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Time: 45 Min

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Table of Content

India and France upgrade ties to Special Global Strategic Partnership
AI and Future of Employability
Strengthening Public Health Through Tobacco Tax Reforms
A Separate Classification for Denotified Tribes

NEWS IN SHORT

Revisiting Net Neutrality in the 5G Era
India-Ireland Digital Partnership
Launch of SAHI and BODH Initiatives
AI-Preneurs of India
Bee Corridor
Gas Turbine Engine
India AI Summit: Army's Indigenous AI Suite
Black Box
Malabar Pied Hornbill
Architects of Artificial Intelligence

INDIA AND FRANCE UPGRADE TIES TO SPECIAL GLOBAL STRATEGIC PARTNERSHIP

Context

- The French President arrived on a **three-day official visit to India to participate in the AI Impact Summit**.

Major Outcomes

- PM Modi announced the establishment of a **'Special Global Strategic Partnership' with France**.
- India and France renewed their **defence cooperation agreement** for another **10 years** at the **sixth India-France Annual Defence Dialogue**.
- **Establishment of annual Foreign Ministers Dialogue** for regularly reviewing implementation of the elevated partnership and Horizon 2047 Roadmap.
- Launch of the **India-France Year of Innovation & India-France Innovation Network**.
- **Inauguration of H125 Helicopter Final Assembly Line** at Vemagal, Karnataka.
- Joint Venture between BEL and Safran to produce **HAMMER missiles** in India.
- India has asked France to increase **"indigenous content"** in the Rafale by up to **50%**, and also expand the Rafale's maintenance, repair and overhaul facility in India.
- **Reciprocal deployment of officers** at Indian Army and French Land Forces establishments.

Major Highlights of the India-France Relations

- **India-France Strategic Partnership:** It was launched on 26 January 1998 and is India's first-ever Strategic Partnership.
 - ♦ **Core vision:** Enhance strategic autonomy and deepen bilateral cooperation.
 - ♦ **Key Strategic Pillars:** Defence and security, Civil nuclear cooperation and Space collaboration.
 - ♦ **Expanding areas:** Indo-Pacific cooperation, maritime security, digitalisation, cyber security, climate change, sustainable development, advanced technologies, and, counter-terrorism.
- **Defence Cooperation:** It is reviewed via the Annual Defence Dialogue (Minister-level) and High Committee on Defence Cooperation (HCDC) (Secretary-level).
 - ♦ **Rafale Fighter Jets:** India procured 36 Rafales from Dassault Aviation.

- ♦ **Scorpene Submarines (Project P-75):** Collaboration with France's Naval Group, 6 submarines built in India; latest is INS Vaghsheer.
- ♦ **Combat Aircraft Engine Development:** HAL and France's Safran Helicopter Engines signed an agreement under the IMRH programme to co-develop engines.
- ♦ Recently both nations formally concluded an **Inter-Governmental Agreement (IGA) to procure 26 Rafale-M fighter jets for the Indian Navy**.
- ♦ **Future plans:** Co-development of next-gen fighter jet engines.
- ♦ **Joint Exercises:** Shakti, Varuna, FRINJEX-23.
- **Economic Cooperation:** Within the European Union, **France remains India's fifth-largest trading partner**, following the Netherlands, Belgium, Italy, and Germany.
 - ♦ The bilateral trade between India and France has **more than doubled** in the last decade to **USD 15.11 Billion** in 2023-24.
 - ♦ Both countries are also moving to **jointly develop technologies and integrate existing technologies**.
 - ♦ The process of **enabling Unified Payment Interface (UPI) has been successful in France**.
 - ♦ **French technologies** especially in renewables, sustainable manufacturing and urban infrastructure development are being integrated in India.
- **Space Cooperation:** There is a over 60 years of collaboration between ISRO and CNES (French space agency)
 - ♦ France is a key supplier of components, launch services (Arianespace).
 - ♦ **Joint missions:** TRISHNA (satellite mission), MDA systems, ground station support.
- **Energy Cooperation:**
 - ♦ **International Solar Alliance (ISA):** Co-founded by India and France in 2015 to promote solar energy worldwide.
 - ♦ **Nuclear Energy Cooperation:** The first meeting of the special task force on nuclear energy in the framework of the Indo-French Strategic Dialogue, was convened in 2025.
 - Both sides have agreed to work on establishing a partnership on low and medium power modular reactors or Small Modular Reactors (SMR) and Advanced Modular Reactors (AMR).
- **Community:** There are an estimated 1,19,000 Indian communities in France, largely originating from erstwhile French colonies.

