 lakh

Chennai: Passenger traffic handled
FY16: 12.42 million
FY17: 15.82 million
FY18: 19.89 million
FY19: 16.89 million
FY20: 22.15 million
FY21: 7.72 million
June 2021: 3.35 lakhs

Hyderabad: Passenger traffic handled
FY16: 12.39 million
FY17: 15.10 million
FY18: 18.16 million
FY19: 21.40 million
FY20: 21.65 million
FY21: 8.04 million
June 2021: 4.26 lakh

Kolkata: Passenger traffic handled
FY16: 12.42 million
FY17: 15.82 million
FY18: 19.89 million
FY19: 16.89 million
FY20: 22.15 million
FY21: 7.72 million
June 2021: 3.35 lakhs

Note: FY - Indian Financial Year (April - March)
Source: AAI
Demand and Capacity in India’s civil aviation sector have shown robust growth.

Capacity (Available Seat Kilometer) available in domestic flights increased to 155,033.4 million kms in FY19\(^\text{a}\). Correspondingly, demand (Revenue Passenger Kilometer) for domestic services grew rapidly to 136,631.4 million kms in FY19\(^\text{a}\).

Capacity (Available Seat Kilometer) available in international flights increased to 126,054.2 million kms in FY19\(^\text{a}\). Correspondingly, demand (Revenue Passenger Kilometer) for international services grew rapidly to 111,620.4 million kms in FY19\(^\text{a}\).

Growth in demand has consistently outpaced the growth in supply, resulting in high utilisation (Passenger Load Factor).

According to a research report by Morgan Stanley, the Indian aviation industry is likely to recover to 80% of the pre-COVID levels (as of 2020). Between October 2021 and December 2021, ~92 million domestic passengers are scheduled to fly in FY22.

Notes: *in million kilometre, ^provisional

Source: AAI
Growth in passenger traffic has been strong since the new millennium, especially with rising income and low-cost aviation.

In June 2021, the average daily passenger traffic stood at 7,81,000.

In May 2021, the average daily passenger traffic per flight stood at 72.

India has become the third largest domestic aviation market in the world and is expected to overtake UK to become the third largest air passenger* market by 2024.

By 2036, India is projected to have 480 million flyers, which will be more than that of Japan (just under 225 million) and Germany (just over 200 million) combined.

India is expected to overtake China and the United States as the world's third-largest air passenger market in the next ten years, by 2030, according to the International Air Transport Association (IATA).

In July 2021, domestic aviation passenger traffic increased by 57%, compared with June 2021.

Notes: FY - Indian Financial Year (April - March), *passenger - Domestic + International,
Source: Association of Private Airport Operator, Airports Authority of India
Domestic passenger and international passenger traffic declined at a CAGR of -9.02% and -28.64%, respectively, from FY16 to FY21, owing to COVID-19-related restrictions on flights in FY21.

In FY21, airports in India pegged the domestic passenger traffic to be ~105.2 million, a 61.7% YoY decline, and international passenger traffic to be ~10.1 million, an 84.8% YoY decline, over the fiscal year ended March 31, 2020.

In June 2021, international and domestic passenger traffic stood at 21.04 million and 2.39 million, respectively.

Notes: E- Estimate, YoY - Year on Year, FY - Indian Financial Year (April - March)
Source: Airports Authority of India, Ministry of Civil Aviation
Between FY16 and FY21, freight traffic declined at a CAGR of -1.77% from 2.70 million metric tonnes (MMT) to 2.47 MMT.

Freight traffic on airports in India has the potential to reach 17 MMT by FY40.

Growth in import and export in India will be the key driver for growth in freight traffic as 30% of total trade is undertaken via airways.

In January 2019, the Government of India released the National Air Cargo Policy Outline 2019, which envisaged making Indian air cargo and logistics most efficient, seamless and cost and time effective globally by the end of next decade.

In May 2021, total freight traffic (international and domestic) was 2.3 lakh metric tonnes (MT).

**Notes:** FY - Indian Financial Year (April - March)

**Source:** Airports Authority of India
From FY16 to FY21, domestic freight traffic decreased at a CAGR of -1.9% and international freight traffic declined at a CAGR of -1.7%.

In FY21, domestic freight traffic stood at 0.95 MMT and international freight traffic was 1.52 MMT.

