

## DAILY CURRENT AFFAIRS (DCA)

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## INTERNATIONALISATION OF HIGHER EDUCATION IN INDIA: NITI AAYOG

### Context

- NITI Aayog released a policy report laying out a **long-term roadmap to internationalise India's higher education system**, with the stated goal of turning the country into a global hub for **education and research by 2047**.

### About

- Internationalisation refers to the systematic integration of **global and intercultural dimensions** into higher education through:
  - ♦ Cross-border student and faculty mobility
  - ♦ International collaborations in teaching and research
  - ♦ Establishment of foreign university campuses
  - ♦ Global recognition of degrees, credits, and qualifications
- **For Example:** IIT Madras is in Zanzibar, IIT Delhi in Abu Dhabi, IIM Ahmedabad in Dubai — and even the University of Southampton in Gurugram.
- NEP 2020 emphasises not only cross-border movement but also improving **quality for the 97% of Indian students** who study within India, ensuring they receive globally relevant education.

### Why India Needs Internationalisation of Higher Education?

- **Imbalance in Student Mobility:** Over 13 lakh Indian students studied abroad in 2024, mainly in Canada, USA, UK, and Australia.
  - ♦ In contrast, India hosted only ~50,000 foreign students (2021–22), nearly 30% from Nepal.
- **Talent Retention and Workforce Quality:** While 3% of Indian students go abroad, 97% study in Indian HEIs and will form India's future workforce.
  - ♦ Internationalisation improves the quality of teaching, curriculum, and exposure for this large domestic base.
- **Global Competitiveness in Research:** International collaborations enhance research impact, citations, and innovation.
  - ♦ India's ambition to become a knowledge economy requires deeper global research partnerships, joint PhDs, and shared labs.
- **Economic and Soft Power Gains:** Education is a major export sector for countries like the US, UK, and Australia.

- ♦ Becoming an education hub enhances India's soft power, cultural influence, and diplomatic engagement, especially with the Global South.

- **Demographic Advantage:** India's young population can meet global skill shortages in areas like AI, climate science, healthcare, and frontier technologies if trained to global standards.

### Challenges of Internationalization of Higher Education

- **Imbalance in Student Mobility:** For every **one international student** coming to India, **28 Indian students** go abroad for higher education.
  - ♦ As of **2022**, India hosted **47,000 international students**, whereas projections suggest that with strategic reforms, the number could reach **7.89 lakh to 11 lakh by 2047**.
- **High Education Expenses: Indian students' overseas education expenses** are projected to hit **₹6.2 lakh crore by 2025**, roughly **2% of India's GDP**.
  - ♦ These outward remittances have increased by **2,000%** over the past decade, representing a massive capital and talent outflow.
- **Risk of Inequality:** Excessive focus on foreign collaborations may widen inequalities between elite and rural universities, diverting resources from local institutions.
- **Brain Drain:** It can lead to skilled graduates emigrating permanently, a challenge highlighted by **NITI Aayog** policy briefs.
  - ♦ The current **1:28 inbound-to-outbound ratio** reflects a severe **brain drain**.
- **Cultural Homogenization:** Adoption of Western models can erode India's educational identity and indigenous knowledge systems.
  - ♦ The **NEP 2020** urges institutions to **'Indianize' curricula** even while internationalizing.
- **Regulatory Complexities:** Multiple agencies like UGC, AICTE, and NAAC complicate international tie-ups due to overlapping jurisdiction and compliance burdens.

### NITI Aayog's Key Policy Recommendations

- **National Strategy for Internationalisation:** Create an inter-ministerial task force led by the Ministry of Education.
  - ♦ Develop dashboards to track mobility, collaborations, and global engagement.