Areas of Concern

- **Trade Imbalance:** Bilateral trade remains below potential, especially compared to India's trade with other EU nations.
- **Technology Transfer & Defence Restrictions:** While France has supported India's defence goals, there are concerns over the depth of technology transfer in big items.
- **Nuclear Liability Concerns:** Despite a civil nuclear agreement in 2008 and plans for reactors at Jaitapur, progress has been slow.
 - ♦ The Civil Liability for Nuclear Damage Act (2010) poses hurdles for French firms as it imposes liability on suppliers in the event of a nuclear accident.
- **Geopolitical Differences:** France's strong economic ties with China sometimes dilute full alignment with India on Indo-Pacific issues.
 - ♦ Differences in approach to Middle East geopolitics occasionally diverge.

Future Outlook

- **Horizon 2047 Roadmap envisions:** To mark the **25th anniversary** of the Indo-French partnership, both countries agreed to adopt a roadmap to set the course for the bilateral relationship up to 2047.
 - ♦ Joint development and production of advanced defence technologies.
 - ♦ Export of jointly developed products to third countries for global good.
 - ♦ Deeper maritime and space security cooperation.
 - ♦ Growing convergence in the Indo-Pacific through strategic dialogue and joint military presence.

Conclusion

- India–France defence cooperation is a cornerstone of their wider Strategic Partnership.
- With shared interests in sovereignty, multilateralism, and regional stability, both countries are set to elevate ties further under the Horizon 2047 vision — making defence ties more collaborative, innovative, and export-oriented.

Source: TH

AI AND FUTURE OF EMPLOYABILITY

Context

- At the India AI Impact Summit 2026, a high-level discussion on **“The Future of Employability in the Age of AI”** brought together policymakers, industry leaders, educators and innovators.

About

- The discussion examined which **skills, roles, and mindsets will remain relevant** as automation accelerates and what individuals must do to stay employable.
- **Speakers emphasised** the growing importance of **creativity, systems thinking, adaptability, and lifelong learning** over narrow task-based expertise.
- **The Chief Economic Advisor** underlined that **aligning technological adoption with mass employability** must be a clear national commitment.
 - ♦ This effort **must extend beyond government** to become a Team India initiative involving policymakers, industry, educators, and society at large.
- The deliberations underscored that while AI presents significant disruption, it also offers India an opportunity to build an inclusive, innovation-driven and responsible AI ecosystem aligned with national priorities and citizen welfare.

India–AI Impact Summit 2026

- **Hosted by: Ministry of Electronics and Information Technology (MeitY).**
- The India–AI Impact Summit 2026, was **announced by the PM at the France AI Action Summit** and it will be the first-ever global AI summit **hosted in the Global South.**
- It will strengthen **existing multilateral initiatives** while advancing new priorities, deliverables, and cooperative frameworks.
- **The Three Sutras:** Three foundational pillars, known as ‘Sutras’ i.e. **People, Planet and Progress**, define how AI can be harnessed through multilateral cooperation for collective benefit.



Impact of AI on Jobs in India

- **Routine, repetitive tasks are most vulnerable:** Roles in sectors like BPO/ customer service, basic clerical work, assembly-line tasks, and routine logistics can be significantly reduced as AI-driven automation takes over these functions.
- **Traditional mid-skill jobs,** which have historically provided stable employment, are being squeezed as automation substitutes many of those functions.
- **IT and outsourcing:** AI tools are increasingly handling tasks such as coding, testing, and support work contributing to workforce restructuring in major IT firms and outsourcing companies.

