



SROTHAS

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Critical Discourse: Analysis of Key Themes in the Present

◇ SUPREME COURT LIMITS ED'S POWER TO ARREST PMLA ACCUSED

◇ IRAN-ISRAEL CONFLICT

◇ GREEN CREDIT PROGRAMME

◇ "INDIA'S GLOBAL INFLUENCE AND REGIONAL CHALLENGES: A CLOSER LOOK"

◇ RIGHT AGAINST CLIMATE CHANGE IS A FUNDAMENTAL RIGHT



SUPREME COURT LIMITS ED'S POWER TO ARREST PMLA ACCUSED

The Supreme Court of India has limited the Enforcement Directorate's (ED) authority to arrest individuals once a special court has taken cognizance of a charge sheet under the Prevention of Money Laundering Act (PMLA). This ruling aims to balance law enforcement powers and personal liberty.



Recent Supreme Court Ruling on PMLA

Origin of the Judgment: The ruling emerged from the ED's appeal against a Punjab and Haryana High Court decision that denied anticipatory bail.

Key issues examined included:

1. The applicability of regular bail provisions under the Code of Criminal Procedure (CrPC) for PMLA accused.
2. The necessity of meeting stringent bail conditions under Section 45 of the PMLA.
3. The bail conditions for those not arrested during the PMLA investigation but appearing in court after summons or warrants.

Supreme Court Observations:

1. **Status of Accused on Summons:** An accused appearing before a special court in response to a summons is not considered in custody and thus does not need to apply for bail under PMLA conditions.
2. **ED's Custody Application:** The ED must file a separate application to seek custody of the accused after they appear in court, justifying the need for custodial interrogation.
3. **Protection of Personal Liberty:** Emphasizing the fundamental right to personal liberty, the court underscored that surety or bonds required by the special court under Section 88 of the CrPC are not equivalent to granting bail under PMLA's stringent conditions.
4. **Procedure for Non-appearance:** If an accused fails to appear despite being summoned, the court can issue aailable warrant, followed by a non-ailable warrant if non-appearance continues.
5. **ED's Arrest Powers:** The ED retains the authority to arrest individuals not named in the initial PMLA complaint, provided proper arrest procedures under Section 19 of the PMLA are followed.

6. **Twin Conditions of Bail Under PMLA:** Under Section 45 of the PMLA, bail conditions include:

1. **Burden of Proving Innocence:** The accused must demonstrate their innocence, proving reasonable grounds of not being guilty.
2. **Ensuring No Offences While on Bail:** The accused must assure the court of not committing any offense while out on bail.

What is PMLA?

The Prevention of Money Laundering Act, 2002 (PMLA) was enacted to combat money laundering and facilitate the confiscation of property derived from such activities. It aims to address money laundering related to illegal activities including drug trafficking, smuggling, and terrorism financing.

Key Provisions of PMLA:

1. Offences and Penalties:
 - PMLA defines money laundering offences and prescribes penalties, including rigorous imprisonment and fines.
 - Money laundering is the process of converting illegally earned money into seemingly legal money.
2. Attachment and Confiscation of Property:
 - The Act allows for the attachment and confiscation of property involved in money laundering.
 - An Adjudicating Authority is established to oversee these proceedings.
3. Reporting Requirements:
 - Entities such as banks and financial institutions must maintain records of transactions and report suspicious transactions to the Financial Intelligence Unit (FIU).
4. Appellate Tribunal:
 - Section 25 provides for an Appellate Tribunal to hear appeals against orders of the Adjudicating



Recent Amendments Related to PMLA:

1. Prevention of Money-laundering (Restoration of Confiscated Property) Amendment Rules, 2019:

- Insertion of Rule 3A: Allows the Special Court to publish notice in newspapers inviting claimants with legitimate interest in attached/seized/frozen property to establish their claims for restoration, post-framing of charges.

2. Prevention of Money Laundering (Maintenance of Records) Amendment Rules, 2023:

- Expanded disclosure requirements for NGOs by reporting entities such as financial institutions, banks, or intermediaries.
- Clarified the definition of “politically exposed persons” (PEPs) to align with Financial Action Task Force (FATF) recommendations.
- PEPs include individuals with prominent public functions by a foreign country, such as heads of state, senior politicians, and high-ranking officials.

Concerns Regarding PMLA, 2002:

1. Broad Definition of Proceeds of Crime:

- The broad interpretation of “proceeds of crime” raises concerns about including legal financial transactions.
- The law targets those involved in generating and laundering crime proceeds, even those indirectly involved.

2. Coverage of Numerous Offences:

- PMLA’s schedule includes numerous offences unrelated to its original purpose of combating drug money laundering.
- The UN resolution prompting the law in India focused solely on laundering drug money, seen as a serious economic crime.

3. Arrest Without Written Communication of Grounds:

- ED officers have often violated Article 22(1) of the Constitution and Section 19(1) of PMLA by relying on verbal communication for arrests.
- Recently, the Supreme Court ordered the release of NewsClick founder Prabir Purkayastha, ruling his arrest invalid under UAPA, emphasizing the constitutional mandate to inform arrested individuals of the grounds for their arrest promptly.

Recent Changes under the PMLA:

- Enhanced disclosure requirements for NGOs by financial entities.
- Defined “politically exposed persons” (PEPs) in line with RBI’s KYC norms.
- Included practicing chartered accountants, company secretaries, and cost accountants under the law.
- Expanded the list of non-banking reporting entities for identity verification under the money laundering law.
- Covered financial transactions like managing client money, securities, bank accounts, and buying/selling business entities.

Way forward:

The Supreme Court’s ruling on the PMLA seeks to protect individual liberties while ensuring the ED’s powers are exercised judiciously. The changes in PMLA align with global standards to combat money laundering, reflecting India’s commitment to maintaining robust financial regulations.



IRAN-ISRAEL CONFLICT

Iran fired drones, surface-to-surface missiles, and cruise missiles against Israel under Operation True Promise (Also called "Operation Honest Promise")

The Iranian attack was in response to a suspected Israeli strike on an Iranian consular building in Damascus, Syria, which reportedly killed 12 people. In retaliation, the Iranian government announced a ban on all vessels linked to Israel from sailing in the Oman Sea and the Persian Gulf.

The current increase in tensions between Iran and Israel can be attributed to several factors:

- **Geopolitical Rivalry:** Iran aims to establish itself as the dominant power in the region, while Israel is deeply concerned about its national security.
 - **Support for Militant Groups:** Iran provides support to groups like Hezbollah in Lebanon and Hamas in Gaza. Additionally, Iran's efforts to develop nuclear weapons pose a significant threat to Israel's existence.
- This conflict also highlights a broader narrative of religious and cultural confrontation:
- **Clash of Civilizations:** Iran's Islamic Republic fundamentally challenges the existence of Israel as a Jewish State, fostering a narrative of religious and cultural conflict. This underscores the broader tensions between the Muslim-majority Middle East and Israel, a Western-oriented, Jewish-majority nation.

Leaders from various countries worldwide have condemned the Iranian assault and have called for an immediate halt to hostilities.

Historical Background

Pre-1979 Iranian Revolution:

- **Early Relations:** Despite not officially recognizing Israel post-1948, Iran maintained covert ties due to shared geopolitical interests.
- **Recognition:** Iran was the second Muslim-majority country to acknowledge Israel's sovereignty after Turkey.
- **Pahlavi Dynasty:** Mohammad Reza Shah Pahlavi's reign saw significant diplomatic, economic, and military collaboration with Israel, including oil supply and agricultural and military assistance.
- **Strategic Alliance:** During this phase, both nations formed a partnership to counter Arab nationalism and Soviet influence in the region.

Post-1979 Iranian Revolution:

- **Shift in Relations:** Ayatollah Khomeini's rise marked a drastic change as Iran cut all diplomatic ties with Israel.
- **Opposition to Western Influence:** Khomeini regarded Israel as a symbol of Western imperialism and dubbed it the little Satan aligned with the Great Satan (United States).

Shadow War post-1979:

- In the early 2010s, Israel conducted targeted strikes on Iranian facilities and nuclear scientists to hinder Iran's nuclear weapons development.
- Notably, in 2010, Israel, along with the US, allegedly developed the Stuxnet computer virus to disrupt Iran's uranium enrichment at the Natanz nuclear site, marking the first publicly known cyber-attack on industrial infrastructure.

Iranian Support for Militant Groups:

- Iran is accused of funding and supporting militant groups opposed to Israel and the US across the region.
- Notable recipients of Iranian support include Hezbollah in Lebanon and Hamas in the Gaza Strip, both known for their anti-Israel stance.

Reasons behind the Conflict

Ideological Differences:

- **Islamic Republic of Iran:** Established after the 1979 Revolution, which overthrew the pro-Western monarchy of Shah Mohammad Reza Pahlavi. The new regime, led by Ayatollah Khomeini, adopted an anti-Western and anti-Israeli stance, viewing Israel as an illegitimate entity occupying Palestinian land.
- **Israel:** Identifies as a Jewish State with historical and religious ties to the land of Israel. It perceives Iran's support for militant groups like Hamas and Hezbollah, which call for Israel's destruction, as a fundamental threat to its security.

