

DAILY CURRENT AFFAIRS (DCA)

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PM VISIT TO BHUTAN

Context

 Prime Minister Narendra Modi's recent visit to Bhutan strengthened the special ties of friendship and cooperation between the two countries.

Key Outcomes

 Inauguration of 1020 MW Punatsangchhu-II Hydroelectric Project constructed under a bilateral agreement between both Nations.

Announcements:

- Understanding on the resumption of work on the main dam structure of 1200 MW Punatsangchhu-I Hydroelectric Project.
- Grant of land in Varanasi for building a Bhutanese Temple/Monastery and Guest House.
- Decision to establish an Immigration Check Post in Hatisar across Gelephu.
- INR 4000 crore Line of Credit (LoC) to Bhutan.

MOUs Signed:

- MoU on Cooperation in the field of Renewable Energy.
- MoU on Cooperation in the field of Health and Medicine.
- MoU between PEMA Secretariat, Bhutan and National Institute of Mental Health and Neuro Sciences (NIMHANS) India on Building Institutional Linkage.

Brief on India-Bhutan Relations

- Diplomatic relations between India and Bhutan were established in 1968.
 - The basic framework of India- Bhutan relations has been the Treaty of Friendship and Cooperation signed in 1949.
 - The treaty was revised in 2007 giving Bhutan more autonomy while reaffirming mutual respect for sovereignty and close cooperation.
 - In 2024, Prime Minister Shri Narendra Modi was conferred the Order of the Druk Gyalpo, Bhutan's highest civilian decoration, the first foreign leader to be given the award.
- Developmental Partnership: India remains
 Bhutan's foremost development partner,
 supporting its national priorities since its 1st FiveYear Plan (1971).
 - Annual Plan Talks (Bilateral Development Cooperation Talks): Institutionalised mechanism for deciding priorities and modalities of assistance.

- Sectors Covered: Roads, infrastructure, digital connectivity, hydropower, agriculture, education, health, HR development, urban development, etc.
- Trade Relations: India has consistently been Bhutan's top trading partner- both as an import source and as an export destination.
 - Since 2014, India's trade with Bhutan has more than tripled—from USD 484 million in 2014–15 to USD 1,777.44 million in 2024–25, accounting for over 80% of Bhutan's overall trade.
 - 2016 India-Bhutan Agreement on Trade, Commerce and Transit, establishes a free trade regime between the two countries and also provides Bhutan duty free transit of goods to/from third countries.
- Energy Cooperation (Hydropower & Renewables): India has constructed 4 major HEPs in Bhutan: Chukha (336 MW), Kurichhu (60 MW), Tala (1020 MW), Mangdechhu (720 MW).
 - Currently, there are two HEPs under construction: 1020 MW Punatsangchhu-I HEP and 1020 MW Punatsangchhu-II HEP.
- Space Cooperation: South Asia Satellite Ground Station inaugurated in 2019 by both Nations.
 - The two sides collaborated on the India-Bhutan SAT, the first satellite jointly developed by India and Bhutan, launched in 2022.
 - Both sides signed a Joint Plan of Action on Space Cooperation in 2024.
- **Fin-Tech: RuPay Card:** Launched in two phases (2019 & 2020) for full interoperability.
 - In 2021, India's Bharat Interface for Money (BHIM) application was launched in Bhutan with the objective of promoting cashless payments between the two nations.
- Indian Diaspora in Bhutan: About 50,000 Indians are presently working in Bhutan in the sectors such as infrastructure development, hydropower, education, trade and commerce signifying close people to people ties between the two countries.

Significance of Bhutan for India

- Buffer against China: Bhutan serves as a geographic buffer between India and China. Its location helps protect the vulnerable Siliguri Corridor (Chicken's Neck) – India's only land link to the Northeast.
 - China has no formal diplomatic relations with Bhutan but is actively negotiating the boundary issue.

