

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](#)