Historical Animosity:

- **Pre-1979 Relations:** Before the 1979 Revolution, Iran and Israel maintained covert but significant diplomatic, economic, and military ties under the Pahlavi dynasty.
- **Post-1979 Shift:** The revolution marked a significant turning point, leading to the severing of diplomatic relations and the adoption of hostile rhetoric by Iran's new Islamic government towards Israel.

Israeli Security Concerns

- **Nuclear Threat:** Israel considers a nuclear-armed Iran an existential threat due to Iran's repeated calls for Israel's destruction and its support for proxy groups capable of launching attacks against Israel.
- **Proxy Empowerment:** Israel fears that a nuclear-armed Iran would embolden its proxies and increase the likelihood of direct confrontations.

Support for Proxy Groups:

- **Hezbollah and Hamas:** Iran provides significant support to Hezbollah in Lebanon and Hamas in Gaza, both of which have carried out attacks against Israel. Hezbollah has a substantial arsenal of rockets and missiles supplied by Iran, posing a direct threat to Israeli population centers.
- **Military Operations:** Israel has conducted numerous military operations to disrupt weapons shipments from Iran to its proxies and to prevent them from gaining advanced capabilities.

Geopolitical Rivalry and Regional Power Dynamics:

- **Regional Power Struggle:** Iran and Israel are engaged in a regional power struggle, each seeking to expand its influence in the Middle East. This competition is evident in conflicts such as the Syrian Civil War.
- **Syrian Civil War:** Iran supports the Assad regime, while Israel opposes the Iranian military presence near its borders. Israel has carried out airstrikes in Syria targeting Iranian-backed militias and weapons shipments to prevent Iran from establishing a permanent military presence on its northern border.
- **Pattern of Conflict:** The conflict often follows a pattern where Iranian-backed groups attack Israel with missiles, and Israel responds with airstrikes in Syria. This pattern was notably evident when Hamas launched terror attacks on Israel in October 2023.

International Response

- **Global Condemnation:** Leaders from various countries worldwide have criticized the Iranian assault and have called for an immediate halt to hostilities.

Possible Consequences

Geopolitical Instability

The Iran-Israel conflict adds complexity to the geopolitical dynamics in the Middle East. Iran's pursuit of regional dominance clashes with Israel's security concerns, leading to heightened tensions and instability. This conflict exacerbates rivalries between regional powers and has the potential to escalate into broader conflicts, impacting not only Iran and Israel but also neighboring countries and global stakeholders.

Security Threats

- **Support for Proxy Groups:** Iran's backing of Hezbollah in Lebanon and Hamas in Gaza provides these groups with capabilities to launch attacks against Israel. This poses a direct security threat to Israel and increases the risk of regional conflict.
- **Military Actions:** Israel's military actions, including airstrikes targeting Iranian assets in Syria, aim to counter these security threats. However, these actions can provoke retaliatory measures, further escalating tensions.



Regional Alliances:

- **Shifting Alliances:** The Iran-Israel conflict influences regional alliances, with countries aligning themselves based on their stance towards Iran and Israel.
- **Sunni and Shia Dynamics:** Sunni-majority Arab states, particularly those wary of Iran's influence, may tacitly align with Israel against Shia-majority Iran. This alignment redefines traditional geopolitical alliances in the Middle East and contributes to the polarization of the region along sectarian and ideological lines.

Humanitarian Impact:

- **Civilian Suffering:** Civilians in conflict zones such as Gaza, Lebanon, and Syria bear the brunt of the humanitarian impact. Ongoing violence, displacement, and infrastructure destruction exacerbate humanitarian crises and lead to civilian casualties.
- **Aid Challenges:** Humanitarian organizations face difficulties providing aid amid the conflict's volatile and unpredictable nature.

Geo-economic Consequences:

The Iran-Israel conflict disrupts economic activities in the region, impacting trade, investment, and infrastructure development.

Impact on Oil Supplies

- **Global Oil Markets:** As the third-largest producer within OPEC, Iran plays a significant role in global crude oil markets. Further escalation of tensions could disrupt crude oil supplies, leading to potential price spikes in the global market.
- **Inflation and Capital Outflow:** Heightened geopolitical tensions typically lead to increased commodity prices, including crude oil and metals like copper, zinc, aluminum, and nickel. This spike contributes to global inflation and prompts investors to shift from riskier assets to safer options like gold.

Financial Market Impact:

- **Investor Uncertainty:** Increased uncertainty and risk aversion among investors could lead to a decline in bond prices and a rise in borrowing costs for companies.
- **Stock Market Volatility:** Stock markets may experience volatility due to reduced corporate profitability and heightened market uncertainty.
- **Trade and Travel Disruptions:** In the event of an all-out conflict between Israel and Iran, trade and travel could be severely disrupted. The aviation and shipping sectors may face challenges, with several countries in the region, including Iran, Jordan, Iraq, Lebanon, and Israel, potentially closing their airspaces temporarily or imposing restrictions.

Maintaining a Balanced Stand: India's Position on the Iran-Israel Conflict

India issued a statement expressing "serious concern" over the escalation of hostilities between Iran and Israel and called for "immediate de-escalation." This balanced stance is rooted in several strategic and pragmatic reasons:

Reasons behind India's Stand

• Complex Regional Politics:

Diverse Engagement: The Middle East is marked by deep and pervasive inter-state and intra-state conflicts. India must balance its engagement with key regional actors such as Egypt, Iran, Israel, Qatar, Turkey, Saudi Arabia, and the United Arab Emirates, whose interests often conflict.

• Non-Ideological Engagement:

Broad Interests: India's interests in the Middle East are multifaceted and go beyond oil imports and labor exports. The Gulf Arab states, particularly Saudi Arabia and the United Arab Emirates, have emerged as major economic and political partners for India.

Strategic Partnerships: India maintains a non-ideological engagement to complement its expanding interests in the region.

Significance of the Region for India

•Threat to Indian Community:

Population at Risk: Approximately 18,000 Indians reside in Israel, 5,000-10,000 in Iran, and around 9 million in the Gulf and West Asia region. Any expanded conflict poses a significant risk to the Indian community in these areas.

•Energy Security:

Oil Dependence: The West Asia region contributes to 80% of India's oil supplies. A potential conflict could severely impact these supplies and lead to rising energy prices.

Price Impact: Although India has mitigated the impact of the Russia-Ukraine war on oil prices by purchasing discounted Russian oil, the Iran-Israel conflict could adversely affect global energy prices.

•Investment and Strategic Importance:

Strategic Relationships: India has invested significantly in its relationships with major Arab countries, Iran, and Israel. It views the region as its extended neighborhood and is pushing for the India-Middle-East-Europe Economic Corridor, which offers strategic and economic benefits.

Chabahar Port: The Chabahar Port in Iran is a critical strategic project, providing India access to Afghanistan and Central Asia, bypassing Pakistan.

• Defense Relations with Israel:

Strategic Partnership: India maintains a deep strategic relationship with Israel, particularly in defense and security.

Defense Procurement: India is one of the largest purchasers of Israeli defense equipment, including the Barak 8 missile defense system, Heron drones, and Spike anti-tank guided missiles, enhancing India's defense capabilities, especially in border surveillance and missile defense.

Innovation and R&D: The India-Israel Defense Industrial R&D and Technological Innovation Fund (I2DF) underscores the commitment of both countries to fostering innovation and collaboration in defense research and development.

Dialogue and Diplomacy

• **International Mediation:** It is crucial to employ international mediation to broker a sustainable ceasefire between Israel and Iran. This can foster an environment conducive to dialogue and conflict resolution. Neutral mediators, such as the European Union or the United Nations, can facilitate direct talks, helping to build trust and paving the way for constructive negotiations.

Addressing Nuclear

Proliferation Concerns

• **JCPOA Compliance:** Iran must adhere to the terms of the Joint Comprehensive Plan of Action (JCPOA) to alleviate international concerns regarding nuclear proliferation. Transparency and cooperation through international inspections of Iranian nuclear facilities are crucial steps in rebuilding trust.



- **Mutual Respect:** In return, Israel should acknowledge Iran's legitimate right to pursue peaceful nuclear energy capabilities, fostering an atmosphere of mutual respect and understanding.

Regional Cooperation

- **Collaborative Frameworks:** Promoting collaboration between Iran and Israel within existing regional frameworks, such as the Arab League or the Gulf Cooperation Council, can help address shared security challenges and contribute to regional stability.
- **Comprehensive Security Architecture:** Developing comprehensive security architecture in the Middle East, supported by multilateral cooperation and dialogue, offers a pathway to mitigating conflict risks and fostering sustainable peace.

Long-Term Vision for the Middle East

- **Resilient Security Framework:** Regional powers must embrace a long-term vision focused on building a resilient security framework. This should include robust confidence-building measures; arms control agreements, and mechanisms for resolving historical grievances.
- **Addressing Root Causes:** Confronting the root causes of conflict, such as religious extremism and historical animosities, is essential for fostering genuine peace and reconciliation. Investing in education, interfaith dialogue, and cultural exchange can promote mutual understanding and tolerance.
- **Normalization of Relations**
- **Diplomatic Normalization:** Initiating steps toward normalizing diplomatic relations between Iran and Israel is critical. This could involve the exchange of ambassadors, reopening embassies, and fostering people-to-people exchanges.
- **Inspiration from Peace Agreements:** Drawing inspiration from recent peace agreements between Israel and Arab states, such as the UAE and Bahrain, can provide a blueprint for building trust and cooperation between former adversaries. Embracing diplomacy and dialogue as the primary means of resolving differences can pave the way for a more stable and prosperous Middle East.