- India sees Bhutan as vital to maintaining a South Asian balance of power and resists Chinese strategic encroachment, especially near the tri-junction.
- **Neighbourhood First Policy:** Bhutan is a central pillar of India's 'Neighbourhood First' policy.
 - Stability in Bhutan reflects India's larger vision for regional peace and cooperation in South Asia.
 - Bhutan plays a role in enhancing India's connectivity to Northeast India.
 - India's Act East Policy aims to connect Northeast with Southeast Asia, and Bhutan is integral to such land-link corridors.
- Hydropower and Energy Security: Bhutan's rivers are a clean and renewable source of energy. India helps build hydropower projects and imports surplus electricity.
 - Helps India diversify its energy mix while giving Bhutan major revenue.
- Trade and Economic Ties: India is Bhutan's largest trade partner and source of investment.
 - Special India–Bhutan Trade and Transit Agreement provides duty-free access to markets
 - Bhutan is crucial to India's efforts to promote sub-regional connectivity in South Asia, especially BBIN (Bangladesh-Bhutan-India-Nepal).
- Diplomatic and Multilateral Support: Bhutan often supports India's positions in international forums, including the UN.
 - Bhutan's commitment to peaceful foreign policy and non-alignment aligns with India's regional diplomacy.

Challenges in Relations

- **Economic Imbalance:** Bhutan faces a large trade deficit with India, importing much more than it exports.
 - Despite preferential trade agreements, Bhutanese industries struggle to diversify.
- China Factor and Border Negotiations: Bhutan and China have held 24 rounds of border talks, including a 2021 MoU on a "three-step roadmap."
 - India is concerned about potential China— Bhutan border agreements, especially in the Doklam region, which is strategically vital for India.

- Connectivity Gaps: Limited road and rail links restrict economic and strategic integration.
 - Bhutan has reservations about joining the BBIN Motor Vehicles Agreement due to environmental and cultural concerns.
- Environmental and Sustainability Concerns: Bhutan's model of Gross National Happiness and environmental protection sometimes clashes with India's infrastructure-led approach.
- Strategic Balancing and Autonomy: Bhutan seeks greater foreign policy autonomy, especially in global forums.
 - While the 2007 Treaty revision gave Bhutan more space, India still plays a dominant role in its external affairs and defence, which could create friction if not managed with sensitivity.

Way Ahead

- While India and Bhutan share a strong foundation of trust and cooperation, evolving economic aspirations, geopolitical realities, and domestic political changes in both countries pose challenges.
 - Managing these with mutual respect, transparency, and strategic sensitivity is key to sustaining their special relationship.
- India-Bhutan relations are a model of goodneighbourly partnership based on mutual trust and benefit.

Source: TH

URBAN COOPERATIVE BANKS

Context

Recently, the Union Home and Cooperation Minister, at the 'Co-op Kumbh 2025', called on Urban Cooperative Banks (UCBs) to play a transformative role in empowering India's youth and underprivileged communities.

Key Highlights of Co-op Kumbh 2025

- 'Delhi Declaration 2025': It was adopted by the National Federation of Urban Cooperative Banks and Credit Societies (NAFCUB), focusing on enhancing financial stability, governance, and digitization within the cooperative banking network.
- Digital Push: Two new digital initiatives Sahkar
 Digi-Pay and Sahkar Digi-Loan were launched to empower even the smallest cooperative banks.



- These enable digital payments and loan disbursement services, integrating UCBs into India's broader digital revolution.
- Commitment to Strengthening the Cooperative Credit Ecosystem: The government aims to establish an UCB in every Indian city with a population exceeding two lakh within the next five years.
 - It aims to expand the urban cooperative credit ecosystem and make financial inclusion more accessible across urban India.

About Urban Cooperative Banks (UCBs)

- These are financial institutions rooted in the cooperative movement, primarily serving urban and semi-urban populations.
 - Cooperative societies are based on the principles of cooperation like mutual help, democratic decision making and open membership, unlike commercial banks.
- They cater to small businesses, salaried individuals, and lower-income groups, offering banking services such as deposits, loans, and credit facilities.
 - They play a vital role in promoting inclusive economic growth, supporting small traders, entrepreneurs, and the weaker sections of society.
- As per RBI and NABARD, there are 1,457 Urban Cooperative Banks, 34 State Co- operative Banks (StCBs), 351 District Central Co-operative Banks (DCCBs) and one Industrial Cooperative Bank which are under the supervision of RBI and NABARD.