By 2023, total freight traffic is expected to touch 4.1 MT, exhibiting a CAGR of 7.27% between FY16 and FY23. In addition, international freight traffic is expected to grow at a CAGR of 7.13% and domestic freight traffic is expected to grow at a CAGR 7.50% between FY16 and FY23.

In May 2021, domestic freight traffic was 73.95 thousand metric tonnes (MT).

**Notes:**
- FY - Indian Financial Year (April - March)
- Source: Airports Authority of India
Aircraft movement

- Aircraft movement declined at a CAGR of -7.79% from 1.60 million in FY16 to 1.20 million in FY21.
- Aircraft movements reached 74,727 in May 2021.
- From FY16 to FY21, domestic aircraft movement decreased at a CAGR of -6.44% and international aircraft movement declined at a CAGR of -18.52%. India’s domestic and international aircraft movements reached 1,062 thousand and 135 thousand, respectively, in FY21.

Notes: CAGR - Compound Annual Growth Rate FY - Indian Financial Year (April - March)
Source: Association of Private Airport Operators, Airports Authority of India
Key public and private sector players

- Until 2013, AAI was the only major player involved in developing and upgrading airports in India.
- Post liberalisation, private sector participation in the sector has been increasing.
- The Government of India has given ‘in-principle’ approval to 19 airports, out of which, 7 are going to be developed on a PPP basis with an investment of Rs. 27,000 crore (US$ 41.89 billion).

**Notes:**
AAI - Airports Authority of India
Recent Trends and Strategies
Notable trends in the airports sector

1 Greater use of non-scheduled airlines
   • Rising business activity leading to higher demand for non-scheduled airlines.
   • As of January 2021, there were 101 operators (NSOP).

2 Significant recovery in air traffic
   • The Indian aviation sector is on a path to recovery and has exhibited significant rebound to pre-Covid levels in terms of passenger movement and cargo operation.
   • The Ministry of Civil Aviation (MoCA) increased capacity of domestic flights to 65%, from 50%, effective from July 05, 2021.

3 Water aerodromes
   • The government is planning to start 14 more water aerodromes across the country, after the successful launch of seaplane service by Prime Minister, Narendra Modi, between the Statue of Unity near Kevadiya in Gujarat's Narmada district and Sabarmati Riverfront in Ahmedabad in October 2020.
   • In March 2021, the government announced plan to set up two water aerodroamcs in Assam and four water aerodromes in Andaman & Nicobar Islands this year to boost tourism and connectivity.
   • In March 2021, the government submitted a proposal to develop a water aerodrome project at the Ujjani Dam, under the Ministry of Civil Aviation’s UDAN-RCS (regional connectivity scheme).

4 Flying Academies
   • The Ministry of Civil Aviation (MoCA) is hopeful that aspiring commercial pilots will soon be able to get trained in India without having to leave the country.
   • In this regard, the government in July 2021 announced setting up eight new flying academies across the following five airports: Belagavi and Kalaburagi in Karnataka, Jalgaon in Maharashtra, Khajuraho in Madhya Pradesh, and Lilabari in Assam.

5 Expansion into new segments
   • Six international airports completed under PPP. The sector is expected to witness investments worth US$ 25 billion by 2027.
   • Navi Mumbai airport is being developed under PPP by GVK Group subsidiary, Mumbai International Airport (MIAL), and City and Industrial Development Corporation of Maharashtra Ltd (CIDCO), with an investment of US$ 2.22 billion.
   • Zurich Airport International signed the concession agreement for the development of Jewar Airport on the outskirts of Delhi.

Notes: FY - Indian Financial Year (April - March), NSOP - Non Schedule Operators Permit
Source: DGCA, News Article
Expansion