- **Global Higher Education Hubs:** Develop regional education and research hubs (similar to GIFT City model).
  - ♦ Align hubs with national missions like Digital India, Startup India, Make in India.
- **Ease of Regulation and Mobility:** Simplify visa, FRRO, and documentation processes.
  - ♦ Create a National Foreign Degree Equivalence Portal.
- **Foreign University Campuses in India:** Allow onshore campuses with single-window clearances.
  - ♦ Introduce “Campus within a Campus” model with a 10-year sunset clause.
- **Financing and Research Push: Establish Bharat Vidya Kosh,** a USD 10 billion research impact fund, co-funded by diaspora and government.
  - ♦ Promote joint research chairs, fellowships, and visiting professorships.
- **Scholarships and Talent Attraction:** Introduce Vishwa Bandhu Fellowship to attract world-class faculty and researchers.
- **Branding and Outreach:** Revamp Study in India as a one-stop global platform.
  - ♦ Create Alumni Ambassador Network (Bharat ki AAN) to leverage Indian diaspora.
- **Curriculum and Cultural Integration:** Promote interdisciplinary, globally benchmarked curricula.
  - ♦ Integrate Indian Knowledge Systems (IKS) with global teaching and research practices.
- **Infrastructure Gaps:** Many Indian institutions lack the facilities, faculty-student ratios, and support systems needed to host international students effectively.

## INDIA – NEW ZEALAND FREE TRADE AGREEMENT

### Context

- **India and New Zealand** have concluded a **comprehensive Free Trade Agreement (FTA)**.

### About

- India has signed **six Free Trade Agreements** in the **last five years**, the latest being with **Oman**.
  - ♦ India-Oman Comprehensive Economic Partnership Agreement (CEPA), 2025.

- ♦ India -UK Comprehensive Economic and Trade Agreement (CETA), 2025.
- ♦ India-EFTA Trade & Economic Partnership Agreement (TEPA) with Switzerland, Norway, Iceland, and Liechtenstein, 2024.
- ♦ India- United Arab Emirates Comprehensive Economic Partnership Agreement (CEPA), 2022.
- ♦ India- Australia Economic Cooperation and Trade Agreement (ECTA), 2022.
- ♦ India – Mauritius Comprehensive Economic Cooperation and Partnership (CECPA), 2021.

### What is a Free Trade Agreement (FTA)?

- A Free Trade Agreement (FTA) is a pact between two or more countries where they agree to:
  - ♦ Reduce or eliminate customs duties on goods
  - ♦ Liberalise trade in services
  - ♦ Provide investment protection
  - ♦ Ensure safeguards for intellectual property rights (IPR).

### Major Highlights of the FTA

- **Zero-Duty Market Access:** India-New Zealand FTA **eliminates duty on 100% of Indian Exports**.
  - ♦ India has offered market **access in 70.03%** of the **tariff lines while keeping 29.97 % tariff lines in exclusion**.
- **FDI Commitment:** New Zealand will invest **USD 20 billion** in India over 15 years, strengthening long-term economic ties.
- **Organic Primary Products:** Mutual recognition of organic certification to be agreed between the two sides.
- **MSME Cooperation:** Institutional linkages to help small businesses access trade-related information and global markets.
- **Technical Assistance:** Cooperation has been agreed in AYUSH, audio visual industries, tourism, sports and traditional knowledge systems.
  - ♦ The FTA promotes India's AYUSH systems internationally, encourages medical value travel, and positions India as a global wellness hub.
- **Best-Ever Offer by New Zealand:** Commitment across 118 services sectors, with Most-Favoured Nation (MFN) treatment in 139 sectors.
- **Student Mobility:** New Zealand signed Annex on Student Mobility and Post Study Work Visa for the first time with any country.

- ♦ Indian students can work up to 20 hours per week while studying, even if there are policy changes in future, with extended post-study work visas (STEM Bachelor: 3 yrs; Master's: up to 3 yrs; Doctorate: up to 4 yrs).
- **Professional Pathways:** A quota of 5,000 visas for skilled Indians for stay upto 3 years in the sectors of interest to India.
- **Working Holiday Visa:** 1,000 young Indians annually can avail multiple entry in New Zealand for a period of 12 months.
- **Certain products are kept in exclusion** from the dairy and agriculture sector of India, which is a huge win for labour intensive sectors.
  - ♦ Dairy, animal products, vegetable products, sugar, artificial honey, Animal, vegetable or microbial fats and oils, Arms and Ammunition, Gems and Jewellery, Copper and Articles, Aluminium and articles.