Previous Efforts of Recognising Cooperative Banks

- Government of India Act (1919): It transferred the subject of 'Cooperation' from the Government of India to Provincial Governments.
 - The Government of Bombay passed the first State Cooperative Societies Act (1925), which:
 - Shaped and expanded the cooperative movement.
 - Emphasized thrift, self-help, and mutual aid.
 - It was followed by other states, marking the second phase in the history of Cooperative Credit Institutions.
- Indian Central Banking Enquiry Committee (1931): Emphasized urban banks' duty to assist small businesses and the middle class.

- Mehta-Bhansali Committee (1939):
 Recommended that cooperative societies meeting certain banking criteria be allowed to function as banks.
 - It suggested forming an Association for Urban Cooperative Banks.
- Co-operative Planning Committee (1946):
 Acknowledged that urban banks were the best financial agencies for small people, often ignored by joint stock banks.
- Rural Banking Enquiry Committee (1950): Recommended setting up such banks even in smaller towns, given their low operational costs.

RBI Study and Report (1958-1961)

- The Reserve Bank of India (RBI) conducted the first study of Urban Cooperative Banks (UCBs) in 1958–59, and published in 1961:
 - Recognized the **financial soundness** of UCBs.
 - Suggested **expansion** to new centers.
 - Urged State Governments to actively support their growth.
- Varde Committee (1963): It recommended establishing UCBs in all urban centers with populations over 1 lakh.
 - Stressed that banks should not be community- or caste-based.
 - Introduced the concept of minimum capital requirement.
 - Defined population criteria for identifying urban centers suitable for UCB incorporation.
- Madhavdas Committee (1979): Conducted a detailed evaluation of UCBs' role and performance. It recommended:
 - Support from RBI and Government for setting up UCBs in backward regions.
 - **Viability standards** for sustainable growth.
- Hate Working Group (1981): It suggested:
 - Better utilization of surplus funds.
 - Gradual alignment of Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR) of UCBs with commercial banks, through a phased approach.
- Marathe Committee (1992):
 - Redefined viability norms for UCBs.
 - Initiated an era of liberalization within the cooperative banking sector.

- Madhava Rao Committee (1999): It focused on:
 - Consolidation and control of sick banks.
 - **Improved professionalism** and management standards.
 - Integration of UCBs with the broader commercial banking system.

Current Challenges Faced by UCBs

- Declining Numbers: The total number of UCBs has dropped from 1,926 in 2004 to around 1,500 in 2024 due to regulatory and financial pressures.
- Regulatory Constraints: UCBs have faced restrictions on branch expansion and licensing. New licenses have not been issued since 2004.
- Governance and Compliance Issues: Many UCBs struggle with outdated governance structures, poor compliance with the Banking Regulation Act, and limited technological adoption.
- Financial Vulnerabilities: Limited capital base and exposure to risky lending practices have affected their stability.

Related Initiatives and Reforms

- NUCFDC Formation: NUCFDC was established to serve as an umbrella organization for UCBs, offering financial support, regulatory guidance, and capacity building.
- Empowerment Measures: RBI has allowed UCBs to open new branches and empowered their boards to formulate settlement policies similar to commercial banks, under the direction of the Ministry of Cooperation.
- Expert Committee Recommendations: A committee chaired by Shri NS Vishwanathan submitted a report in 2021 recommending the creation of a strong apex entity and improved regulatory mechanisms.
- Modernization and Reforms in Cooperative Sector: It emphasized that significant policy reforms have modernized cooperatives and resolved long-pending challenges since the creation of the Ministry of Cooperation.
 - Several state governments have adopted model bylaws for Primary Agricultural Credit Societies (PACS), ensuring uniformity and transparency.
- Financial Discipline and Reduction in NPAs:
 Highlighting financial improvements, Shah stated that Non-Performing Assets (NPAs) in the cooperative sector have declined from 2.8% to 0.6% in the past two years.