- Indian carriers are expected to double their fleet capacity to around 1,100 aircrafts by 2027.
- The AAI has announced a few developments in Indian Airports—construction of a new airport on a greenfield site in Hollongi (Arunachal Pradesh) by November 2022, new integrated passenger terminal building expansion of Tiruchirappalli & Pune Airport (March 2022), Guwahati International Airport (June 2022), Maharaja Bir Bikram Airport (Early 2021) and major expansion of Surat Airport (December 2021)
- On January 19, 2021, the Airport Authority of India (AAI) signed a concession agreement with Adani Group for three airports—Jaipur, Guwahati and Thiruvananthapuram. The concession period is 50 years from the date of commercial operations.
- On February 25, 2021, the Airports Authority of India (AAI) issued tenders for construction of the first phase of an international airport at Dholera in Gujarat, entailing an investment of Rs. 987 crore (US$ 135.07 million). The new facility is being set up in greenfield city under the Delhi–Mumbai Industrial Corridor (DMIC) project at Dholera.
- In March 2021, the Indira Gandhi International (IGI) Airport in Delhi announced a key expansion project to increase its passenger handling capacity. The expansion project includes a new terminal, advanced facilities, an additional runway and improved capacity to handle more passengers.
- In June 2021, SpiceJet announced its ambitious target to fly 100 million domestic passengers on Sustainable Aviation Fuel (SAF) blend by 2030 under the aegis of World Economic Forum (WEF).
- In July 2021, IndiGo signed an agreement to examine the possibility of using sustainable fuel in its planes.
- In August 2021, Raghu Vamsi announced plans to build a US$ 15 million facility in Hyderabad to meet Boeing's needs.
- SpiceJet to introduce 16 new flights from August 2021.

Source: Central Asia-Pacific Aviation, News Article
Government’s push

- To become a US$ 5 trillion economy, the Government proposed to ramp up infrastructure in seaways, roads, airports and payments infrastructure.

- Under Union Budget 2021-22, the Indian government expanded the scope for ‘Krishi Udaan’ in convergence with Operation Green Scheme, wherein air freight subsidy of 50% for agri-perishables would be provided to North East states and 4 Himalayan states/UTs. The expansion of product-coverage will boost the ‘Krishi Udaan’ scheme and improve air cargo transportation from these states.

- In March 2021, on the launch of the ‘Azadi Ka Amrit Mahotsav (India@75)’ by the Government of India, the Ministry of Civil Aviation (MoCA) has proposed 392 routes under the UDAN 4.1 bidding process.

- In February 2021, the government identified 24 routes in Assam under the first phase of UDAN 4.0.

- In November 2020, the Government of India announced that it is likely to increase the total number of allowed domestic flights to 75% of the pre-COVID-19 levels, as it expects a rise in passenger numbers due to the festive and holiday season.

- In September 2020, the Government of India sanctioned Rs. 108 crore (US $ 14.73 million) for Jagdalpur, Ambikapur and Bilaspur airports in Chhattisgarh under the UDAN scheme for upgrade and development.

- In April 2020, the government introduced the ‘Lifeline Udan’ flights to transport essential medical cargo to remote parts of the country to support India’s war against COVID-19. Under this scheme, about 600 flights flew more than 5 lakh kms and transported about 1,000 tons of essential cargo.

- As of December 31, 2020, ~31 lakh Indians have been repatriated under the Vande Bharat Mission (VBM). The VBM has so far involved 6,373 Air India flights and 474 flights by private Indian carriers. About 1,035,471 Indian nationals have been repatriated by Air India, whereas 74,675 Indian nationals have been brought back by private carriers.

- In August 2021, the government convened three groups to revitalise the aviation industry. This committee will advise the government on how to increase local and international connectivity and address concerns such as aircraft leasing & financing, aircraft & component production and other regulatory requirements.

Source: Ministry of Aviation, DPIIT, News Article
Ancillary services

- Indian low-cost carriers (LCC’s) are looking forward to increase their ancillary services, without tampering their business models. This includes services like lounge access, priority boarding, customer loyalty memberships and customer meals.

- In August 2021, IndiGo joined forces with International Air Transport Association (IATA) to establish a pilot project for IATA Travel Pass, which will allow travelers to generate a ‘digital passport’ to verify their pre-travel tests or vaccination status to meet the government SOPs.

- In April 2021, Boeing, an aircraft manufacturer, announced that it has partnered with the Indian Aviation Academy (IAA) and the University of Southern California (USC) to conduct safety management system training sessions for all stakeholders in the domestic aviation industry.