#### Significance to India from FTA

- The India–New Zealand FTA secures **duty free or preferential access across a wide range of sectors.**
  - ♦ These gains are expected to boost India's exports, create jobs, and strengthen the competitiveness of Indian industries in the Oceania region.
- **Dedicated cooperation in Ayush and Indian traditional knowledge** has been agreed.
- Engagement with **New Zealand's indigenous Maori communities** to promote cultural exchange and mutual respect. This strengthens India's **soft power and global recognition of its heritage.**
- **Gains in Horticulture Sector:** New Zealand has agreed on **focused Action Plans for kiwifruit, apples, and honey** to improve productivity, quality, and sectoral capabilities of these **fruits growers in India.**
  - ♦ Projects for premium apple cultivators and sustainable beekeeping practices will enhance production and quality standards.
  - ♦ This access will be managed through a **Tariff Rate Quota (TRQ) system** with Minimum Import Price and seasonal imports, ensuring consumer choice while protecting domestic farmers.

## ELECTORAL TRUSTS

### Context

- With the scrapping of the **electoral bonds scheme**, companies have again turned to

**electoral trusts** as a preferred source of political donations for companies in 2024-25.

### Electoral Trust Scheme

- The electoral trust scheme was introduced by the **government in 2013.**
- Electoral trusts are one of the **funding channels for political parties.**
  - ♦ They became a **preferred source of political donation** for companies in **2024-25 after the SC scrapped the electoral bonds** scheme in 2024.
  - ♦ **Both schemes** are meant to facilitate donations to political parties by corporations and individuals.
- It is regulated by the **Central Board of Direct Taxes (CBDT)** under the **Electoral Trust Scheme, 2013.**
- **Eligibility for Electoral Trust and Donations:** Any company registered under the Companies Act can form an electoral trust.
  - ♦ Any citizen of India, a company registered in India, or a firm or Hindu Undivided Family or association of persons living in India, can donate to an electoral trust.

### How many electoral trusts does India have?

- While just five trusts reported contributions in 2023-24, the number increased to nine in 2024-25.
- Of these nine, three trusts — **Prudent Electoral Trust, Progressive Electoral Trust and New Democratic Electoral Trust** — accounted for 98 per cent of all contributions in 2024-25.

### How do These Trusts Function?

- **Renewal Requirement:** Electoral trusts must apply for renewal every three financial years to continue operating.
- **Eligible Beneficiaries:** Donations can be made only to political parties registered under Section 29A of the Representation of the People Act, 1951.
- **Mandatory Disbursement Rule:** At least 95% of total contributions received in a financial year must be donated to eligible political parties.
  - ♦ The remaining 5% may be used only for administrative expenses.
- **Disclosure of Donor Identity:** PAN is mandatory for resident Indian contributors.
  - ♦ Passport number is required for NRIs at the time of contribution.

- **Mode of Contribution:** Trusts receive voluntary contributions from Indian citizens, domestic companies, firms, or Hindu Undivided Families (HUFs) via cheques, bank drafts, or electronic transfers.
- **Transparency:** The electoral trust route is fully transparent, with disclosure of both contributors and beneficiaries, unlike electoral bonds.
- **Use of Funds:** Trusts cannot use donations for the benefit of their members or any purpose other than permitted administrative expenses and political contributions.
- **Accounting & Oversight:** Trusts must maintain audited accounts, disclosing donors, recipients, and disbursements to the CBDT and the Election Commission of India (ECI).