Emerging Opportunities

- **Emerging technologies are creating new job categories** that didn't exist before such as: AI/ML engineers, Data scientists and analysts, Cloud architects, Cybersecurity specialists, AI product managers and prompt engineers.
 - ♦ These roles often command higher salaries and are rapidly growing in demand.
 - ♦ Forecasts suggest millions of new tech jobs could be added over the next few years, with estimates of ~4.7 million AI/tech roles emerging in India by 2027.
- **Shift in Skill demands:** About 38% of the Indian workforce could experience shifts in skill needs due to AI by 2030 the highest among BRICS countries.
 - ♦ Traditional academic credentials are becoming less predictive of employability; recruiters are prioritizing technology skills, analytical abilities, and adaptive learning.

Way Ahead

- **Upskilling & Reskilling Imperatives:** India needs large-scale reskilling to adapt to new job requirements, estimates suggest over 16 million workers will need reskilling in AI and automation technologies by 2027.
- **Government & Industry Initiatives:** National strategies and partnerships are focusing on equipping students and workers with AI and tech competencies.
 - ♦ Large-scale corporate skill-building initiatives are underway to boost workforce readiness.

Conclusion

- While certain traditional roles will decline or transform, a dynamic landscape of new opportunities is opening up that rewards advanced technical capabilities, continuous learning, and adaptability.

- The transition will require **coordinated efforts from government, industry, and educational systems** to ensure India's workforce is ready for the future of work.

Government Initiatives

- **FutureSkills PRIME (National Reskilling & Upskilling Platform):** A flagship national programme by the Ministry of Electronics and Information Technology (MeitY) in partnership with NASSCOM to upskill/reskill IT professionals and youth in 10 new and emerging technologies including AI.
- **Skill India Mission:** India's broader Skill India Mission now includes several AI/tech components.
 - ♦ It encourages early exposure to AI skills and ties vocational pathways with employability in future tech roles.
- **National Council for Vocational Education & Training (NCVET)** has developed the **National Programme on Artificial Intelligence (NPAI) Skilling Framework**, which outlines the national roadmap, structure and guidelines for skilling in AI, data science and emerging technologies.
- **MSDE** launched a national-level initiative, SOAR (Skilling for AI Readiness) aimed at embedding AI awareness and foundational skills among school students (Classes 6–12) and building AI literacy among educators.
- **Directorate General of Training (DGT)** has collaborated with entities including IBM India, Microsoft, Cisco, Adobe India, Amazon Web Services (AWS), etc, for skilling initiatives under Corporate Social Responsibility (CSR).
- **Sector Skill Councils (SSCs)**, constituted with active industry and global domain participation, co-develop curriculum and conduct Training of Trainers.
 - ♦ Leading industry partners offer curriculum support and provide apprenticeship/ internship support in AI, robotics and climate tech.

Source: PIB

STRENGTHENING PUBLIC HEALTH THROUGH TOBACCO TAX REFORMS

Context

- India, the world's **second-largest tobacco producer and consumer**, continues to face a

severe public health burden as cigarette taxes make up only about 53% of the retail price, well below WHO benchmark.

About Tobacco

- Tobacco is a commercial crop obtained mainly from the plant **Nicotiana tabacum**, whose leaves **contain nicotine**, a highly addictive alkaloid that stimulates the central nervous system.
- It is used in **smoking forms** (cigarettes, cigars, beedis) and **smokeless forms** (gutka, khaini, chewing tobacco).

Health Burden of Tobacco in India

- Tobacco use causes approximately **1.35 million** deaths annually in India due to **cancer, cardiovascular diseases, lung disorders, and stroke**.
- **Nicotine is highly addictive** and activates the brain's dopaminergic reward system, making cessation difficult.
 - ♦ Additives such as **menthol increase nicotine retention** and enhance addiction potential.
- Cigarette butts containing **plastic filters** contribute significantly to environmental pollution, further affecting public health.
- A study of WHO finds that **India loses 1% of its GDP** to diseases and early deaths from tobacco use.

Taxation as a Public Health Tool

- **WHO Benchmark:** The WHO recommends that taxes should constitute at least **75%** of the retail price to effectively reduce tobacco consumption.
 - ♦ Higher taxation reduces affordability, particularly among youth and low-income users, who are more price-sensitive.
- **Indian Scenario:** Cigarette taxes currently account for only **53%** of retail price.
 - ♦ GST on cigarettes and smokeless tobacco stands at **40%**, along with **additional cess**.
 - ♦ However, GST on **beedis has been reduced to 18%**, despite their high prevalence among lower-income populations.