GREEN CREDIT PROGRAMME

The image features a young green plant with several leaves growing out of a rolled-up 200 Euro banknote. The banknote is partially unrolled, showing the number '200' and the word 'FEDERAL'. The plant is set against a dark green background with bokeh light effects. The overall composition suggests a connection between nature and finance.

The Green Credit Programme became a topic of discussion recently after the Ministry of Environment, Forest and Climate Change notified the rules for it.

GCP Programme

The Green Credit Programme (GCP) is positioned as an innovative, market-driven mechanism aimed at incentivizing voluntary environmental conservation actions.

Scope of the Programme

- The GCP encourages participation from individuals, organizations, and both public and private companies across various sectors.
- Participants are encouraged to invest in activities such as afforestation, water conservation, air pollution mitigation, waste management, and mangrove conservation.

Green Credits Incentive

Participants who invest in the specified environmental conservation activities are eligible to receive 'green credits' as a form of incentive.

Administration and Oversight:

- The Indian Council of Forestry Research and Education (ICFRE), an autonomous body under the Ministry of Environment, is responsible for administering and overseeing the GCP.
- The ICFRE plays a crucial role in ensuring the effective implementation and management of the programme.
- They will define methodologies to calculate 'green credits' that result from the activities prescribed.
- They will also manage a trading platform whereby such credits could be traded.

Afforestation Initiative Guidelines:

- The Ministry outlined rules governing the initial initiative focused on afforestation.
- Companies, organizations, and individuals are permitted to contribute funds for afforestation projects in designated areas of degraded forest and wasteland.
- The responsibility for actual tree planting is assigned to the State forest departments.
- After a period of two years post-planting, each tree undergoes evaluation by the ICFRE.
- Based on the evaluation results, each successfully planted tree becomes eligible for one 'green credit'.

Eight Key Activities:

1. **Afforestation:** Involves planting trees to create more green spaces, combat deforestation, and improve the environment.
2. **Water Management:** Includes strategies to use water more wisely and conserve it, ensuring the protection and availability of water resources for future generations.
3. **Sustainable Agriculture:** Promotes farming practices that are environmentally safe, such as using natural fertilizers and reducing chemical use, to ensure sustainable food production without harming soil fertility.
4. **Waste Management:** Focuses on managing waste to reduce pollution and environmental damage, including converting organic waste into renewable energy sources.
5. **Air Pollution Reduction:** Focuses on reducing air pollution by using cleaner energy sources, controlling emissions from factories and vehicles, and improving air quality for public health.
6. **Mangrove Conservation:** Involves protecting and restoring mangrove forests, vital ecosystems that provide habitat for many species and protect coastlines from erosion and storms.
7. **Eco-mark Labelling:** Involves obtaining eco-mark certification for products that meet high environmental sustainability standards, indicating they are eco-friendly and do not harm the environment.
8. **Sustainable Buildings:** Involves constructing buildings and structures in an environmentally friendly manner, using ecofriendly materials, designing for energy and water efficiency, and minimizing impact on surrounding nature.

Earning Green Credits

- **Registration:** Individuals or entities seeking green credits must register their activities through the Union Government's dedicated app or portal.
- **Payment for Afforestation Projects:**
 - Registered entities can finance afforestation projects in specific tracts of degraded forest and wasteland by making payments.
 - The actual afforestation will be carried out by State Forest departments.
- **Voluntary Tree Plantation:** Initially, voluntary tree plantation is envisaged on degraded land, waste land, and watershed areas under the control and management of Forest departments.
- **Evaluation:**
 - After two years of planting, the International Council of Forestry Research and Education will evaluate the work to determine if the plants qualify for green credits.
 - Each healthy plant/tree could be worth one 'green credit'.
- **Utilization of Green Credits:** Companies that have diverted forest land for non-forest purposes and razed trees can use these green credits to offset some of their obligations under India's compensatory afforestation laws.

Progress:

- **Identification of Parcels:** 10 States have identified parcels of degraded forest land, totaling about 3,853 hectares, available for individuals, groups, public and private sector units to earn and potentially trade green credits.
- **Significant Contributions:** States like Chhattisgarh and Madhya Pradesh alone account for up to 40% of the forest land made available for green credit projects.

Benefits:

- Green credits offer a potential boost to afforestation efforts by serving as incentives for private investments in tree plantation activities.
- The Compensatory Afforestation Act mandates industries to compensate for forest land they clear for non-forestry purposes by providing non-forest land to forest authorities and funding afforestation projects.

However, compliance with this requirement presents challenges, particularly regarding the proximity of the compensation land to the cleared forest area.
- States like Chhattisgarh, Madhya Pradesh, and Odisha face difficulties in finding contiguous non-forest land for afforestation due to extensive forest land diversion for mining activities.
- Consequently, significant amounts of compensation funds remain unused, highlighting the need for alternative approaches to incentivize afforestation, such as the implementation of green credits.



Concerns:

• **Commodification of Environmental Conservation:**

- According to India's forest conservation laws, industries permitted to clear forests for non-forestry purposes must compensate by providing non-forest land to forest authorities and funding afforestation.
- Critics argue that the GCP's afforestation initiative could potentially facilitate forest diversion for mining and infrastructure projects by allowing companies to exchange credits for complying with compensatory afforestation requirements.

• **Challenges in Afforestation:**

- Planting trees does not guarantee ecosystem enhancement, considering India's diverse forest ecosystems comprising various types, including grasslands and shrub-dominated areas.
- Studies indicate that inappropriate tree planting may lead to the proliferation of invasive species or disrupt sustainable ecosystem dynamics.

• **Controversy Surrounding Carbon Trading:**

- The GCP proposes that green credits earned through carbon sequestration (tree planting) can be utilized for carbon trading.
- However, there's uncertainty regarding the equivalence between afforestation activities and carbon storage, raising questions about the validity of carbon trading mechanisms associated with the program.

• **Afforestation Pressure on Wastelands:**

- The focus on afforestation efforts targeting "degraded land parcels" places significant pressure on areas commonly labeled as wastelands.
- Wastelands, including grasslands, hold ecological significance by facilitating carbon sequestration and fostering diverse biodiversity.
- Afforestation initiatives in these regions may jeopardize the presence of endemic species and disrupt essential ecological functions.

Way Forward:

• **Ecological Assessment and Targeted Initiatives:**

- Conduct comprehensive ecological assessments to identify priority areas for afforestation, water conservation, waste management, and other environmental initiatives.
- Implement targeted projects based on the assessment findings to maximize environmental benefits and minimize negative impacts.

• **Community Engagement and Participation:**

- Foster community involvement and participation in green credit initiatives through awareness campaigns, training programs, and incentivized participation.
- Encourage local communities to take ownership of environmental projects, ensuring sustainable practices and long-term stewardship.

• **Monitoring, Evaluation, and Adaptive Management:**

- Establish robust monitoring and evaluation mechanisms to track the effectiveness of green credit projects and their environmental outcomes.
- Utilize adaptive management strategies to address challenges, refine project approaches, and optimize resource allocation based on real-time feedback.

“India’s Global Influence and Regional Challenges: A Closer Look”



One of the paradoxes of contemporary Indian foreign policy is that a globally India growing but regionally India is a declining power.

- India’s aggregate power has grown over the past two decades which is evident in robust economic growth, military capabilities, and a largely young demography.

Factors Leading to India's Global Rise

•Multilateral alliances:

- Hosting of events such as the G-20 meetings, inclusion as an invitee at G-7 meetings, and active participation in multilateral groups such as the Quad, BRICS, and the Shanghai Cooperation Organisation further highlight its geopolitical significance and its powerful presence globally, even if it is not a member of the United Nations Security Council.

•Economic Boom:

- The World Bank has forecasted India's growth to reach 7.5% in FY24. Since the start of the 21st century, annual average GDP growth has been 6% to 7%.
- India's large and diverse market size is a magnet for foreign investors. With a population of over 1.3 billion people, India offers immense opportunities for businesses across various sectors. By 2030, India is projected to become the world's third-largest consumer market.

•Demographic Dividend:

- India's population is among the youngest in an ageing world. By 2022, the median age in India will be 28 years; in comparison, it will be 37 in China and the United States, 45 in Western Europe, and 49 in Japan.
- This demographic dividend provides a significant advantage in terms of a large workforce and potential for innovation and entrepreneurship. By harnessing its youthful population through skill development initiatives and education reforms, India can fuel economic growth and strengthen its position as a global powerhouse.