- In August 2021, the government plans to implement a biometric boarding system using facial technology in six airports, including Bengaluru, Hyderabad and Pune. The project is currently in the testing phase.
GROWTH DRIVERS
Strong demand and policy support driving investments

Growing demand
- Expanding middle income group and working population
- Rising domestic and foreign tourists and travellers
- Strong growth in external trade

Inviting
Policy support
- Greater Government focus on infrastructure
- Increasing liberalisation, Open Sky Policy
- Policy sops, FDI encouragement

Resulting in
Increasing investment
- AAI driving large modernisation, development projects; expansion and upgrading of existing airports; development of low-cost airports
- Increasing private sector participation, increasing greenfield projects
- Strong projected demand making returns attractive
Travel and tourism

- According to WTTC, India ranked 10th among 185 countries in terms of travel & tourism’s total contribution (6.8%) to the GDP in 2019. The contribution was worth Rs. 16,681 billion (US$ 226.37 billion).
- Emergence of business hubs like Mumbai (Finance), Bengaluru (IT), Chennai (IT), and Delhi (Manufacturing, IT) is likely to boost business travel as well.
- Leisure travel spending reached US$ 234.16 billion in 2019 and is expected to reach US$ 432.3 billion by 2028F, whereas business travel revenue was US$ 12.84 billion in 2019 and is projected to increase to US$ 24.4 billion by 2028F.
- India plans to open 100 airports by 2024.
- Rare Enterprises, in partnership with former CEOs of IndiGo and Jet Airways, plans to start an ultra-low-cost airline to capitalise on the domestic air travel demand in 2021.
- With a market size of US$ 16 billion in July 2021, the country is the 10th largest civilian aviation market.

Notes: IT - Information Technology
Source: World Travel and Tourism Council, Make in India, Global Business Travel Association
Export and import

- Between FY16 and FY21,
  - India’s exports increased at a CAGR of 2.09% to US$ 290.6 billion in FY21.
  - Imports posted a CAGR of 0.45% to reach US$ 389.18 billion in FY21.
- In FY21, India’s merchandise exports and imports stood at US$ 314.31 billion and US$ 467.19 billion, respectively.
- In FY22*, exports and imports stood at US$ 62.89 billion and US$ 84.27 billion, respectively.

*FDI in aviation and liberalised aviation policy
Increasing airline operators
Higher aircraft movement
Growth in passenger traffic
Rise in freight traffic

**Notes:** CAGR - Compound Annual Growth Rate, FY - Indian Financial Year (April - March) * - Until May 2021
Source: Ministry of Commerce and Industry
**Northeast India**

- Over 30 airport development projects are under progress across various regions in Northeast India.
- AAI plans to develop over 20 airports in Tier-II and Tier-III cities in the next 5 years.
- AAI plans to develop Guwahati as an inter-regional hub and Agartala, Imphal and Dibrugarh as intra-regional hubs.
- On May 08, 2021, AAI commenced commercial operations at Rupsi airport—Northeast India’s 15th airport and Assam’s 7th airport.

**Greater focus on infrastructure**

- AAI plans to invest Rs. 25,000 crore (US$ 3.58 billion) in the next five years to augment facilities and infrastructure at airports. The Indian Government is planning to invest US$ 1.83 billion for development of airport infrastructure along with aviation navigation services by 2026.
- In 2019, 85 AAI airports were declared as Single-Use Plastic Free Airport Terminals.

**Liberalisation, open sky policy**

- With the opening of the airport sector to private participation, six airports across major cities are being developed under PPP.
- Currently, 60% of airport traffic is handled under PPP, while the remaining 40% is managed by AAI.
- Increased traffic rights under bilateral agreements with foreign countries.
- India signed its 1st open skies agreement with Greece.

*Source: News Article*
Policy support…(2/3)

National Civil Aviation Policy, 2016
- The policy covers 22 areas of the civil aviation sector.
- Regional Connectivity Scheme (RCS) has been launched under the policy.
- Airlines can commence international operations and will have to deploy 20 aircrafts or 20% of their total capacity (whichever is higher) for domestic operations.

Taxes and duties
- 100% tax exemption for airport projects for a period of 10 years.
- Indian aircraft Manufacture, Repair and Overhaul (MRO) service providers are exempted completely from customs and countervailing duties.
- The Airport Authority of India plans to abolish royalty and offer steep discounts in lease rent to encourage MRO units to set up facilities at its airports.