Other measures taken by government

- **Framework Convention on Tobacco Control (FCTC):** India is a signatory of the FCTC, launched by WHO in **2005**.
 - ♦ It aims to reduce tobacco usage worldwide by helping countries develop demand and supply reduction strategies.
 - ♦ **Under Article 5.3**, the Convention requires parties to protect public health policies from the industry's commercial interests.

- **The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply, and Distribution) Act (COTPA) 2003** has 33 sections governing the production, advertisement, distribution, and consumption of tobacco.
- **The National Tobacco Control Program (NTCP):** India launched NTCP in 2007. It is designed to improve the implementation of COTPA and FCTC, improve awareness about the harms of tobacco use, and help people quit it.
- **Prohibition of Electronic Cigarettes Bill, 2019:** It prohibits production, manufacture, import, export, transport, sale, distribution, storage and advertisement of e-cigarettes.

What are the Governance Challenges?

- **Industry Interference:** The **WHO Framework Convention on Tobacco Control (WHO FCTC)** has repeatedly flagged tobacco industry interference in policy-making.
- **Policy Inconsistencies:** Differential GST rates (40% on cigarettes vs 18% on beedis) create distortions and undermine equity goals. Beedis, largely consumed by lower income populations, remain relatively affordable.
 - ♦ Inadequate inflation adjustment reduces the real impact of tax hikes.
- **Non-compliance with Packaging Guidelines:** Smokeless tobacco products frequently violate COTPA (Cigarettes and Other Tobacco Products Act) packaging guidelines, with studies showing up to **92.8%** of packages missing mandatory pictorial health warnings.

Way Ahead

- The measures should be taken to align tobacco taxation with the WHO's 75% benchmark to reduce affordability. Also rationalise GST by increasing taxes on beedis and smokeless tobacco to address health inequities.
- Ensure **strict implementation of FCTC Article 5.3** to shield policy-making from industry interference.
- **Integrate environmental accountability** for tobacco waste under extended producer responsibility frameworks.

Source: TH

A SEPARATE CLASSIFICATION FOR DENOTIFIED TRIBES

In News

- The Union government assured leaders of Denotified, Nomadic, and Semi-Nomadic Tribes (DNTs) that they will be enumerated in the second phase of the 2027 Census, but details of the process remain unclear.

Denotified, Nomadic, and Semi-Nomadic Tribes (DNTs)

- Denotified, nomadic, and semi-nomadic tribes were once labeled “criminal” by colonial authorities under the **Criminal Tribes Act (CTA) of 1871**, which described certain communities as inherently predisposed to crime due to caste-based heredity.
 - ♦ This act allowed for registration, surveillance, and control of these so-called criminal tribes.
- The **CTA was repealed in 1952**, officially denotifying these communities and creating the category of denotified, nomadic, and semi-nomadic tribes (DNTs).
- However, the same year, states enacted habitual offender laws, which, while removing hereditary criminality, continued to target these communities as “habitual offenders,” perpetuating discrimination in a new form.

Enumeration

- These tribes were enumerated in **1911–1931 Censuses**. After the CTA repeal, denotified communities were largely included in SC, ST, or OBC lists. National Commissions later emphasized the need for a dedicated Census to properly classify DNTs.
- The **Renke Commission (2008)** was the first national body to list DNT communities, followed by the **Idate Commission (2014–2017)**, which identified about 1,200 communities absorbed into SC/ST/OBC categories and 268 unclassified ones.
- The **Anthropological Survey of India (AnSI)** studied these 268 groups, recommending their inclusion in existing scheduled lists, but implementation lags.

Issues and Concerns

- **Social stigma:** Denotified Tribes (DNTs) in India, though included in SC, ST, and OBC lists in many states, continue to face social, economic, and political marginalization, partly due to lingering stigma and laws like the Habitual Offenders Act.
- **Lack of documentation:** Many remain outside caste-based reservations due to unclear classification.
- **Economic vulnerability:** Traditional livelihoods (performing arts, pastoralism, itinerant trades) have declined, leaving them impoverished.
- **Education gap:** High illiteracy and low access to formal schooling.
- **Political invisibility:** Absence of reliable census data and weak representation in policymaking.