•Technology and Innovation Hub:

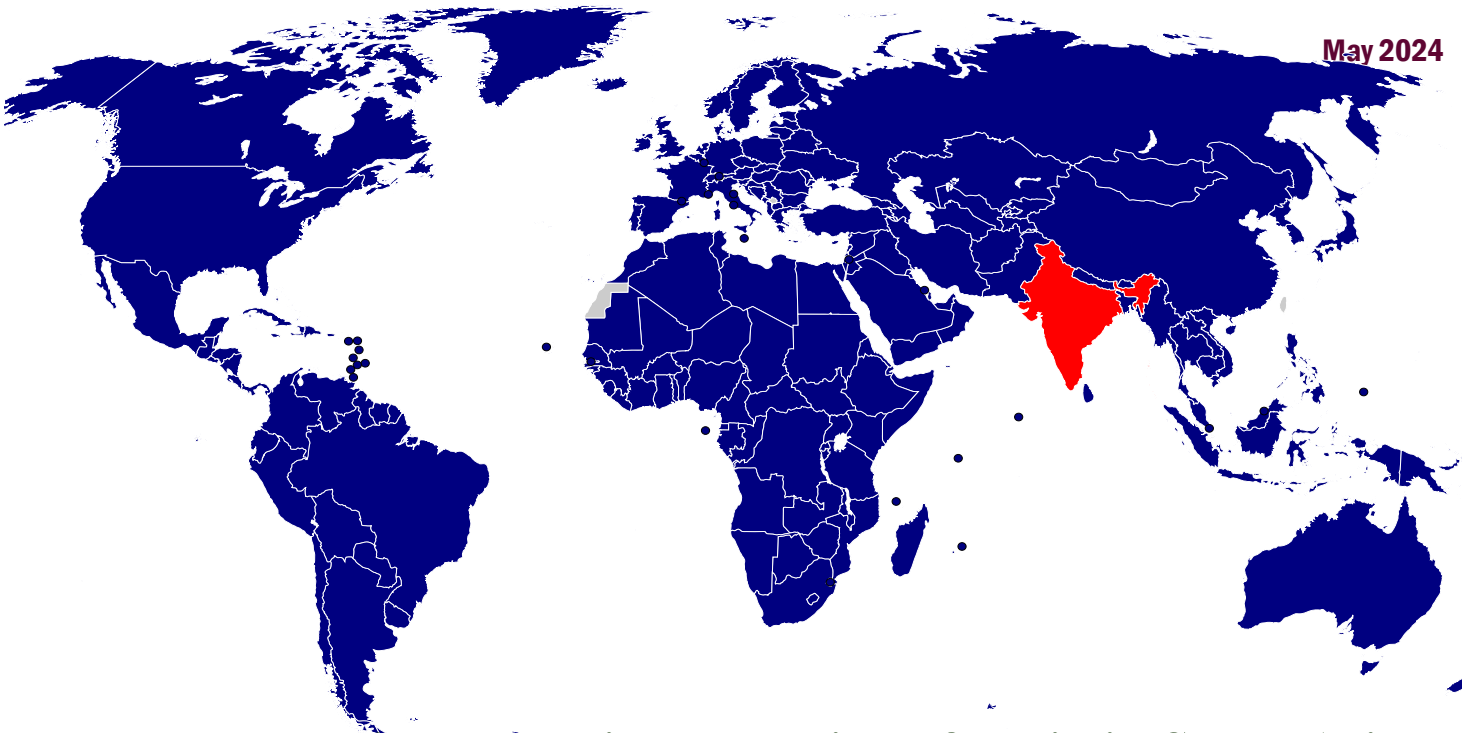
- India has emerged as a global hub for technology and innovation, particularly in the IT and software sectors. The country is home to a thriving startup ecosystem, with cities like Bangalore, Hyderabad, and Pune gaining recognition as tech hubs.
- Indian tech companies are making waves internationally, with firms like Tata Consultancy Services (TCS) and Infosys among the world's largest IT services providers. Additionally, India's space agency, ISRO, has achieved remarkable milestones, such as the Mars Orbiter Mission at a fraction of the cost compared to other space agencies.

•Power and Cultural Influence:

- India's rich cultural heritage, including its literature, music, cinema, and cuisine, contributes to its soft power and global influence. Bollywood, for instance, has a massive international following, and Indian cuisine is popular worldwide.
- The Indian diaspora, numbering over 30 million people, is spread across the globe and serves as a bridge between India and the rest of the world, fostering cultural exchange, trade, and investment.

•Rising Military Capabilities:

- India has been actively modernising its military capabilities through significant investments in defense spending. As of 2021, India's defense budget stood at approximately \$73.65 billion, making it one of the top military spenders globally. INS Sahyadri, LCA Tejas and INS Vikrant are prime examples of India's recently built military capabilities



Factors are leading to Regional Decline of India in South Asia

•Strained Bilateral Relations:

- India's relations with certain neighboring countries, such as Pakistan and Nepal, have been marred by historical animosities, territorial disputes, and geopolitical rivalries. Persistent tensions and occasional conflicts have hindered efforts for regional cooperation and stability.

• China's Growing Influence:

- China's increasing economic, political, and military presence in South Asia has altered the regional dynamics, posing challenges to India's traditional dominance. Through initiatives like the Belt and Road Initiative (BRI), China has expanded its infrastructure projects and strategic partnerships in the region, sometimes at the expense of India's interests.

•Internal Instability and Conflict:

- Persistent internal conflicts and political instability within certain South Asian countries, such as Afghanistan, Bangladesh, and Sri Lanka, have limited their capacity for regional cooperation and engagement. India's efforts to promote stability and development in these countries have faced challenges amidst ongoing conflicts and power struggle.

•Low Regional Trade:

- Intra-regional trade in South Asia is already among the lowest in the world. India's trade with the South Asian countries has remained roughly between 1.7% and 3.8% of its global trade.

•Economic Disparities and Development Gaps:

- Despite India's economic growth and development, disparities within South Asia persist, contributing to regional tensions and mistrust. Economic disparities between India and its neighbors, coupled with unequal access to resources and opportunities, have fueled grievances and affected efforts for inclusive regional development.

•Security Challenges and Terrorism:

•Persistent security challenges, including cross-border terrorism and insurgencies, have undermined regional stability and cooperation. India's concerns about terrorism emanating from certain neighboring countries, particularly Pakistan, have strained bilateral relations and hindered efforts to build trust and cooperation in the region.

•Geopolitical Competition:

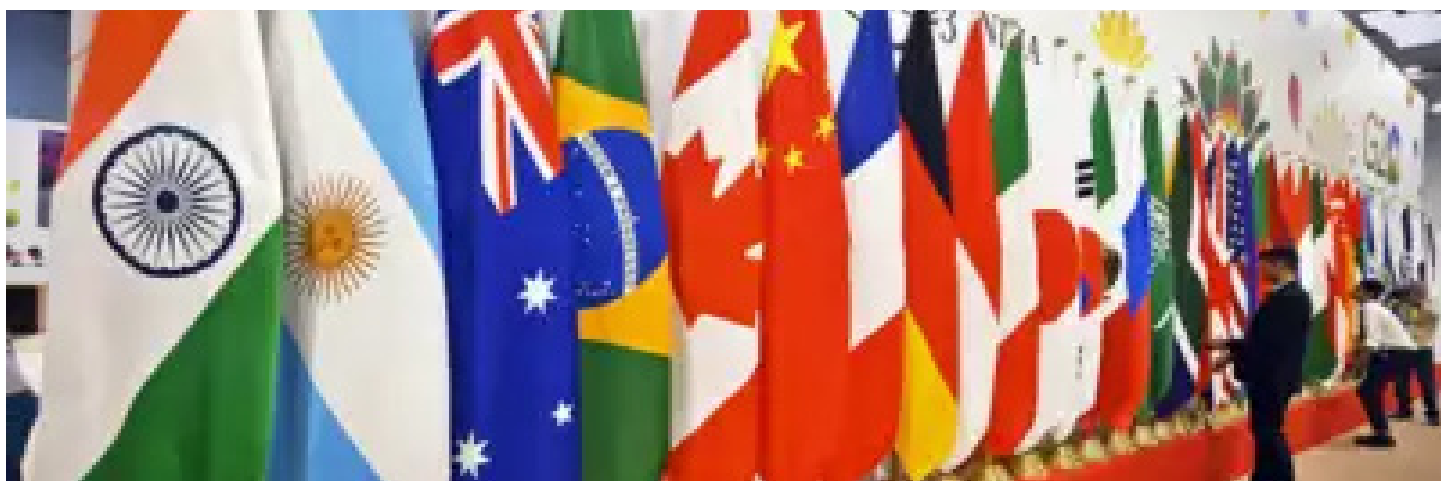
•Geopolitical competition among major powers, including India, China, and the United States, has influenced regional dynamics and exacerbated tensions in South Asia. Rivalry for strategic influence and access to resources has sometimes undermined prospects for cooperative regional initiatives.

•Limited Regional Integration Efforts:

•Despite various attempts to promote regional integration, initiatives such as the South Asian Association for Regional Cooperation (SAARC) have faced challenges in achieving meaningful cooperation and integration among member states. Differences in priorities, competing interests, and bilateral tensions have affected progress towards greater regional cohesion.