- The Union Ministry of Cooperation has outlined four key objectives, including:
 - Engaging youth through new educational initiatives such as Tribhuvan Sahkari University.
 - Promoting multi-sectoral collaboration.
 - Ensuring financial discipline and efficiency.
 - Expanding the reach of cooperatives across urban and rural India.
- The United Nations (UN) designated 2025 as the International Year of Cooperatives (IYC 2025) under the theme 'Cooperatives Build a Better World', which aims to serve as a platform to modernize and scale the cooperative banking system.

Source: DD News

SEBI WARNS AGAINST DIGITAL GOLD RISKS

Context

 The Securities and Exchange Board of India (SEBI) has cautioned the general public against investing in digital gold and e-gold products.

About

- The investment in digital gold has existed for several years, but there has been a surge in their popularity over the last one year.
 - The reasons include a steep rise in gold prices, combined with the convenience, and ease of owning gold digitally through online platforms.
- The digital gold products **remain unregulated** and do not fall under any regulatory ambit, **exposing investors to heightened risks.**

What is Digital Gold?

- Digital gold refers to buying gold without physically possessing the precious metal. The price of digital gold is linked to that of physical gold.
- Digital gold is created using blockchain technology.
- It allows investors to buy, sell and store gold electronically.
- Tax: In India, buying gold, whether physical or digital, usually attracts GST, though the exact rate for digital gold can vary depending on how the provider structures the product.

 When you sell digital gold, any profit is treated as a capital gain, and the tax rate depends on how long you have held it.

Pros of Investing in Digital Gold:

- Digital gold is easy to access and allows one to sell it quickly in case of an emergency.
- Unlike traditional gold purchases, digital gold allows investors to start investing with smaller amounts.
- It also **eliminates the storage hassle**, which is the biggest challenge associated with physical gold.
- Digital gold allows investors to convert their investment into physical gold whenever required as it can be converted into coins, bars, or jewellery.
- Investing in digital gold does not require a demat account or margin deposits, making it a more convenient option.

Concerns Related Investing In Digital Gold

- Not regulated by SEBI or RBI.
- No guaranteed investor protection.
- Depends entirely on the company's honesty and stability.
- Possible hidden fees (delivery, storage, or making charges).
- Limited legal recourse if something goes wrong.

Why SEBI Has Cautioned Investors?

- It has observed that several digital and online platforms are offering investors the facility to invest in digital gold or e-gold products.
 - Many jewellers from both the organised and unorganised sectors are providing opportunities for investment in digital gold.
- These products are neither notified as securities nor regulated as commodity derivatives.
- These gold products may entail significant risks for investors and may expose investors to counterparty and operational risks.

Recommendations of SEBI

- Investors should look at investing in gold products which are regulated by the Sebi to avoid any kind of risk.
- Various Sebi-regulated gold products are:
 SEBI advises investors to use regulated gold
 investment options such as Sovereign Gold
 Bonds (SGBs), Gold exchange-traded fund (ETF),
 Electronic Gold Receipts (EGRs), and commodity
 derivatives.

 Investments in these products can be made through Sebi-registered intermediaries and are governed by the regulatory framework prescribed by the markets regulator.

Securities and Exchange Board of India (SEBI)

- It is the **regulatory authority** for the securities and capital markets in India.
- It was established in **1988** and given statutory powers through the SEBI Act of **1992**.
- SEBI's primary goal is to protect the interests of investors, promote and regulate the securities market, and ensure its orderly functioning.

Source: IE

3RD INTERNATIONAL CONFERENCE ON GREEN HYDROGEN (ICGH 2025)

In News

 At the 3rd International Conference on Green Hydrogen,the Union Minister for New & Renewable Energy highlighted the National
 Green Hydrogen Mission (NGHM) as a catalyst for India's clean energy transition, job creation, and global leadership in green hydrogen.