Union Budget 2021-22
- The government allocated Rs. 3,224.67 crore (US$ 440.36 million) for the Ministry of Civil Aviation.
- It will provide tax holiday for capital gains incomes of aircraft leasing and financing companies. Also, it will enable tax exemptions for aircraft lease rentals or royalty paid to foreign lessor under International Financial Services Centre (IFSC) in GIFT (Gujarat International Finance Tec-City) City.
- Under PM Atma Nirbhar Swasth Bharat Yojana, the government proposed development of health systems capacities, which will include aviation entry points. Under this programme, public health units will be strengthened at 32 airports. This programme will facilitate smooth movement of pharmaceuticals through air across India and worldwide.
- Through this budget, the government has reiterated its commitment of disinvestment of Air India and PawanHans in 2021-22.

Source: News Article
**Encouragement to FDI**

- The Government has allowed 100% FDI under automatic route for greenfield projects, whereas 74% FDI is allowed under automatic route for brownfield projects.
- 100% FDI is allowed under automatic route in scheduled air transport service, regional air transport service and domestic scheduled passenger airline. FDI over 49% would require Government approval.
- Approval of 49% FDI in aviation for foreign carriers.
- FDI inflow in India’s air transport sector (including air freight) reached US$ 2.95 billion between April 2000 and March 2021.

**Metro airports**

- India has envisaged increasing the number of operational airports to 190-200 by FY40.
- AAI has developed and upgraded over 23 metro airports in the last 5 years.

**Non-metro airports**

- AAI plans to spend US$ 3 billion on non-metro projects over the 5 years (2016-20), mainly focusing on modernisation and upgradation of airports. New airports at Itanagar, Kohima and Gangtok are also planned.
- The Government of Andhra Pradesh is to develop greenfield airports in six cities-Nizamabad, Nellore, Kurnool, Ramagundam, Tadepalligudem and Kothagudem under PPP.
- Upfront subsidy has been proposed through which non-metro airports would be funded by imposing 2% levy on both domestic and international airfares.
- About 22 airports to get connected under regional connectivity scheme of AAI.

*Source: News Article*
Private sector investment in airports rising

- Recourse to the PPP model has boosted private sector investments in airports.
- PPP route for five international airports (Delhi, Mumbai, Cochin, Hyderabad, Bengaluru) most noteworthy.
- Increasing share of private sector in equity component of major airports -
  - 74% private share holding in IGI Airport (Delhi) — owned majorly by GMR (54%), Fraport AG (10%), and Eraman Malaysia (10%); rest of the shares owned by AAI.
  - 74% private shareholding in CSI Airport (Mumbai) — wholly owned by Adani Group; the remaining shares were owned by the AAI.
  - 74% private shareholding in RGI Airport (Hyderabad) — owned majorly by GMR (63%) and Malaysia Airports Holdings Berhad (11%); rest of the shares owned by Government of India (13%) and Government of Andhra Pradesh (13%).
  - 74% shareholding in Kempagowda International Airport (Bengaluru) — owned majorly by Siemens Project Ventures, Germany (40%), Unique (Flughafen Zurich AG) Zurich Airport, Switzerland (17%), and L&T, India (17%); rest of the shares owned by AAI (13%) and KSIIDC, which is an agency owned by the state of Karnataka, India (13%).
  - Akasa, an ultra-low-cost carrier (ULCC), will launch in April 2022 with an initial investment of US$ 35 million.
  - In Hyderabad, Tata Advanced Systems Ltd. (TASL) will produce Boeing 737 fan cowls. From FY25 onwards, TASL will supply 50% of the monthly 737 fan cowl requirements.

Notes: KSIIDC - Karnataka State Industrial and Infrastructure Development Corporation Ltd.
Source: News Article
Successful PPP airports in India

- Presently, India has 5 PPP airports, one each at Mumbai, Delhi, Cochin, Hyderabad and Bengaluru, which together handle over 55% of the country’s air traffic.

- The Delhi airport accounts for 46% and the Mumbai airport accounts for 39% of the gross revenue with the government. The two airports generated Rs. 29,000 crore (US$ 3.94 billion) until December 2020.

- Government of India has approved 15 greenfield PPP projects which are expected to increase the air traffic in India. These projects would be setup in Goa, Navi Mumbai, Maharashtra, Bijapur, Gulbarga, Karnataka, Kerala, West Bengal, Madhya Pradesh, Sikkim, Puducherry and Uttar Pradesh.