India's challenges with neighbouring countries

- China:** The unresolved border dispute, particularly concerning the Line of Actual Control (LAC), has led to military standoffs, notably the recent Galwan Valley Standoff. India protests against China's String of Pearls Strategy and the China-Pakistan Economic Corridor. Recent territorial claims by China, encompassing Arunachal Pradesh and the Aksai Chin region, have raised tensions.
- Maldives:** Recent political developments have witnessed anti-India sentiments under the "India Out" campaign had casted Indian presence as a sovereignty threat. Diplomatic disputes and China's expanding influence, raises concerns regarding India-Maldives relations.
- Bangladesh:** India and Bangladesh's relationship is threatened with limited progress in water sharing agreements. India and Bangladesh have signed only 2 treaties out of 54 common rivers they share, including the Ganga Waters Treaty and The Kushiyara River Treaty. Illegal immigrants from Bangladesh including Rohingyas affect the India Bangladesh relations.
- Sri Lanka:** Challenges persist in India's relationship with Sri Lanka, including disputes over the ownership of Katchatheevu Island, border security concerns, and tensions about China's increasing influence, particularly through infrastructure projects like the Hambantota Port.
- Nepal:** The India-Nepal border dispute revolves around the Kalapani region and the Lipulekh Pass. The border dispute over Kalapani is rooted in competing interpretations of maps and ground evidence. Nepal claims that the river to the west of Kalapani should be the border, while India maintains control over the region based on its assertion of the eastern river as the border.



• Diplomatic Engagement and Conflict Resolution:

- India should prioritise diplomatic engagement with neighbouring countries to address bilateral disputes and build trust. Initiating dialogues and confidence-building measures can help in resolving long standing issues such as border disputes, water-sharing agreements, and territorial claims.

• Economic Integration and Development Cooperation:

- India can promote economic integration and development cooperation initiatives to foster inclusive growth and address socio-economic disparities in the region. Enhancing trade relations, investing in infrastructure projects, and facilitating people-to-people exchanges can strengthen regional connectivity and prosperity.

• Security Cooperation and Counterterrorism Efforts:

- Strengthening security cooperation and counterterrorism efforts with neighboring countries is crucial for maintaining regional stability and addressing common security threats. Collaborative efforts in intelligence-sharing, border security, and counterterrorism operations can enhance mutual trust.

• Promotion of Soft Power and Cultural Diplomacy:

- Leveraging India's rich cultural heritage and soft power assets can enhance its influence in the region. Promoting cultural exchanges, educational scholarships, and tourism initiatives can promote greater understanding and goodwill among South Asian nations, consolidating India's cultural leadership.

• Regional Integration Mechanisms and Institutional Cooperation:

- India should actively engage in regional integration mechanisms such as the South Asian Association for Regional Cooperation (SAARC) while exploring alternative platforms for cooperation. Initiating joint projects, sharing best practices, and collaborating in areas like healthcare, climate change, and disaster management can strengthen regional solidarity and cooperation.

• Infrastructure Connectivity and Connectivity Projects:

- Investing in infrastructure connectivity projects, such as road, rail, and energy corridors, can enhance physical connectivity and facilitate economic integration within South Asia.
- Initiatives like the International North-South Transport Corridor and the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) can serve as platforms for regional connectivity and cooperation.

• Balancing Major Power Dynamics:

- India should navigate the complex dynamics of major power competition in the region, particularly between China and the United States. By maintaining strategic autonomy and pursuing a balanced approach, India can safeguard its interests.



RIGHT AGAINST CLIMATE CHANGE IS A FUNDAMENTAL RIGHT

The Supreme Court in MK Ranjitsinh v. Union of India has ruled that people have a “right to be free from the adverse effects of climate change”, which should be recognized by the combined reading of Article 14 and Article 21. The court further said that the environment-related aspects of the Directive Principles of State Policy must be read together with the right to life and personal liberty under Article 21.

MK RANJITSINH V. UNION OF INDIA

- **History of this case:** A writ petition filed in 2019 (MK Ranjitsinh And Ors. v. Union of India) sought conservation directives amid the declining population of Great Indian Bustards.
- **Court Orders:** In April 2021, the Supreme Court ordered all power lines be buried in Bustard habitat. However, the court later agreed to review its order due to practical challenges highlighted by the centre and considering the importance of renewable energy and climate commitments.
- **Revision by Supreme Court:** In 2024, while the Supreme Court underscored the importance of protection of Bustard, it modified its order with respect to conversion of overhead transmission line to underground transmission lines. Court has further said that other factors such as low fecundity, fragmentation, habitat loss, predators, and loss of prey must be addressed.

OBSERVATIONS

- **Habitat and Species Status:** Desert National Park in Rajasthan shelters the critically endangered Great Indian Bustard and Lesser Florican.
- **Threats to Species:** Overhead cables, particularly in solar parks, pose a significant threat to the survival of these birds.
- **Mortality Statistics:** Power Line Mitigation, 2018 report highlighted that around 1 lakh birds die annually due to collisions with power lines, necessitating urgent action to prevent the extinction of the Great Indian Bustard.
- **Ministry of Power's Statement:** Ministry of Power acknowledged the vulnerability of Great Indian Bustards to power lines due to their lack of frontal vision, emphasizing the risk of collision and electrocution.
- **Article 14 and climate change:** Supreme Court held that climate change affects the right to equality, the Court reasoned that "If climate change and environmental degradation lead to acute food and water shortages in a particular area, poorer communities will suffer more than richer ones. The right to equality would be impacted in each of these instances".
- **Article 21 and right to clean environment:** Article 21 of the constitution states that "no person shall be deprived of his life or personal liberty except according to procedure established by law". Article 21 has received liberal interpretation from time to time after the decision of the Supreme Court in Maneka Gandhi vs. Union of India. Article 21 guarantees fundamental right to life, Right to an environment, free of danger of disease and infection is inherent in it.

ENVIRONMENTAL JURISPRUDENCE IN INDIA

- In the 1980s, SC read the right to a clean environment as part of Article 21. A bundle of rights, including the right to education, the right to shelter (in the context of slum dwellers), the right to clean air, the right to livelihood (in the context of hawkers), and the right to medical care have all been subsequently included under the umbrella of Article 21.
- **Rural Litigation and Entitlement Kendra vs. State:** Right to a healthy environment is an important attribute of the right to live with human dignity. The right to live in a healthy environment as part of Article 21 of the Constitution was first recognized in the case of Rural Litigation and Entitlement Kendra vs. State. It is the first case of this kind in India, involving issues relating to environment and ecological balance in which the Supreme Court directed to stop the illegal mining under the Environment (Protection) Act, 1986.
- **M.C. Mehta vs. Union of India:** Supreme Court treated the right to live in a pollution free environment as a part of fundamental right to life under Article 21 of the Constitution.
- **Subhash Kumar v. State of Bihar (1991):** the Supreme Court held that the right to life includes the right to a healthy environment, and it is the duty of the government to protect and improve the environment. The court observed that the right to life and personal liberty cannot be enjoyed in the absence of a clean environment.

- **Vellore Citizens Welfare Forum vs Union of India:** The Supreme Court held that though industries are vital for the country's development, having regards to the pollution caused by them, the principle of 'sustainable development' has to be adopted as the balancing concept.
- **M.C. Mehta v. Kamal Nath (1996) & Virender Gaur v. State of Haryana:** Recognized the right to a clean environment as a part of Article 21 of the Constitution. However, the Court underlined that "it is yet to be articulated that the people have a right against the adverse effects of climate change." Observing how climate change is increasing year by year, the Court underscored the need to recognize this right as a distinct one.
- **Consumer Education and Research Centre v. Union of India (1995):** The right to health has also been recognized as a part of the right to life under Article 21. In Consumer Education and Research Centre v. Union of India (1995), the Supreme Court held that the right to health is a fundamental right under Article 21, and the government has a duty to provide adequate medical facilities to its citizens.
- **Karnataka Industrial Areas Development Board vs C Kenchappa, 2006:** Supreme Court took note of the adverse effects of rising sea levels and rising global temperatures.
- **Bombay Dyeing & Mfg. Co. Ltd. v. Bombay Environmental Action Group, 2006:** Supreme Court recognized that climate change posed a "major threat" to the environment.

OUTCOMES OF THE JUDGMENT

- **Impact of climate change on health:** The right to health (which is a part of the right to life under Article 21) is impacted due to factors such as air pollution, shifts in vector-borne diseases, rising temperatures, droughts, shortages in food supplies due to crop failure, storms, and flooding. The inability of underserved communities to adapt to climate change or cope with its effects violates the right to life as well as the right to equality. The judgment acknowledged the right to a healthy environment, safe from the ill-effects of climate change, was a "fundamental human right".
- **Expanded scope of Article 14:** Judgment has expanded the purview of Article 14. It was observed that if climate change and environmental degradation lead to acute food and water shortages in a particular area, poorer communities will suffer more than richer ones.
- **Important legal precedent:** This judgment will set an important legal precedent and will influence the broader public discourse on environmental matters and has the potential to shape future government policies.
- **Importance of solar power:** Judgment also highlighted the importance of solar power for arresting ills of climate change.
- **Increased energy demand:** 25% of global energy demand is likely to be from India in the next two decades.
- **Enhanced energy security:** Renewable energy provides enhanced energy security by reducing reliance on fossil fuels.
- **Improved public health:** adoption of renewable energy technologies helps in curbing air pollution, thereby improving public health and reducing healthcare costs.