Government Steps

- **National Commission for DNTs (2014)** Identified communities and recommended welfare measures.
- **Development and Welfare Board for DNTs (2019)** was established to oversee schemes and welfare programs.
- The Department of Social Justice has formulated a Scheme namely, **Scheme for Economic Empowerment of DNTs (SEED)** for the Development and Welfare of DNT/NT/SNT.
 - ♦ It supports DNT communities through education (coaching), health (Ayushman Cards), livelihoods (SHGs), and housing (PMAY and other schemes).
- Other programs are Dr. Ambedkar Pre/Post-Matric Scholarships for DNTs (since 2014-15) and the Nanaji Deshmukh Hostel Scheme for DNT students.

Source :TH

NEWS IN SHORT

REVISITING NET NEUTRALITY IN THE 5G ERA

Context

- Telecom operators such as Reliance Jio and Bharti Airtel have urged the government to revisit India’s 2016 net neutrality framework to explicitly permit “network slicing” under 5G networks.

What is Net Neutrality?

- Net neutrality is the principle that **all internet traffic should be treated equally**, without discrimination based on content, platform, application, or user.
- **It prohibits:**
 - ♦ **Blocking** of lawful content.
 - ♦ **Throttling** (intentional slowing down of specific services).
 - ♦ **Paid prioritisation** of certain apps or websites.
- India adopted **one of the world’s strongest net neutrality frameworks** in 2016–2018 following public debates on discriminatory pricing practices.

What is Network Slicing?

- Network slicing is a 5G feature that enables the creation of **multiple virtual networks** on a single physical infrastructure.

- Each “slice” can be optimised for specific needs:
 - ♦ Ultra-low latency (autonomous vehicles, telemedicine).
 - ♦ High reliability (industrial automation).
 - ♦ High bandwidth (gaming, HD streaming).
- Telecom operators argue that this is a **technological capability** intrinsic to 5G, **not content-based discrimination**. Operators want to:
 - ♦ Offer differentiated quality of service (QoS).
 - ♦ Charge premium prices for guaranteed speeds or low latency.

Source: ET

INDIA–IRELAND DIGITAL PARTNERSHIP

Context

- India and Ireland held a high-level bilateral meeting in New Delhi to strengthen cooperation in telecommunications, digital infrastructure, and emerging technologies.

Key Highlights

- **India’s Digital Transformation:** India presented its achievements in ICT and digital governance. It represents;
 - ♦ One of the world’s largest digital ecosystems, with over **1.23 billion** telecom subscribers and nearly **a billion internet users**.
 - ♦ 5G coverage extends to approximately **99.9%** of the districts, supported by data tariffs averaging around **USD 0.10 per GB**, making connectivity affordable.
- **Digital Public Infrastructure (DPI):** India highlighted globally recognized platforms such as **Unified Payments Interface (UPI)**, **Direct Benefit Transfer (DBT)**, **DigiLocker**, **Digi Yatra** and **Sanchar Saathi**.

About Ireland

- Ireland is an island nation in **Northwestern Europe**, separated from **Great Britain** by the **Irish Sea**.
- **Topography:** A central lowland limestone plain surrounded by coastal mountains.
 - ♦ **Eg:** MacGillycuddy’s Reeks in the southwest.
- **The River Shannon** is the longest river. The significant lakes include **Lough Neagh** and **Lough Corrib**.
- **Capital:** Dublin.



Source: PIB

LAUNCH OF SAHI AND BODH INITIATIVES

Context

- The Union Health and Family Welfare Minister launched **two digital health initiatives**—SAHI (Secure AI for Health Initiative) and BODH (Benchmarking Open Data Platform for Health AI)—during the India AI Impact Summit 2026.