#### Electoral Bonds

- Government of India notified the **Electoral Bond scheme in 2018**.
- An electoral bond is like a **promissory note** that can be bought by **any Indian citizen or company incorporated in India** from select branches of State Bank of India.
  - ♦ The citizen or corporate **can then donate** the same to any **eligible political party of his/her choice**.
- **Anonymous Donation:** The electoral bonds will not bear the name of the donor. Thus, the political party might not be aware of the donor's identity.
- **Tax exemption:** A donor will get a deduction and the recipient, or the political party, will get tax exemption, provided returns are filed by the political party.
- **The Supreme Court has struck down the Electoral Bonds Scheme**, the Scheme is violative of the Right to Information under Article 19(1)(a).
  - ♦ They also infringe on the principle of free and fair elections as stipulated in the constitution.
  - ♦ While the **electoral bonds scheme** sought to ensure donor anonymity, **electoral trusts are required to report to the Election Commission contributions** from individuals and companies, and their donations to parties every year.

Source: IE

## PROTECTING ASTRONAUTS FROM DEADLY SPACE DEBRIS

### Context

- The rapid expansion of satellite launches and commercial space activity has intensified the threat posed by Micrometeoroids and Orbital Debris (MMOD), raising serious concerns for astronaut safety and long-term sustainability of Earth's orbits.

### What is Micrometeoroids and Orbital Debris (MMOD)?

- **MMOD** refers to the natural and human-made particles moving at very high speeds in Earth's orbital environment that pose a collision risk to spacecraft and astronauts.
  - ♦ **Micrometeoroids:** Naturally occurring, extremely small particles originating mainly from asteroid belt collisions and comets, travelling at velocities of 11–72 km/s.
  - ♦ **Orbital Debris:** Human-made objects such as defunct satellites, rocket fragments and collision remnants, typically moving at around 10 km/s.

### Dangers of space debris

- According to NASA, debris can travel at speeds of up to **18,000 mph**, which is 10 times faster than the speed of a bullet.
- **The International Space Station has experienced damage** from a two-inch piece of space junk striking one of its components in **2021**.
- **Kessler Syndrome:** It is a theoretical scenario in which a cascade of collisions between artificial objects in low Earth orbit leads to a rapidly increasing amount of space debris, making the use of near-Earth space impossible for an extended period of time.

### What are the MMOD Protection Measures

- **Debris Avoidance Manoeuvres (DAM):** Objects larger than 10 cm are continuously tracked.
  - ♦ When collision probability rises, spacecraft perform orbital adjustments using onboard thrusters.
- **Whipple Shields:** It forms the primary line of defence against MMOD and consists of multiple layers of materials such as aluminium, Kevlar and carbon fibre separated by air gaps.
  - ♦ It shatters incoming debris and disperse its energy over a larger area, preventing damage to the main spacecraft wall.

### International agreements on space debris

- **The Space Liability Convention of 1972:** It defines responsibility in case a space object causes harm.
  - ♦ The treaty says that “a launching State shall be absolutely liable to pay compensation for damage caused by its space objects on the surface of the earth or to aircraft, and liable for damage due to its faults in space.
- **Zero Debris Charter:** Twelve nations and the European Space Agency (ESA) have signed the **Zero Debris Charter** at the ESA/EU Space Council. It aims to become **debris neutral in space by 2030**.
- **Absence of law:** However, there is no law against space junk crashing back to earth.

### Missions on Removing Space Debris

- **RemoveDebris mission:** It is the European Space Agency’s debris removal demonstration mission in the low Earth orbit (LEO) that aims to test and validate multiple active debris removal technologies.
- **Space Debris Removal System (SDRS):** It is a proposed mission by the Russian Space Agency (Roscosmos) to demonstrate the feasibility of removing space debris from low Earth orbit.
- **Cleanup Mission:** It is China National Space Administration’s (CNSA) to demonstrate the feasibility of cleaning up space debris using a combination of active and passive methods.