The National Green Hydrogen Mission

- It was launched by the Government of India in January 2023 and spearheaded by the Ministry of New and Renewable Energy (MNRE).
- It is a cornerstone of India's strategy to achieve energy independence by 2047 and net-zero emissions by 2070.
- It aims to position India as a global hub for the production, utilization, and export of green hydrogen and its derivatives.

Objectives

 It aims to reduce dependence on fossil fuels and cut emissions in hard-to-abate sectors like steel, cement, refining, and mobility.





- It aims to create export opportunities for green hydrogen and its derivatives such as ammonia and methanol.
- It aims to generate employment and stimulate economic growth through innovation and infrastructure development.
- It aims to develop green hydrogen hubs and promote public-private partnerships for technology advancement.

Challenges

- High production costs: Electrolyser technology and renewable energy inputs remain expensive.
- **Infrastructure gaps:** Limited hydrogen pipelines, refueling stations, and storage facilities.
- Technology maturity: Many green hydrogen applications are still in pilot or demonstration stages.
- Policy coordination: Cross-sectoral alignment is needed across energy, transport, industry, and finance ministries.
- Global competition: Countries like the EU, US, and China are also aggressively pursuing green hydrogen leadership.

Way Ahead

- India's National Green Hydrogen Mission is a strategic push to align clean energy with industrial growth and global competitiveness.
- Key priorities include scaling domestic manufacturing, expanding pilot projects, boosting R&D, building hydrogen infrastructure, improving policy coherence, and leveraging renewable energy to produce affordable green hydrogen for domestic and export markets.

Source :PIB

TROPICAL FOREST FOREVER FACILITY (TFFF)

Context

 Recently, the Tropical Forest Forever Facility (TFFF) was launched on the sidelines of the COP30 Climate Summit in Belém, Brazil.

What is the Conference of the Parties (COP) of UNFCCC?

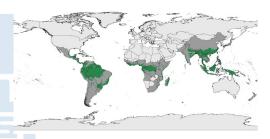
 It is the highest decision-making body that reviews implementation and adopts necessary decisions for effective execution.

- The venue and presidency rotate among the five UN regional groups — Africa, Asia, Latin America & the Caribbean, Central & Eastern Europe, and Western Europe & Others.
- It meets **annually**, typically in **Bonn (Germany)** unless hosted elsewhere by a Party nation.
- The first COP was held in Berlin, Germany (1995).

About Tropical Forests Forever Facility (TFFF)

- Overview: It is an investment fund designed as a permanent, self-financing vehicle through which net returns aim to be awarded to up to 74 developing tropical forest countries for keeping their existing old-growth forests intact.
- Rationale: It aims to recognise and encourage Tropical Forest Countries to continue protecting and conserving Tropical Forest at the right scale and speed, especially given significant opportunity and implementation costs.

Countries with Tropical Forests Eligible for TFFF Payments



- **Funding Structure:** It aims to **raise \$25 billion** from wealthy nations and philanthropists, and **an additional \$100 billion** in private investment, based on satellite remote sensing data forest cover.
 - It focuses at least 20% of payments flow directly to Indigenous Peoples and local communities.



Significance of TFFF: It is hailed as a
groundbreaking initiative that empowers the
Global South to lead tropical forest conservation,
provides enduring financial incentives for forest
protection, and redefines intact tropical forests as
valuable ecological assets.

India's Perspective

- India welcomed Brazil's initiative to establish the TFFF, and joined the Facility as an **Observer**.
- India is pursuing ambitious goals green budgeting, sovereign green bonds, and a national carbon market (by 2026).
- India's indigenous and local knowledge like traditional seed systems, community-based water harvesting, and ecosystem restoration models offer valuable lessons for globally adaptable resilience strategies.

What are the concerns?

- Volatility of Financial Markets: TFFF plans to invest in bonds in developing nations that have historically been prone to fluctuations.
 - For instance, the TFFF may not be able to pay returns to countries if markets crash like COVID-19 pandemic, and the 2008-09 financial crisis.
- Diluting Legal Obligations: TFFF is not officially part of the UNFCCC, and is not subject to the same responsibilities that govern the UN climate negotiations, where the onus falls on developed countries.