About

- **SAHI** is a **governance framework**, policy compass, and national roadmap for the responsible use of AI in healthcare, for leveraging AI in an ethical, transparent, accountable, and people-centric manner.
 - ♦ The platform will also serve as a **knowledge-sharing and governance hub**, promoting best practices in health AI development and implementation.
- BODH, developed by the IIT Kanpur in collaboration with the National Health Authority, will enable systematic evaluation of AI models using diverse, anonymized real-world health datasets.
 - ♦ It provides a **structured mechanism to test and validate AI solutions** before large-scale deployment.
- Together, **SAHI and BODH represent India’s commitment to building a trustworthy, inclusive, and globally competitive health AI ecosystem** grounded in innovation, responsibility, and public trust.

Source: TH

AI-PRENEURS OF INDIA

In News

- Atal Innovation Mission launches 'AI-Preneurs of India' at India AI Impact Summit 2026, showcasing India's purpose driven AI Ecosystem.

About AI-Preneurs of India

- It is a flagship coffee table book chronicling the journeys of 45 pioneering AI startups shaping solutions for real-world challenges.
- AI-Preneurs of India features startups working across 30+ sector domains, including healthcare, education, sustainability, mobility, sports analytics, deep tech, and social impact.
- The book reflects the geographic and thematic diversity of India's AI innovation landscape, extending far beyond traditional technology hubs.

Objectives

- The book showcases how public innovation infrastructure, sustained incubation support, and mission-led governance are enabling Indian startups to deliver scalable impact with global relevance.
- AI-Preneurs of India positions India not merely as a consumer of frontier technologies, but as a global contributor shaping responsible AI pathways.
- Reinforces AI vision for inclusive growth and ethical deployment.

Source: PIB

BEE CORRIDOR

In News

- In a first-of-its-kind initiative, the National Highways Authority of India (NHAI) has unveiled an ambitious plan to create dedicated "bee corridors" along India's national highways.

About

- The initiative aims to establish continuous linear stretches of bee-friendly vegetation featuring carefully selected flowering trees and plants.
- Unlike traditional decorative plantings, the new corridors will be designed to provide year-round nectar and pollen, ensuring sustained food sources for pollinators.
- The NHAI plans to plant around 40 lakh trees along NHs during the year 2026–27, around 60 per cent of which will be planted under the 'bee corridor' initiative.

Significance

- The initiative will help reduce the increasing ecological stress faced by honeybees and other pollinators, which is adversely impacting pollination services, agricultural and horticultural productivity, and overall ecological balance.

Source: IE

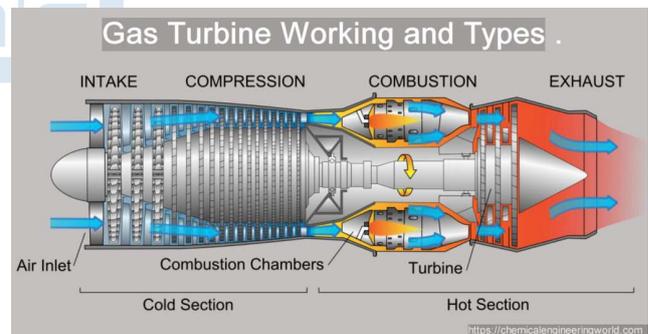
GAS TURBINE ENGINE

In News

- The Minister for Defence visited **DRDO's Gas Turbine Research Establishment (GTRE)** in Bengaluru to review **ongoing indigenous military gas turbine projects**, including the Kaveri engine afterburner test.

Gas Turbine Engine

- A gas-turbine engine is an **internal combustion engine** that uses air and fuel to generate power by turning a turbine.
- It consists of a compressor, combustion chamber, and turbine, where air is compressed, fuel is burned at constant pressure, and extra air cools the gases before reaching the turbine.
- Gas turbines are used in aviation (jet propulsion), electric power generation, and driving compressors for pipelines.
- The first successful gas turbine was built in 1903 in Paris.



Source :PIB

INDIA AI SUMMIT: ARMY'S INDIGENOUS AI SUITE

Context

- At the India AI Summit, the Indian Army showcased a range of indigenous AI-based solutions with significant dual-use potential across defence and civilian sectors.

Key Highlights Include:

- AI Examiner:** An automated assessment and feedback system for education and training platforms.