- Government of Maharashtra approved development of Nagpur airport on PPP basis and allocated Rs. 100 crore (US$ 15.45 million) for it in the State Budget 2018-19. The airport will be upgraded on a DBFOT basis with a private player operating it for 60 years.

<table>
<thead>
<tr>
<th>Name of the airport</th>
<th>Operator</th>
<th>Type of project/ PPP structure</th>
<th>Revenue sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chhatrapati Shivaji International Airport</td>
<td>Mumbai International Airport Ltd (MIAL)</td>
<td>Brownfield/BOOT</td>
<td>38.7% of gross revenue to be shared with AAI</td>
</tr>
<tr>
<td>Indira Gandhi International Airport</td>
<td>Delhi International Airport Ltd (DIAL)</td>
<td>Brownfield/BOOT</td>
<td>45.9% of gross revenue to be shared with AAI</td>
</tr>
<tr>
<td>Rajiv Gandhi International Airport</td>
<td>GMR Hyderabad International Airport Ltd (GHIAL)</td>
<td>Greenfield/BOOT</td>
<td>Concession fees - 4% of gross revenue to be shared with AAI</td>
</tr>
<tr>
<td>Bengaluru International Airport</td>
<td>Bengaluru International Airport Ltd (BIAL)</td>
<td>Greenfield/BOOT</td>
<td>Concession fees - 4% of gross revenue to be shared with AAI</td>
</tr>
<tr>
<td>Cochin International Airport</td>
<td>Cochin International Airport Ltd (CIAL)</td>
<td>Greenfield/BOO</td>
<td>Payment of dividend to the Government towards their 26% equity capital</td>
</tr>
</tbody>
</table>

Notes: BOOT - Build Own Operate Transfer; BOO - Build Own Operate, DBFTO - Design Build Finance Operate Transfer
Source: Association of Private Airport Operators
**Key projects offered in airports under national infrastructure pipeline - FY 2019-25**

<table>
<thead>
<tr>
<th>Name of the airport</th>
<th>Current Status</th>
<th>Project Cost (US$ million)</th>
<th>Mode of Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pune Airport Development</td>
<td>Development</td>
<td>2,695.42</td>
<td>PPP</td>
</tr>
<tr>
<td>Navi Mumbai Airport Pre-Development</td>
<td>Development</td>
<td>2,312.38</td>
<td>PPP</td>
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<tr>
<td>Bangalore Airport Expansion</td>
<td>Development</td>
<td>2,298.20</td>
<td>PPP</td>
</tr>
<tr>
<td>Sriperumbudur Airport Development</td>
<td>Conceptualization</td>
<td>2,127.96</td>
<td>EPC</td>
</tr>
<tr>
<td>Bhiwadi International Airport Development</td>
<td>Conceptualization</td>
<td>1,517.95</td>
<td>EPC</td>
</tr>
<tr>
<td>Delhi Airport Expansion</td>
<td>Implementation</td>
<td>1,390.27</td>
<td>EPC</td>
</tr>
<tr>
<td>Jewar Airport Development</td>
<td>Development</td>
<td>1,220.03</td>
<td>PPP</td>
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<tr>
<td>Hyderabad Airport Expansion</td>
<td>Implementation</td>
<td>837.00</td>
<td>PPP</td>
</tr>
<tr>
<td>Vellore Aerospace Park Development</td>
<td>Conceptualization</td>
<td>425.59</td>
<td>EPC</td>
</tr>
<tr>
<td>Coimbatore Airport Expansion</td>
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<td>425.59</td>
<td>EPC</td>
</tr>
<tr>
<td>Madurai Airport Expansion</td>
<td>Conceptualization</td>
<td>425.59</td>
<td>EPC</td>
</tr>
<tr>
<td>Mopa Airport Development</td>
<td>Development</td>
<td>425.59</td>
<td>PPP</td>
</tr>
<tr>
<td>Bhogapuram Airport Development</td>
<td>Development</td>
<td>425.59</td>
<td>PPP</td>
</tr>
<tr>
<td>Campbell Bay Airport Development</td>
<td>Conceptualization</td>
<td>354.66</td>
<td>EPC</td>
</tr>
<tr>
<td>Port Blair Airport Development</td>
<td>Conceptualization</td>
<td>354.66</td>
<td>EPC</td>
</tr>
<tr>
<td>Chennai Airport Upgradation</td>
<td>Implementation</td>
<td>354.66</td>
<td>EPC</td>
</tr>
<tr>
<td>Nagpur Airport Upgradation</td>
<td>Development</td>
<td>241.17</td>
<td>PPP</td>
</tr>
<tr>
<td>Dholera International Airport Development</td>
<td>Conceptualization</td>
<td>241.17</td>
<td>EPC</td>
</tr>
</tbody>
</table>
Opportunities

