

## India's Aviation Revolution

**Mains Syllabus : GS III - Infrastructure: Energy, Ports, Roads, Airports, Railways etc.**

### Why in the News?

Recently, Parliament passed the Protection of Interest in Aircraft Objects Bill, 2025, aligning India's aviation leasing laws with global standards to reduce leasing costs.

### What are the legislative reforms driving systemic transformation of India's aviation sector?

- **Protection of Interest in Aircraft Objects Bill, 2025** - It aligns India's aircraft leasing and financing framework with international standards set by the Cape Town Convention, 2001.

#### Features and Impacts of the act

- **Reducing leasing cost** - By addressing gaps in legal enforcement, the Bill is strategically designed to reduce aircraft leasing costs for Indian carriers, which were previously 8-10% higher than in other nations.
- **Boosting investment** - This is expected to boost investor confidence in India's burgeoning aviation market significantly.
- **Intended impacts of the Bill** - Reduced risk premiums, lower interest rates, and lease costs for passengers and shippers.
- **Other benefits** - It also aims for better contract enforceability and repossession certainty, fostering the growth of domestic leasing hubs.

[To know more about the act, Click here.](#)

- **Bharatiya Vayuyan Adhiniyam 2024** - It replaced the colonial-era Aircraft Act of 1934 to modernize India's aviation sector and came into force on 1st January 2025.

#### Features and Impacts of the act

- **Aim** - To regulate activities related to aircrafts including manufacturing, possession, use, and trade.
- To foster indigenous manufacturing under the 'Make in India' and 'Atmanirbhar Bharat' initiatives.
- To align regulations with international conventions such as the Chicago Convention and the International Civil Aviation Organization (ICAO).
- To streamline regulatory processes by simplifying license issuance.
- **1935 act sets up**
  - Directorate General of Civil Aviation (DGCA) for overseeing safety and performing regulatory functions.
  - Bureau of Civil Aviation Security (BCAS) for overseeing security
  - Aircraft Accidents Investigation Bureau (AAIB) for investigating accidents
- The central government will exercise superintendence over these bodies and may review or modify their orders.
- The act retains these provisions.
- The new act removes redundancies and introduces provisions for appeals.
- The new act introduces a provision for a second appeal against decisions related to the imposition of penalties for violating Rules under it.

## What are the recent expansions in India's aviation infrastructure?

- **New terminal capacity** - Significant infrastructure development is underway, including the laying of foundations for new terminals at key locations such as Varanasi, Agra, Darbhanga, and Bagdogra.
- **Operationalisation of greenfield airports** - Since 2014, 12 Greenfield Airports have been operationalised out of 21 'in-principle' approved airports.
- These include Durgapur, Shirdi, Kannur, Pakyong, Kalaburagi, Orvakal (Kurnool), Sindhudurg, Kushinagar, Itanagar (Hollongi), Mopa, Shivamogga, and Rajkot (Hirasar).

## Doubling of India's Airport Network (2014 vs 2024)

**Objective:** To showcase the significant growth in India's airport infrastructure over a decade, highlighting the increase from 74 airports in 2014 to 159 in 2024.



- **Development of international airports** - Furthermore, development at Noida (Jewar) and Navi Mumbai International Airports is progressing rapidly, with operationalisation targeted for the first quarter of FY 2025-26.
- **Target for further expansion** - The government has set an ambitious target of developing 50 more airports in the next 5 years and connecting 120 new destinations in the next 10 years.
- **Significant capital expenditure in airport infrastructure** - A substantial CAPEX of over Rs. 91,000 crore is planned for airport infrastructure development under the National Infrastructure Pipeline (NIP) during FY 2019-20 to FY 2024-25.

### How RCS-UDAN democratised air travel and boosted regional growth?

- **RCS-UDAN connecting India** - The Regional Connectivity Scheme (RCS) - Ude Desh Ka Aam Nagrik (UDAN), launched in 2016, has operationalised 619 routes and connected 88 airports across the country.
- This scheme embodies the government's commitment to affordable air travel and promoting balanced regional development.
- **Expansion of Regional Connectivity** - In 2024 alone, 102 new RCS routes were launched, including 20 in the North Eastern States.
- The scheme has facilitated affordable air travel for 1.5 crore passengers.
- It further aims to extend this to 4 crore more in the next decade through a revamped UDAN initiative to add 120 new destinations.
- **Connecting remote regions** - The scheme also prioritises connecting remote, hilly,

and aspirational districts, including the North Eastern region, through support for helipads and smaller airports.