Exploring Timely Topics

POLITY

ECONOMY

INTERNATIONAL RELATIONS

SCIENCE AND TECH

ENVIRONMENT

SPECIES IN NEWS

PLACES IN NEWS

MISCELLANEOUS

GUIDELINES FOR THE ELIMINATION OF CORPORAL PUNISHMENT IN SCHOOLS...

- The Tamil Nadu School Education Department has released Guidelines for the Elimination of Corporal Punishment in Schools (GECPE), focusing on safeguarding students' physical and mental well-being.

- The guidelines, issued jointly by the Director of School Education and the Director of Elementary Education, address various forms of harassment, in line with the Right to Education Act, 2009.

- Measures include awareness camps, prompt complaint resolution, and the establishment of monitoring committees at each

Affirmative actions against corporal punishment and promoting a positive environment are also emphasized. District-level officers are instructed to ensure schools implement these guidelines effectively.

- Corporal Punishment refers to the use of physical force against students as a means of discipline or punishment in educational settings.

- It can include actions such as hitting, spanking, or other forms of physical punishment inflicted by teachers or school authorities on students.

National Centre for Good Governance: MoU...

- A delegation from India visited Bangladesh for bilateral discussions on renewing the Memorandum of Understanding (MoU) between India's National Centre for Good Governance (NCGG) and Bangladesh's Ministry of Public Administration.

- The primary agenda of the visit is to negotiate the renewal of the MoU for the period 2024-2029, focusing on mid-career capacity-building programs for Bangladesh Civil Servants.

- The National Centre for Good Governance (NCGG) is an autonomous institute under the aegis of the Department of Administrative Reforms and Public Grievances, Government of India.

- Its mission is to facilitate governance reforms through studies, training, knowledge sharing, and the promotion of innovative ideas.

- Purpose and Functions:

- The NCGG focuses on public policy, governance, and reforms.

- It conducts policy-relevant research and prepares case studies.

- The centre curates training courses for civil servants from India and other developing countries.

- It collaborates with the Ministry of External Affairs (MEA) to provide training to civil servants from various nations.

- The NCGG aims to enhance the capacity of civil servants in India and other developing countries.



Water Trading: NITI Aayog Report

- As urbanization gathers pace, more and more waste water is generated. But only about 40% of this is treated, and even that is not being reused.
- The NITI Aayog, said in a report titled ‘water trading mechanism to promote reuse of treated water’ that in many countries water trading has helped achieve water-use efficiency and productivity.
- Water Trading is a water market mechanism that considers water as a commodity rather than a public good.
- It can be traded amongst users according to their needs.
- A water company rather than creating its own water source, can buy the water from a third party and sell it to the users.
- Enabling elements for Water Trading:
 - Ownership of water – should be indisputable.
 - Water entitlements- could be transferred.
 - Water Reuse Certificates (WRCs) – as tradable permits.

India VIX

India’s VIX surged above 16.5 amidst election-driven volatility, prompting caution from experts on leveraged positions. With the general election outcome nearing, market experts anticipate increased volatility.

• India VIX is a volatility index that measures the expected volatility in the Indian stock market over the next 30 days.

• It is often referred to as the “Fear Index” because it reflects investors’ sentiments about the market’s future volatility.



- A high India VIX suggests that investors expect significant fluctuations in stock prices, indicating uncertainty and risk in the market.
- A low India VIX indicates expectations of relatively stable market conditions.

4TH SESSION OF INTERGOVERNMENTAL NEGOTIATING COMMITTEE:

- INC-4 Session in Ottawa: The fourth session of the Intergovernmental Negotiating Committee (INC-4) under the United Nations Environment Agency (UNEA) took place in Ottawa, Canada, with participation from over 170 member states.
- Objective of INC-4: This session is part of ongoing negotiations aimed at creating a legally binding treaty on plastic pollution by the end of 2024 under UNEA.
- Lack of Agreement at INC-4: Despite efforts, the INC-4 session failed to reach an agreement.
- Negotiators are now aiming for a consensus by the end of 2024 at the upcoming INC-5 session, scheduled for November 2024 in South Korea.
- INC Overview: The Intergovernmental Negotiating Committee (INC) was established by the United Nations Environment Programme (UNEP) in March 2022 to develop an international legally binding agreement on plastic pollution, addressing the entire life cycle of plastic and incorporating both voluntary and binding approaches.
- Previous INC Sessions: The INC-1 session was held in November 2022 in Punta del Este, Uruguay; INC-2 took place in May-June 2023 in Paris, France; and INC-3 convened in December 2023 in Nairobi, Kenya.

6th International Conference on Disaster Resilient Infrastructure (ICDRI) 2024

- The Prime Minister of India addressed the 6th International Conference on Disaster Resilient Infrastructure (ICDRI) 2024.
- ICDRI is the annual international conference of the Coalition for Disaster Resilient Infrastructure (CDRI), held in partnership with member countries, organizations, and institutions.
- The conference aims to enhance the resilience of infrastructure systems to climate and disaster risks, thereby promoting sustainable development.
- CDRI was launched in 2019 at the United Nations Climate Action Summit in New York, marking India's second major global initiative after the International Solar Alliance (ISA).
- The CDRI Secretariat is based in New Delhi, India.
- India initiated this effort, focusing on capacity building and pilot projects in Small Island Developing States (SIDS).
- The initiative is supported by the United Nations Development Programme (UNDP) and the United Nations Office for Disaster Risk Reduction (UNDRR).

Other notable CDRI programs include resilient housing in Dominica, resilient transport networks in Papua New Guinea, and enhanced early warning systems in the Dominican Republic and Fiji.



Prime Minister Narendra Modi addresses the 6th edition of the International Conference on Disaster Resilient Infrastructure (CDRI) via video message, Wednesday, April 24, 2024

#PLAYTRUE CAMPAIGN : NADA

The National Anti-Doping Agency (NADA) India recently wrapped up its #PlayTrue Campaign, attracting over 12,133 participants.



- The #PlayTrue Campaign, organized by NADA India, aims to raise awareness about clean sports and anti-doping practices.
- Through activities like quizzes and awareness sessions, it promotes fair play and integrity in sports, aligning with the World Anti-Doping Agency (WADA) vision.
- Sports ethics essentials include promoting fair play, and integrity, and rejecting doping.

It emphasizes the importance of clean competition and upholding anti-doping regulations to ensure a level playing field for all athletes.



**NATIONAL
ANTI DOPING
AGENCY
INDIA**

India Proposes Digital Competition Bill, 2024 Against Tech Giants

The government has proposed the Digital Competition Bill, 2024 taking a clue from European regulatory frameworks. This draft law aims to regulate the operations of major technology firms such as Google, Facebook, and Amazon, ensuring they do not misuse their dominant positions.

- This proposal seeks to prevent these corporations from favouring their services over competitors' and misusing data to benefit their various business segments.
- The Bill introduces a proactive regulatory approach (ex-ante), which anticipates and prevents anti-competitive practices before they occur, unlike the reactive (ex post) framework under the current Competition Act, 2002.
- The Bill proposes identifying Systematically Significant Digital Enterprises (SSDEs) based on criteria like turnover, user base, and market influence. These SSDEs will be restricted from certain practices such as self-preferencing and anti-steering.
- The legislation also plans to regulate ADEs which benefit from data shared within their group companies, ensuring that their operations do not undermine competitive practices.



Diplomatic Passport

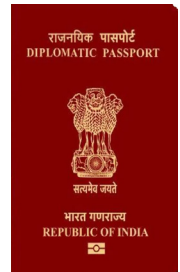
After sexual abuse allegations surfaced against Janata Dal (Secular) MP Prajwal Revanna, he fled to Germany using a diplomatic passport.



- Diplomatic passports are issued to individuals representing a country on official diplomatic missions or government business.
 - They are used by diplomats, government officials, and sometimes their immediate family members.
- These passports are a form of identification and carry certain legal privileges and immunities under international law, such as immunity from arrest, detention, and

certain legal from arrest, detention, and certain legal proceedings in the host country.

- In India, the Ministry of External Affairs' Consular, Passport & Visa Division issues diplomatic passports, also known as 'Type D' passports, to individuals falling into several categories:
 - Government-appointed individuals and officers working under branches A and B of the Indian Foreign Service (IFS) traveling abroad for official business
 - Select individuals on official travel, including union ministers and Members of Parliament (MPs).



Rythu Bharosa Scheme : Hold The Disbursement Of Amounts

The Election Commission of India (ECI) has put on hold the disbursement of amounts under Rythu Bharosa (previously known as Rythu Bandhu) till the completion of polling for the Lok Sabha election in the State.

- The Chief Minister of Telangana violated the Model Code of Conduct (MCC) by publicly speaking about ensuing disbursement under the Rythu Bharosa.
- The MCC is a set of guidelines issued by the ECI to regulate the conduct of political parties and candidates during elections.
- Article 324 of the Constitution grants the ECI the authority to oversee and ensure the conduct of impartial elections for both the Parliament and State Legislatures.
- The scheme 'RYTHU BHAROSA' is one of the nine navratna welfare schemes launched by Telangana Govt in June 2019.
- The scheme provides financial assistance of Rs. 13,500 per farmer family every year including tenant farmers also across the state.