### Steps taken by India

- **Project NETRA (Network for space object Tracking and Analysis),** an early warning system, was initiated by ISRO to help detect space hazards to Indian satellites.
  - ♦ The project is expected to give India its own capability in **space situational awareness (SSA)**, something that other space powers already have.
  - ♦ The SSA is used to predict threats from debris to Indian satellites.
- **The ISRO System for Safe and Sustainable Operations Management (IS4OM)** was established in 2022 to continually monitor objects posing collision threats and to mitigate the risk posed by space debris.

## NEWS IN SHORT

### CHAUDHARY CHARAN SINGH

#### Context

- PM Modi paid tributes to former Prime Minister and Bharat Ratna Chaudhary Charan Singh on his birth anniversary.

#### About

- **Early life:** Charan Singh was born on 23 December **1902** at Noorpur in Meerut district of Uttar Pradesh in a peasant family.
- **Graduation:** He graduated in science in **1923**, and did his post-graduation from **Agra University in 1925**. Also trained in law, he set up practice at Ghaziabad.
  - ♦ He shifted to Meerut in **1929** and later joined the Congress.
- **Political Career:** He was first elected to the **U.P. Legislative Assembly in 1937** from **Chhaprauli**, and represented the constituency in **1946, 1952, 1962 and 1967**.
  - Known for his integrity, discipline, and pragmatism, he was the architect of major land reforms, including the Debt Redemption Bill (1939) and the Land Holding Act (1960).
  - He served as India’s fifth Prime Minister from 1979 to 1980 and was a strong advocate for farmers’ rights.
  - He served as the fifth Prime Minister of India from July 1979 to January 1980.
- **Legacy:** A champion of farmers and social justice, he authored influential works on agrarian reforms, leaving a lasting legacy in rural India.
  - ♦ **His birth anniversary** has been celebrated as **Kisan Diwas since 2001** in his honor.
- **Literary Contribution:** Authored influential works on agrarian and rural reforms, including;
  - ♦ Abolition of Zamindari
  - ♦ Co-operative Farming X-rayed
  - ♦ India’s Poverty and Its Solution
  - ♦ Peasant Proprietorship or Land to the Workers
  - ♦ Prevention of Division of Holdings Below a Certain Minimum.

## INDIAN NAVY RECEIVES 'ANJADIP'

### Context

- The Indian Navy received **Anjadip**, the third of eight **Anti-Submarine Warfare Shallow Water Crafts (ASW SWC)**.

### About

- The ship is named after **Anjadip Island**, located **off the coast of Karwar in Karnataka**, and carries forward the **legacy of the erstwhile INS Anjadip**, a Petya-class corvette that was **decommissioned in 2003**.
- It is **indigenously designed** and built by Garden Reach Shipbuilders and Engineers (GRSE), Kolkata.
  - The project has been executed under a **public-private partnership**.
- The ASW SWC is the **largest Indian naval warship** to be propelled by waterjets.
  - The craft is equipped with advanced lightweight torpedoes, indigenously developed anti-submarine rockets and shallow water sonar systems, enabling effective detection and engagement of underwater threats.
- The platform is expected to significantly enhance the **Navy's anti-submarine warfare, coastal surveillance and mine-laying capabilities**.

## DARK STORES

### In News

- The number of dark stores in India is projected to triple to around 7,500 by 2030, driven by the growth of quick commerce (Q-Commerce) and consumer demand for ultra-fast deliveries.

### Dark Stores

- It refers to a retail outlet or warehouse that is solely used for processing online orders and is not accessible to the public.
- These facilities are also known as dark shops, dark supermarkets, dotcom centers, or ghost stores.
- They function as distribution hubs for storing inventory and packaging products.

### Present status

- As of October 2025, India has about 2,525 operational dark stores across eight Tier-I cities and over 100 Tier-II and III cities, covering 13 million sq. ft.