- **SAM-UN:** A geospatial and AI-enabled situational awareness platform for mission planning, disaster response and smart command centres.
- **EKAM (AI-as-a-Service):** A secure, air-gapped indigenous AI cloud platform ensuring data sovereignty.
- **PRAKSHEPAN:** An AI-driven climatology and disaster prediction system providing advance alerts for landslides, floods and avalanches.
- **XFace:** An AI facial recognition system for security and identity verification.
- **Nabh Drishti:** A mobile telemetry-based real-time reporting and visualisation platform.
- **Driver Fatigue Detection:** An AI device for real-time drowsiness alerts.
- **AI-in-a-Box:** A portable edge AI platform for secure deployment in remote or disconnected environments.
- **Vehicle Tracking System:** An AI-enabled fleet monitoring and logistics optimisation.
- **Deepfake Detection & AI Cyber Security Systems** - A tool to counter synthetic media, malware, cyber threats and protect critical digital infrastructure.



Significance

- These initiatives reflect a decisive shift towards a secure, networked and AI-empowered ecosystem, strengthening defence preparedness while enhancing disaster resilience, cybersecurity and national development.

Source: TH

BLACK BOX

Context

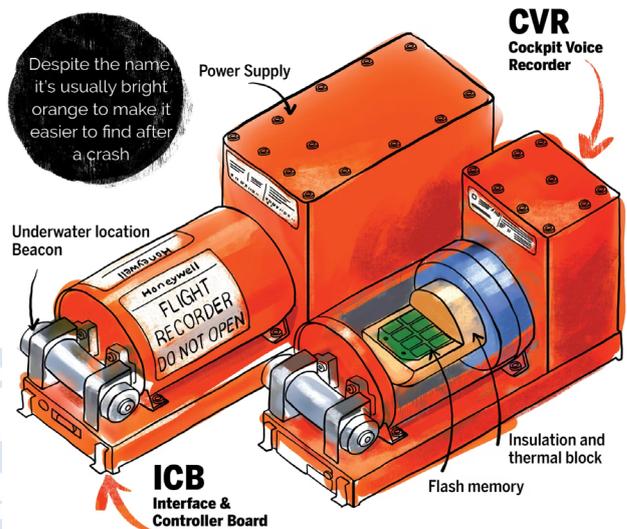
- The Aircraft Accident Investigation Bureau recovered the black boxes from the Learjet 45 aircraft that crashed in Baramati, killing five people on board.

What is a Black Box?

- A black box is a small **machine that records information** about an aircraft during its flight.
- It is a **bright orange or yellow rectangular box** crafted to withstand explosions, fire, water pressure, and high-speed crashes.
- **Discovered by Australian scientist David Warren**, it is used to discover the cause of a plane crash.

Black Box

A black box in aviation refers to a pair of flight recorders that capture key flight information. They are critical for investigations following an aircraft crash



Built to survive extreme conditions, black boxes can endure forces up to **3,400 Gs**, temperatures reaching **1,100°C**, and transmit signals every second from depths of up to **19,000 feet** for as long as **30 days**

What Does A Black Box Do?

- **The black box comprises two components:**
 - ♦ **Cockpit Voice Recorder (CVR):** Captures cockpit audio, including pilot conversations, alarms, and engine sounds.
 - ♦ **Flight Data Recorder (FDR):** Logs key flight parameters such as, Altitude, Airspeed, Flight heading, Vertical acceleration, Pitch and roll angles etc.
- **Location:** Both recorders are usually placed in the tail section of the aircraft—an area statistically least impacted in crashes.
- **Crash Survival Capabilities:**
 - ♦ **Materials:** Titanium or stainless steel casing
 - ♦ **Impact Resistance:** Can survive 3,400 g of force
 - ♦ **Fire Resistance:** Endures 1,100°C for at least 60 minutes
 - ♦ **Pressure Resistance:** Tolerates deep-sea pressure up to 6,000 meters.

Aircraft Accident Investigation Bureau (AAIB)

- **Established:** In 2012 under the Ministry of Civil Aviation.
- **Mandate:** Investigates civil aircraft accidents and serious incidents to determine causes and recommend safety measures (as per Annex 13 of ICAO).
- **Legal Backing:** Aircraft (Investigation of Accidents and Incidents) Rules, 2017.