Vibrant Village Programme : Data

The Home Ministry recently sanctioned 113 roads under the Vibrant Village Programme in Arunachal Pradesh, Uttarakhand, and Sikkim.

- Vibrant Village Programme is a Centrally Sponsored Scheme implemented over the financial years 2022-23 to 2025-26.
 - Objective is comprehensive development of villages and blocks on the northern border, thus improving the quality of life of people living in identified border villages.
 - This will help in encouraging people to stay in their native locations in border areas and reversing the outmigration from these villages, adding to improved security of the border.
 - It will provide funds for the development of essential infrastructure and the creation of livelihood opportunities in 2967 villages in 19 Districts and 46 Border blocks of 4 states and 1 UT along the northern land border of the country: Arunachal Pradesh, Sikkim, Uttarakhand, Himachal Pradesh, and the UT of Ladakh.
 - It envisages focused areas of intervention in the select villages for the creation of opportunities for livelihood generation through promotion of tourism and cultural heritage, skill development and entrepreneurship, and development of cooperative societies, including agriculture/horticulture, cultivation of medicinal plants/herbs etc.
 - Interventions also include providing road connectivity to unconnected villages, housing and village infrastructures, energy including renewable energy, television and telecom connectivity.
 - Vibrant Village Action Plans will be created by the district administration with the help of Gram Panchayats, and 100 % saturation of Central and state schemes will be ensured.
- There will be no overlap with the Border Area Development Programme.

Swachhata Pakhwada

The Ministry of Development of North Eastern Region (MDoNER) has taken a significant step towards promoting cleanliness and environmental sustainability with the launch of Swachhata Pakhwada and it will run from 16th May to 31st May 2024.

- Swachhata Pakhwada is an initiative launched in April, 2016 under the Swachh Bharat Mission.
- It was launched with the objective of bringing a fortnight of intense focus on the issues and practices of Swachhata by engaging the central government ministries/departments.
- It aims to include all ministries and departments through a common programme to contribute for Swachh Bharat Mission.
- An annual calendar is pre-circulated among the ministries to help them plan for the Pakhwada activities.
- The ministries observing Swachhata Pakhwada are monitored closely using the online monitoring system of Swachhata Samiksha where action plans, images, videos related to Swachhata activities are uploaded and shared.
- For the Pakhwada fortnight, observing ministries are considered as ‘Swachhata Ministries’ and are expected to bring qualitative swachhata improvements in their jurisdictions.

Swachh Bharat Mission:

- The Indian government launched the swachh bharat mission on October 2, 2014.
- The mission covered all rural and urban areas.
- The urban component of the mission is implemented by the Ministry of Urban Development, and the rural component by the Ministry of Drinking Water and Sanitation.



Inflation Expectations Survey of Households and Consumer Confidence Survey..

- The Reserve Bank of India (RBI) recently announced the launch of 'Inflation Expectations Survey of Households' and 'Consumer Confidence Survey'.
- Inflation Expectations Survey of Households' and 'Consumer Confidence Survey' are launched by the Reserve Bank of India (RBI).
- They will provide useful inputs for the bi-monthly monetary policy.
- Inflation Expectations Survey of Households aims at capturing subjective assessments on price movements and inflation, based on their individual consumption baskets.
- This survey spans 19 cities, including Guwahati, Hyderabad, Jaipur, Kolkata, Luck now, and Thiruvananthapuram.
- It seeks qualitative responses from households on price changes (general prices as well as prices of specific product groups) in the three months ahead as well as in the one-year ahead period.
- Additionally, it will collect quantitative data on current, three-month ahead, and one-year ahead inflation rates.

IREDA Get Navratna Status...

- IREDA (Indian Renewable Energy Development Agency), the financing agency for Renewable projects in India, was conferred with 'Navratna status' by the Department of Public Enterprises (Ministry of Finance)
- IREDA is under the administrative control of the Ministry of New and Renewable Energy.
- It was established as a Non-Banking Financial Institution in 1987.
- This status grants greater autonomy and facilitates quicker decision-making, attracting more investments and skilled talent.
- As a Navratna PSU, IREDA can operate more efficiently, compete effectively, and achieve sustainable growth

ENERGY FOR EVER



ONCE IREDA ALWAYS IREDA



- **Interest in Inheritance Tax Legislation:** A prominent leader from India's opposition party has shown interest in the proposed inheritance tax legislation.
- **Tool for Addressing Income Inequality:** There has been considerable discussion about using inheritance tax as a means to redistribute wealth and address income inequality in India.
- **Understanding Inheritance Tax:** Inheritance tax is a levy on the value of property or assets inherited from a deceased person, paid by the beneficiary. Depending on the country, this tax can reach up to 55%.
- **Current Status in India:** Currently, India does not impose a tax on inheritance. To implement such a tax, the first step involves determining the total value of the deceased's assets, which includes real estate, investments, bank accounts, vehicles, personal belongings, and deducting any outstanding debts.
- **Factors Affecting Inheritance Tax:** The applicability of inheritance tax depends on various factors, such as the total value of the estate and local laws. In some jurisdictions, certain beneficiaries like spouses or children may be exempt or subject to a reduced tax rate.

Street Vendors Act

- **Tenth Anniversary of Street Vendors Act:** The Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014, recently celebrated its tenth anniversary, marking the culmination of four decades of legal evolution and advocacy by street vendor movements in India.
- **Purpose and Scope:** The Act aims to protect and regulate street vending across Indian cities, involving local authorities in establishing designated vending zones to secure vendors' livelihoods and integrate their activities into formal urban planning.

- **Importance of Vendors:** Street vendors play a crucial role in urban life, contributing to food distribution and cultural identity. The Act seeks to safeguard their livelihoods and formally incorporate their presence in urban development.
- **Town Vending Committees:** The Act establishes Town Vending Committees (TVCs) that include street vendor representatives, with 33% of these representatives being women. These committees are responsible for designating vending zones and handling grievances through mechanisms like the Grievance Redressal Committee, chaired by a civil judge or judicial magistrate.
- **Roles, Responsibilities, and Surveys:** The Act clearly defines the roles and responsibilities of vendors and government at various levels. It mandates that States and Urban Local Bodies (ULBs) conduct a survey to identify street vendors at least once every five years.

Conflict Minerals

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International Conference on
Disaster Resilient Infrastructure



Other notable CDRI programs include resilient housing in Dominica, resilient transport networks in Papua New Guinea, and enhanced early warning systems in the Dominican Republic and Fiji

Integrated Pensioners Portal

- The government's Department of Pension & Pensioners' Welfare has launched the Integrated Pensioners' Portal in collaboration with the Bank of India.
- Complete Digitization: The portal is designed for full digitization of the pension processing and payment system, aiming to streamline and modernize these services.
- Unified Services: It integrates the pension processing and payment services of five banks (Bank of India, State Bank of India, Bank of Baroda, Punjab National Bank, and Canara Bank) into a single window, with plans to include most other pension-disbursing banks later.
- Transparency and Efficiency: The portal aims to enhance transparency and efficiency in pension-related services, enabling online submission of pension forms and capturing pensioners' personal and service details.
- Progress Notifications: Pensioners will receive SMS or email notifications about the progress of their pension sanction, keeping them informed throughout the process.

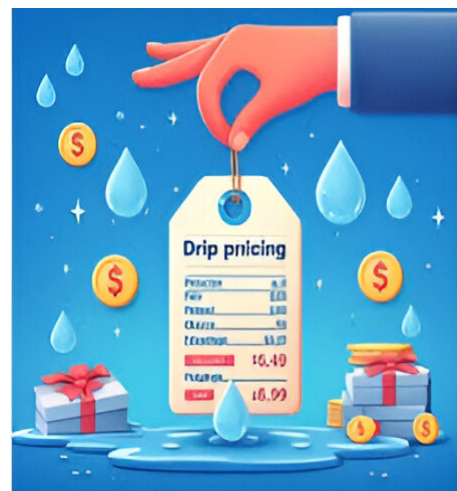


Integrated Pensioners' Portal

DRIP PRICING

The Centre recently warned about “drip pricing”, saying it can surprise consumers with “hidden charges”.

- The Department of Consumer Affairs asked consumers to reach out to NCH 1915 for assistance or via WhatsApp at if they need help with ‘drip pricing’.
- Drip pricing is a pricing technique used by firms where they initially advertise only part of a product's price referred to as the “headline price”.
- As the customer proceeds through the buying process, additional charges are gradually revealed.
- This technique can lead to “hidden charges” that surprise consumer.



- Key Features: Retirees can access their monthly pension slips, check the status of life certificates, submit Form 16, and view statements of arrears paid. The portal also includes the Bhavishya platform and a Centralized Pension Grievances Redress and Monitoring System (CPENGRAMS).

Swing Trading



The Indian stock market has been witnessing volatility amid the ongoing Lok Sabha elections and swing trading has been trending on the internet.