Huge potential to develop India as an MRO hub

• India’s MRO industry is expected to grow from US$ 800 million in 2018 to more than US$ 2.4 billion by 2028.
• Indian airline companies will spend over 12-15% of their revenues on maintenance, which is the second-highest cost component after fuel.
• The Government has envisaged making India a global MRO hub, handling nearly 90% of the MRO needs of Indian operators and obtaining around 20% of the MRO revenue from foreign-registered aircraft.
• To achieve this, the Government has proposed various key steps including setting up of a high-power task force for promotion of MRO, declaration of MRO and component warehouses as free trade zones with 0% GST, import restrictions.

Policy support and demand growth unlocking large investment potential

• Success of PPP will raise investment in existing and greenfield airports.
• Private sector participation in six existing airports operated by AAI is likely to increase investment opportunities for airport sector.
• Government of India has launched NABH-Nirman Scheme, which is aimed at increasing India’s airports’ capacity. According to various estimates, India will require investments worth Rs. 3 - 4 lakh crore (US - 62.06 million) to achieve a capacity for having a billion trips per year.

Leverage on non-aeronautical revenues, improved technology

• Airport developers can now draw on wider revenue opportunities such as retail, advertising and vehicle parking.
• Future operators will benefit from greater operational efficiency due to satellite-based navigation systems like ‘Project Gagan’ which is in development phase.

Notes: PPP - Public Private Partnership, NABH - NextGen Airports for Bharat, MRO - Maintenance, Repair and Overhaul, GST - Goods and Services Tax
Source: FICCI Vision 2040 for the Civil Aviation Industry in India
Key Industry Contacts
<table>
<thead>
<tr>
<th>Agency</th>
<th>Contact Information</th>
</tr>
</thead>
</table>
| Airports Authority of India (AAI)           | Address: Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi -110 003  
                                                  Phone: 91 11 24632950  
                                                  Website: [https://www.aai.aero/en](https://www.aai.aero/en) |
| Directorate General of Civil Aviation (DGCA) | Address: Aurbindo Marg, Opp. Safdarjung Airport, New Delhi -110 003  
                                                  Phone: 91 11 24622495  
                                                  Fax: 91 11 24629221  
                                                  E-mail: dri@dgca.nic.in, dfa@dgca.nic.in  
                                                  Website: [https://dgca.gov.in/digigov-portal/](https://dgca.gov.in/digigov-portal/) |
Glossary

- AAI: Airports Authority of India
- ACI: Airport Council International
- CAGR: Compound Annual Growth Rate
- FDI: Foreign Direct Investment
- FY: Indian Financial Year (April to March); So, FY20 implies April 2019 to March 2020
- GOI: Government of India
- Rs: Indian Rupee
- MRO: Maintenance, Repair and Overhaul
- PPP: It could denote two things (mentioned in the presentation accordingly) -
  - Purchasing Power Parity (used in calculating per-capita GDP - slide 12, GROWTH DRIVERS)
  - Public Private Partnership (a type of joint venture between the public and private sectors)
### Exchange Rates (Fiscal Year)

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<thead>
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<th>Year</th>
<th>Rs. Equivalent of one US$</th>
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<td>2019-20</td>
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<td>2020-21</td>
<td>73.20</td>
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### Exchange Rates (Calendar Year)

<table>
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<tbody>
<tr>
<td>2005</td>
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<td>69.89</td>
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<td>2020</td>
<td>74.18</td>
</tr>
<tr>
<td>2021*</td>
<td>74.28</td>
</tr>
</tbody>
</table>

*Note: As of August 2021
Source: Reserve Bank of India, Average for the year
India Brand Equity Foundation (IBEF) engaged Sutherland Global Services Private Limited to prepare/update this presentation.

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