Other Global Initiatives for Forest Conservation

- Convention on Biological Diversity: The Convention was opened for signature in 1992 at the United Nations Conference on Environment and Development (Rio Earth Summit).
 - The Convention on Biological Diversity (CBD) entered into force on 29 December 1993.
- UN-REDD Programme (Reducing Emissions from Deforestation and Forest Degradation): Launched in 2008, it provides financial incentives to developing countries for reducing emissions by conserving and sustainably managing forests.
- Paris Agreement: It is a legally binding international treaty on climate change. It was adopted by 195 Parties at the UN Climate Change Conference (COP21) in Paris, France, in 2015. It entered into force on 4 November 2016.

Way Forward

- Integrate with UNFCCC mechanisms to ensure accountability and sustained contributions from developed nations.
- Guarantee long-term stability by insulating the fund from market shocks.
- Enhance transparency via open-access forest monitoring data and independent audits.

Source: IE

NEWS IN SHORT

FUNGUS INFECTIONS RISE IN INDIA

Context

 Studies suggest that fungal infections would overtake the annual incidence of tuberculosis in India.

About

- A study in 2022 had estimated that India has the largest burden of fungal diseases per capita in the world.
 - This means over 57 million people (4.1% of the population) are affected by serious fungal diseases.
- The report also flagged how diagnostic limitations across the country had already inhibited some high-quality epidemiological studies.

Fungal Infections

- Fungal infections also called mycoses are diseases caused by fungi.
 - Fungi are eukaryotic organisms (cells with nuclei) that differ from bacteria and viruses.
 - They thrive in warm, moist environments and can live on skin, mucous membranes, or inside the body.
- Fungal infections range from mild to lifethreatening.
- **People with weakened immune system**s are at higher risk for most fungal infections.

Source: IE

DUMPSITE REMEDIATION ACCELERATOR PROGRAMME (DRAP)

In News

 The Dumpsite Remediation Accelerator Programme (DRAP) has been launched by the Ministry of Housing and Urban Affairs (MoHUA).

Dumpsite Remediation Accelerator Programme (DRAP)

 It is a year-long, mission-mode initiative which aims to fast-track the remediation of remaining dumpsites and reclaim valuable urban land for community and infrastructure development, advancing India's vision of achieving "Lakshya Zero Dumpsites" by September 2026.

- The Dumpsite Remediation Action Plan (DRAP) is guided by the 5P framework from the Swachh Bharat Mission, ensuring comprehensive oversight, funding, and community engagement:
 - Political Leadership: Senior leaders adopt specific dumpsites to drive progress
 - Public Finance: Additional financial support is provided to cities with significant legacy waste, supplementing existing funds.
 - Partnerships: Collaborations include corporates/PSUs for funding, PWDs/NHAI for using inert waste in road construction, technical experts for engineering, and NGOs for community outreach.
 - Public Advocacy: Focus on awareness and health initiatives for affected communities, including SafaiMitras and nearby residents.
 - Project Management: Site-specific microaction plans with defined timelines, resource allocation, and monitoring mechanisms ensure effective execution.

Source:HT

YBRANT PROGRAMME

In News

 The Indian Institute of Corporate Affairs (IICA), in partnership with WNS Global Services, launched the YBRANT programme.

YBRANT programme

- It is a strategic collaboration between government, industry, and academia.
- It is designed to instill sustainable development values in future CEOs.
- It is a six-month blended learning program that includes 15 modules, 22.5 hours of academic instruction, and 18 hours of fieldwork, delivered via IICA's online platform.

Objectives and Need

- India's CSR spending has grown significantly from 10,065.93 crore in FY 2014–15 to 34,908.75 crore in FY 2023–24—highlighting the need for professionals who balance profit with responsible conduct.
- Therefore the YBRANT programme aims to cultivate socially responsible and sustainabilityoriented business leaders.

Source: PIB

LUCIFER BEE

Context

 Australian scientists have discovered a new native bee species named Lucifer.