Source: IE

MALABAR PIED HORNBILL**In News**

- The Chhattisgarh Forest Department is setting up **six “hornbill restaurants”** in the **Udanti Sitanadi Tiger Reserve** to provide a permanent habitat for the rare **Malabar Pied Hornbill** and promote forest regeneration.

Malabar Pied Hornbill (Anthracoceros coronatus)

- It stands 2 to 2.5 feet tall, has a large beak and vibrant plumage.
- It inhabits moist evergreen and tall deciduous forests, plantations, and low-altitude riparian areas
- It feeds mainly on figs and makes seasonal movements following fruiting events, sometimes visiting isolated trees in cultivated areas.
- Occurs in the western Ghats, and in eastern/central India from south-west West Bengal and

Bihar, to Andhra Pradesh, India, as well as Sri Lanka

- They are recognised as keystone seed dispersers in tropical forests.
- The hornbill's natural predators include leopards, snakes, and the Indian Shaheen Falcon, which has recently seen an increase in population at the Udanti Sitanadi Tiger Reserve.
- In the most recent assessment by the International Union for Conservation of Nature (IUCN), the Malabar Pied Hornbill was listed in the 'Red List of Threatened Species' in 2024, under the 'Near Threatened' criteria.

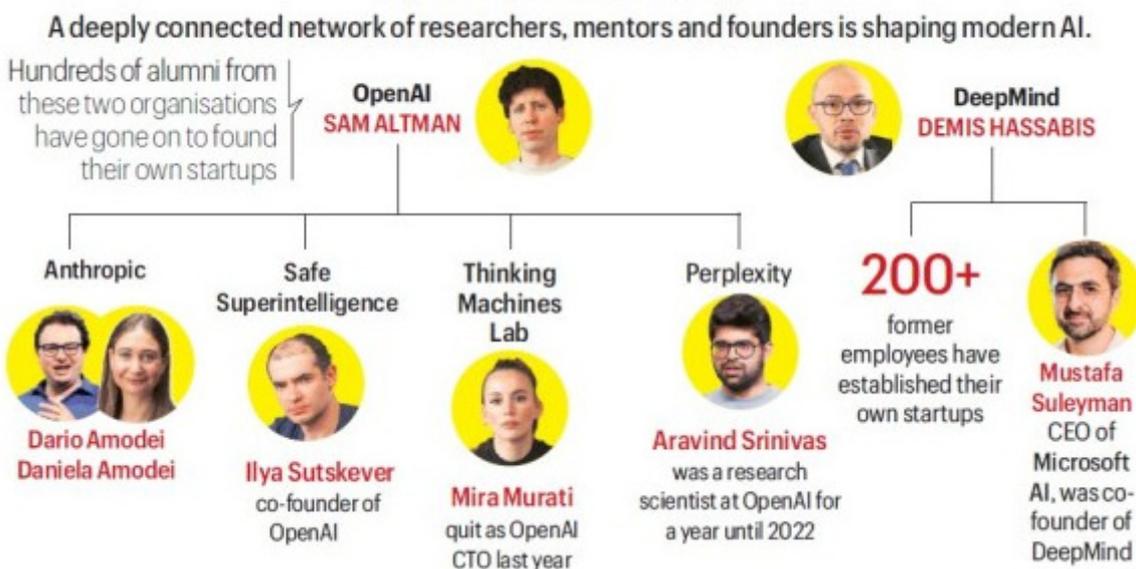
Source :IE

ARCHITECTS OF ARTIFICIAL INTELLIGENCE**Context**

- Time magazine named the “Architects of AI” as its 2025 Person of the Year, highlighting key tech leaders like Sam Altman, Elon Musk, Demis Hassabis etc.

What is an AI Architect?

- An AI Architect is a senior **technology professional** who designs, plans, and oversees the development and deployment of Artificial Intelligence (AI) systems within an organisation.
- The role combines **technical expertise, system design capability, and strategic vision.**

THE WEB OF A.I. LEADERS

Source: IE