- **Affordable food at airports** - The UDAN Yatri Café initiative, aligned with the Hon'ble Prime Minister's vision of democratising air travel, was launched to provide affordable and quality airport food options.

### **What is the recent momentum in air passenger traffic?**

- **Exponential growth in domestic passengers** - In 2024, domestic air passenger traffic more than doubled to 22 crore comparing 2014.
- India's domestic air passenger traffic reached a historic milestone, surpassing 5 lakh passengers in a single day in 2024.
- **Strong growth in international traffic** - International routes also experienced substantial 11% growth between January and November 2024.
- **India emerges as a top global aviation market** - The total number of air passengers annually has exceeded 350 million, firmly establishing India as the third-largest aviation market globally.
- Over the past decade, domestic air passenger traffic has grown 10-12% annually.

### **What are the developments in safety and technology for seamless travel?**

- **State-of-the-Art DFDR & CVR laboratory** - Digital Flight Data Recorder and Cockpit Voice Recorder (DFDR & CVR) Laboratory was inaugurated at the Aircraft Accident Investigation Bureau (AAIB) in New Delhi.
- It will significantly improve the effectiveness of identifying the root causes of incidents and ensuring accountability, thereby contributing to a safer aviation ecosystem.
- **Expansion of Digi Yatra** - Digi Yatra services to 24 airports have significantly enhanced passenger convenience and security.
- This initiative provides a seamless, contactless travel experience for passengers.
- **Guidelines for seaplane operations** - These Guidelines were launched in 2024 to enhance regional connectivity further.
- These guidelines prioritise safety and security and aim to facilitate the commencement of seaplane operations across the country.

### **What are the Sustainability and Capacity Building initiatives?**

- **Green energy adoption** - To promote sustainable aviation, 100% green energy is adopted in around 80 airports and further aimed at 100 airports.

*Bengaluru Airport has achieved the highest Carbon Accreditation Level 5 by Airports Council International (ACI), while Delhi, Mumbai, and Hyderabad airports have achieved Level 4+ accreditation, becoming carbon neutral.*

*Chennai Airport also operates entirely on green energy and houses a 1.5 MW solar power plant.*

- **Addressing the growing demand for pilots** - Recognizing the increasing need for trained pilots, the number of Flight Training Organizations (FTOs) and the annual issuance of commercial pilot licenses are being increased.
- **Aviation career guidance for students** - To nurture future talent, a 'Career Guidance Programme in Aviation' for school students has been launched at the Indian Aviation Academy.
- The programme aims to inspire and educate students about diverse career opportunities within the sector.

#### Additional Milestones in Aviation Growth

- **Maintenance, Repair & Overhaul (MRO)** - A uniform 5% Integrated Goods and Services Tax (IGST) rate has been introduced for aircraft parts to promote India as a competitive global MRO hub.
- **Gender inclusion** - India boasts 13-18% of women pilots, which ranks among the highest globally.
- The Directorate General of Civil Aviation (DGCA) targets 25% representation of women in all aviation roles by 2025.
- **International recognition** - The 2nd Asia-Pacific Ministerial Conference on Civil Aviation was successfully hosted in New Delhi, culminating in the Delhi Declaration.
- **Air cargo infrastructure** - Cargo handling capacity reached 8 million MT in FY24, growing at 10 %+ annually with a new focus on warehousing for perishables and streamlined customs protocols.

## What lies ahead?

- The Ministry of Civil Aviation remains resolutely committed to positioning India as a global aviation leader, driving transformative change through visionary policies, world-class infrastructure, and inclusive, sustainable growth.
- As India continues to break records in passenger traffic, expand regional connectivity, and modernise aviation frameworks, the nation is firmly set on an upward trajectory toward becoming a vibrant global aviation hub.
- These concerted efforts enhance travel experiences for millions and bolster economic prosperity, strengthen national integration, and empower India to confidently soar towards its vision of becoming a developed nation—Viksit Bharat @2047.

### Reference

[PIB | India's Aviation Revolution](#)