- Major players like Blinkit, Swiggy Instamart, Zepto, and Reliance Retail are aggressively expanding their networks.
- Tier-I cities—Ahmedabad, Bengaluru, Chennai, Hyderabad, Pune, Mumbai, Kolkata, and Delhi-NCR—account for 68% of stores, with NCR alone hosting 400 stores.
- Tier-II and III cities contribute 32% of stores.

## SIGMA 30N

### Context

- India Optel Limited (IOL), a Mini Navratna Defence Public Sector Undertaking, signed an agreement with a French company **to manufacture two high-precision, combat-proven systems in India**.

### About

- IOL will be responsible for** manufacturing, final assembly, testing, quality control and full life-cycle support, ensuring the systems meet the operational needs of the Indian Army.
- The systems to be manufactured under this collaboration include **SIGMA 30N Digital Ring Laser Gyro Inertial Navigation System**, used in artillery guns, air defence systems, missiles and radars; and CM3-MR Direct Firing Sight, designed for artillery guns and anti-drone systems.
  - SIGMA 30** is designed to optimize operational deployment of artillery units and their intelligence systems.
  - It gives combat platforms** an autonomous engagement capability, even when there are no GPS signals.

## NATIONAL MATHEMATICS DAY

### Context

- National Mathematics Day is observed every year on 22 December to commemorate the birth anniversary of Srinivasa Ramanujan.

### Srinivasa Ramanujan?

- Srinivasa Ramanujan was an **Indian mathematician** born in **1887 in Kumbakonam, Tamil Nadu**.
- Contribution to Mathematics:** Despite having almost no formal training in pure mathematics, he made substantial contributions to **mathematical analysis, number theory, infinite series, and continued fractions**, including solutions

to mathematical problems then considered unsolvable.

- ◆ In 1913, he wrote to British mathematician **G.H. Hardy**, leading to his invitation to Cambridge.
- ◆ He became one of the **youngest Fellows of the Royal Society** and the first Indian **Fellow of Trinity College, Cambridge**.
- He passed away at the age of **32**.

#### What is the Hardy–Ramanujan number?

- The Hardy-Ramanujan number is **1729**, the smallest number that can be expressed as the sum of two cubes in two different ways:
  - ◆  $1^3 + 12^3 = 1 + 1728 = 1729$ ; and
  - ◆  $9^3 + 10^3 = 729 + 1000 = 1729$ .

## GHOST PAIRING

### In News

- The Ministry of Electronics and Information Technology has warned that a cyber campaign known as “Ghost Pairing” is being used to hijack WhatsApp accounts.

### Ghost Pairing

- It is a cyber attack that targets WhatsApp and Telegram users through social engineering.
- Attackers pose as known contacts, bank officials, or government representatives and send messages like “Hi, check this photo” with a link.
- The link leads to a verification process where users unknowingly grant hackers access to their WhatsApp accounts.
- No password theft or SIM swapping is needed. Once accessed, attackers can steal sensitive photos, videos, or bank information and use them to blackmail victims or steal money.

## DRDO TRANSFERS DIRECTED ENERGY WEAPON TECHNOLOGIES TO APOLLO MICRO SYSTEMS

### Context

- Hyderabad-based defence firm **Apollo Micro Systems** has secured Defence Research & Development Organisation (DRDO) approval to get access to **Directed Energy Weapon (DEW)** systems technologies from two DRDO entities.

### What are Directed Energy Weapons (DEWs)?

- Directed Energy Weapons use **concentrated electromagnetic energy**, primarily **high-power lasers**, to damage or destroy targets.
- Unlike conventional kinetic weapons, DEWs rely on **thermal and energy-based effects** rather than physical impact.

### What are the Approved Transfers of Technology?

- Laser-based Directed Energy Weapon System
  - ◆ **Technology:** Multi-channel 10 kW Laser DEW system
  - ◆ **DRDO Lab:** Centre for High Energy Systems & Sciences (CHESS), Hyderabad
  - ◆ **Purpose:** Enables precision engagement of aerial threats such as drones and small UAVs.
- Electro-Optical (EO) Tracking System for DEW
  - ◆ **Technology:** EO tracking system with electro-optical sensors
  - ◆ **DRDO Lab:** Instruments Research & Development Establishment (IRDE), Dehradun
  - ◆ **Purpose:** Provides accurate detection, tracking and targeting capability for DEW platforms.