About

- The new species dubbed Megachile (Hackeriapis) Lucifer – was first discovered in 2019 in the state of Western Australia.
 - It's the first new member of this bee group to be described in more than 20 years.
 - Australia has around 2,000 native bee species, more than 300 of which are yet to be scientifically named and described.
- The **highly distinctive**, **upward-pointing horns** on the female bee's face inspired its name.
 - Each of the horns on the bee measure about
 0.9 millimetres and scientists note could be used to access flowers, compete for resources, and defend nests.
 - Interestingly, the species' male bees lack the horns.



Significance

- The discovery will raise awareness about the number of undiscovered species that may still exist, especially in areas threatened by mining.
 - Many mining companies still don't survey for native bees, including those that play crucial roles in supporting threatened plants and ecosystems.
- Almost all flowering plants depend on wild pollinators, particularly bees, but habitat loss and climate change are driving many vital species to the brink of extinction.

Source: TH

GAGANYAAN MISSION

In News

- ISRO successfully conducted a critical parachute test for its upcoming human spaceflight mission, Gaganyaan.
 - ISRO will next conduct three uncrewed flights with Vyomitra, a half-humanoid robot, aiming for a crewed mission by early 2027.

Gaganyaan Mission

- The Gaganyaan Programme was approved in December 2018.
- It is a mission of Indian Space Research Organisation (ISRO) and was approved with a financial outlay of approximately 20,193 crore.
- It is India's first indigenous human spaceflight initiative.
- It aims to demonstrate India's human spaceflight capability by sending a crew to 400 km low-Earth orbit for three days, with a safe return and sea landing in Indian waters.
- The Human Rated LVM3, a modified version of ISRO's reliable LVM3 rocket, is identified as the launch vehicle for Gaganyaan mission.
 - It features a Crew Escape System (CES) with high-thrust solid motors to safely evacuate the crew during launch emergencies.

Source :IE

INTERNATIONAL CRYOSPHERE CLIMATE INITIATIVE

In News

 The "2025 State of the Cryosphere Report" underscores that Earth's glaciers and ice sheets are rapidly melting.

Key Highlights

- Critical Thresholds: Earth's cryosphere (glaciers and ice sheets) is nearing critical temperature thresholds, with irreversible melting likely at just 1°C of warming, and many glaciers could melt irreversibly at even lower temperatures.
- Global Ice Loss: Rapid melting of polar ice sheets and glaciers, notably in Greenland and Antarctica, is accelerating sea-level rise and

- causing significant impacts on ocean currents and ecosystems.
- **Sea Ice Decline:** Both Arctic and Antarctic sea ice have hit record lows in 2025, affecting global climate patterns and marine food webs.
- **Sea-Level Rise:** Staying at current warming levels (~1.2°C) could lead to several meters of sea-level rise over centuries, threatening coastal cities and small islands, but limiting warming to 1.5°C or below can slow this process.
- Impact on Water Resources: Melting glaciers and ice sheets have already released large volumes of water, roughly 13% of global annual water consumption in 2023, with future reductions threatening water security for billions.
- Ocean Changes: Melting polar ice and warmer waters are disrupting ocean currents, slowing the Atlantic Meridional Overturning Circulation, and potentially causing colder temperatures in northern Europe.
- Increased Risks: Loss of permafrost, increased ocean acidification, and declining snow cover are further aggravating climate change effects, threatening ecosystems and human livelihoods.

Source: TH

NATIONAL WATER AWARDS 2024

Context

- Maharashtra has secured the first position in the Best State category of the 6th National Water Awards for 2024.
 - Gujarat and Haryana have been placed second and third respectively.

About

- Instituted in 2018 by the Department of Water Resources, River Development, and Ganga Rejuvenation (DoWR, RD &GR), the National Water Awards aim to encourage sustainable water management and support the government's 'Jal Samridh Bharat' vision.
- This year, 46 winners have been selected across ten categories, including Best District, Best Village Panchayat, Best Urban Local Body, and Best Institution.

Source: PIB