## THE SCIENCE BEHIND WHOLE-BODY REGENERATION

### Context

- Recent studies published in Cell and Cell Reports reveal that regeneration in **axolotls and planarian flatworms** is not confined to the injury site; the entire body actively participates in the healing and regrowth process.
  - ◆ In planarians, this finding is closely linked to neoblasts, the special stem cells that drive regeneration.

### What are Neoblasts?

- Neoblasts are **pluripotent stem cells** found in planarian flatworms.
- They are the **only dividing cells** in adult planarians and are responsible for their extraordinary regenerative ability.
- Can differentiate into all cell types of the planarian body, including nerve, muscle, gut and epidermal cells.

### What is a Blastema?

- A blastema is a mass of **undifferentiated, proliferating cells** that forms at the site of injury during regeneration.

- It is commonly observed in **regenerative vertebrates**, such as axolotls and salamanders.

## SYLLA SYL-X1

### In News

- Sarla Aviation conducted ground tests of its half-scale eVTOL demonstrator SYLLA SYL-X1 at its Bengaluru facility.

### SYLLA SYL-X1

- SYL-X1 has a 7.5-meter wingspan and is India's largest and most advanced private eVTOL demonstrator.
- The sub-scale demonstrator validates structural behavior, propulsion integration, and system-level safety at real aircraft scale, bridging toward a planned 15-meter full-scale eVTOL.
- It is developed in ~9 months at a fraction of global costs, marking a milestone in private aerospace engineering in India.

### Do you know?

- Sarla Aviation's flagship program is a six-seater electric flying taxi aimed at reducing commute times in congested Indian cities such as Bengaluru, Mumbai, Delhi, and Pune.
- In 2024, it partnered with Bangalore International Airport Limited (BIAL) to explore sustainable air mobility using eVTOL aircraft.
- Sarla raised \$13 million and delivered a full-scale static aircraft for national display at Bharat Mobility.

Source :TH

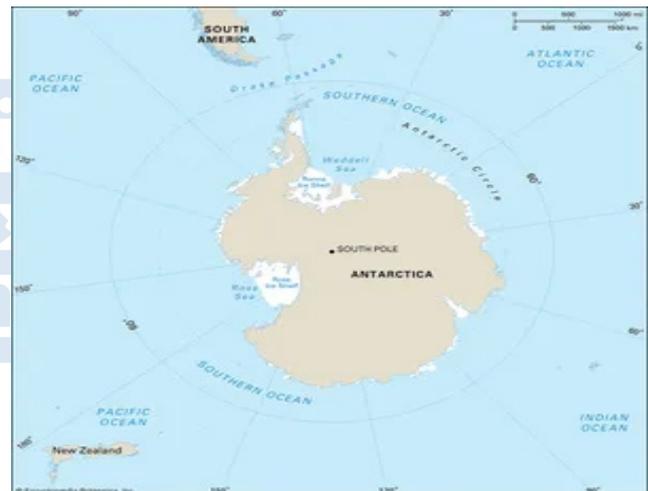
## SOUTHERN OCEAN

### Context

- A recent study highlighted that the Southern Ocean is absorbing more carbon dioxide than climate models had predicted.

### About Southern Ocean

- The Southern Ocean is **one of the five major ocean basins of the Earth**. It surrounds the continent of Antarctica.
  - ♦ It lies between **60° South latitude and the coast of Antarctica**.
- It was formed around 34 million years ago when Antarctica and South America drifted apart, creating the **Drake Passage**.
- Recognised formally as a distinct ocean by the **International Hydrographic Organization (IHO)**.
- It is central to international scientific research under **the Antarctic Treaty System**.



Source: TH