- Swing Trading is a style of trading where investors keep their positions for longer than a single day, typically holding onto stocks for several days or weeks.
- Its goal is to capture gains in a stock's value as it swings up and down.
- A swing trader will look for stocks with high volume (a lot of trading activity) and volatility (price movement).
- The entry into a swing trade involves setting up stop-loss orders (to limit potential losses) and target prices (to capture profits) based on support and resistance levels.
- Swing traders buy at support (lower price level) and sell at resistance (higher price level) anticipating the stock's price to swing back and forth within these bounds.
- The primary goal is to profit from short- to medium-term fluctuations in stock prices.
- Traders aim to enter and exit positions quickly, typically holding stocks for 2 days to a few weeks.
- Swing traders capitalise on both upward and downward movements in the market, seeking to take advantage of trends and momentum

Non-Market Economy Status

Vietnam has been pushing the President United States of America to quickly change its “non-market economy” classification to “market economy” status.

- The United States of America designates a country as non-market economy based on several factors namely.

- If the country's currency is convertible;
- If wage rates are determined by free bargaining between labour and management;
- If joint ventures or other foreign investment are allowed; whether the means of production are owned by the state; and
- If the state controls the allocation of resources and price and output decisions.
- The non-market economy label allows the US to impose

“anti-dumping” duties on goods imported from designated countries.

Market Economy: It is a system in which production decisions and the prices of goods and services are guided primarily by the interactions of consumers and businesses.



WOMEN EMPOWERMENT: MAKING INDIA VIKSIT BY 2047

A new government will soon be taking up the challenge of making India viksit by 2047.

- With women lagging behind on several parameters of well-being in the country today, empowering them economically lies at the heart of the challenge we face in transforming India into a developed country.
- As history has shown, women are empowered when they step out of their homes and enter market work only when their education levels rise and “good” jobs appear.
- Improving the value of investments in women’s human capital, and at a low cost, is our best bet for engendering gender parity and creating a “developed” society.”
- India’s overall employment rate has historically been around 50 per cent of the working-age population much lower than in China (almost 70



per cent) or even our neighbour, Bangladesh (about 55 per cent), according to ILO and World Bank estimates.

- Bringing more working-age population into the productive workforce is critical to achieving a high GDP growth rate.
- Amongst the main reasons for the significantly lower labour force participation (LFP) rate in India, is women’s low LFP (currently around 25 per cent).
- According to World Bank estimates, Increasing women’s LFP to 50 per cent of labour force will bring India closer to 8 per cent GDP growth rates and a five-trillion dollar economy by 2030.

WHOLESALE PRICE INDEX

Inflation in India’s wholesale prices rose to a 13-month high of 1.26% in April, owing to an uptick in food inflation and a 1.4% year-on-year rise in fuel and power prices after several months of deflation.

- Wholesale Price Index (WPI) measures the changes in the prices of goods sold and traded in bulk by wholesale businesses to other businesses.
- It is calculated and published by the Office of Economic Advisor, Department of Industrial Policy and Promotion in the Ministry of Commerce and Industry.
- WPI data is published monthly, with the index value representing an estimate of the price level for the month as a whole, rather than a specific date.
- Analysts use the numbers to track the supply and demand dynamics in industry, manufacturing, and construction.
- An upward surge in the WPI indicates inflationary pressure in the economy, and vice versa.
- The quantum of rise in the WPI month-after-month is used to measure the level of wholesale inflation in the economy.



Insurance Surety Bonds

Insurance companies have issued about 700 insurance surety bonds valued about ₹3,000 crore after Centre makes the instrument on par with bank guarantees for all government procurements.

- Surety Bond is a promise to be liable for the debt, default, or failure of another.
- It is a three-party contract in which one party (the surety) guarantees the performance or obligations of a second party (the principal) to a third party (the obligee).
- Insurance Surety Bonds is a financial instrument, where insurance companies act as 'Surety' and provides the financial guarantee that the contractor will fulfil its obligation as per the agreed terms.
- It is a risk transfer mechanism wherein an insurer provides a guarantee to a beneficiary or obligee that the principal or contractor will meet his contractual obligations.
- In case the principal fails to deliver his promise, a monetary compensation is paid to the obligee by the insurer.
- There are 3 parties involved:
 - The Surety (Insurance Companies) will provide the financial guarantee to the Obligee /beneficiary.
 - Obligee or Beneficiary (example-Government, Infrastructure Development Authorities etc.) -the party that needs the surety and is often the beneficiary of the surety bond.
 - Principal (could be the owner or contractor)-the party that purchases the Surety bond from an insurer as a guarantee and undertakes a commitment to perform the obligations as per the contract entered.



Regional Economic Outlook For Asia And Pacific Report April 2024: IMF Report

The International Monetary Fund (IMF) has released its Regional Economic Outlook for Asia And Pacific Report April 2024, which stated that India was the source of repeated positive growth surprises, supporting my.

demand. Also, Public Investment is a significant factor in driving India's economy.

Highlights of the Report:

- Asia-Pacific's growth in late 2023 surpassed expectations at 5.0%, with varying inflation rates across economies.

- Projections for 2024 suggest a slight growth slowdown to 4.5%, balancing near-term risks.

- In emerging markets, growth was supported primarily by strong private demand.

- It raised India's growth forecast for the financial year 2024-25 to 6.8% from 6.5% earlier and retained the growth forecast for 2025-26 at 6.5%.

- It stated that India and the Philippines have been the source of repeated positive growth surprises, supported by resilient domestic demand.

- In China and, especially, India, public investment made an important contribution.



Global Leaders Group on Antimicrobial Resistance

- The European Society for Clinical Microbiology and Infectious Diseases and the Global Leaders Group (GLG) on AMR jointly organised a high-level event, ‘Forging partnerships between science and policy’.
- Global Leaders Group on Antimicrobial Resistance consists of world leaders and experts from across sectors working together to accelerate political action on antimicrobial resistance (AMR).
- It performs an independent global advisory and advocacy role and works to maintain urgency, public support, political momentum and visibility of the AMR challenge on the global health and development agenda.
- It was established in November 2020 following the recommendation of the Interagency Coordination Group (IACG) on Antimicrobial Resistance to strengthen global political momentum and leadership on AMR.
- The inaugural meeting of the Group took place in January 2021.
- The Quadripartite Joint Secretariat (QJS) on Antimicrobial Resistance, a joint effort by the Food and Agriculture Organization of the United Nations (FAO), the United Nations Environment Programme (UNEP), the World Health Organization (WHO) and the World Organisation for Animal Health (WOAH) provide secretariat support for the Group.
 - Antimicrobial resistance (AMR) is the ability of bacteria and other microbes to resist the drugs used to inhibit or kill them.
 - These microbes are sometimes referred to as ‘superbugs’ and are responsible for causing drug-resistant infections that are difficult to treat.



Global Leaders Group on Antimicrobial Resistance meet in Barbados. Down To Earth Editor-in-Chief Sunita Narain is seen beside UNEP Executive Director Inger Andersen.

INTERNATIONAL RELATIONS

Group of Seven

- Energy ministers from the Group of Seven (G7) nations have agreed to shut down their coal-fired power plants by 2035, marking a significant step toward phasing out fossil fuels as highlighted by the COP28 United Nations climate summit.
- The G7 is an intergovernmental political and economic forum comprising seven of the world's leading advanced economies: Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.
- The European Union (EU) is also considered a “non-enumerated member” of the G7.
- The G7 originated from an informal gathering of finance ministers in 1973 and is organized around shared values of pluralism, liberal democracy, and representative government.
- Over the years, the G7 has evolved into a formal and high-profile venue for discussing and coordinating solutions to major global issues.
- The G7 addresses a wide range of issues, including trade, security, economics, and climate change, demonstrating a commitment to finding collaborative solutions to the world's most pressing challenges.



G-7 ministers on climate, energy and environment pose for a photo during its photo session in Sapporo, northern Japan.

7th India-Indonesia Joint Defence Cooperation Committee

The recent 7th India-Indonesia Joint Defence Cooperation Committee (JDCC) meeting highlights the ongoing efforts of both nations to bolster their defence collaboration.

- Progress on various bilateral defence cooperation initiatives was reviewed, including those deliberated in meetings of Working Groups on Defence Cooperation and Defence Industries Cooperation.
- Means to enhance existing collaboration, particularly in defence industry ties, maritime security, and multilateral cooperation, were identified.
- JDCC is an annual meeting between the Indian and Indonesian Defence Ministries, discussing a

wide range of bilateral cooperation.

- India and Indonesia upgraded their strategic partnership to a “Comprehensive Strategic Partnership in 2018, and also signed a Defence Cooperation Agreement,

aligned with a shared vision of the Indo-Pacific.

- Indonesia is a crucial partner in India's Act East Policy and holds significance in the Indo-Pacific region.





Five Eyes Intelligence-Sharing Network: Accused India

- Four countries across three continents, all members of the Five Eyes intelligence-sharing network, have accused India of conducting espionage operations.
- The Five Eyes intelligence-sharing network comprises over 20 different agencies from five English-speaking countries: Australia, Canada, New Zealand, the United Kingdom, and the United States.
- This network engages in both surveillance-based and signals intelligence (SIGINT).
- Its origins trace back to the post-war 1946 UKUSA Agreement, designed as a cooperative arrangement for sharing SIGINT.
- Intelligence documents shared among member countries are classified as ‘Secret—AUS/CAN/NZ/UK/US Eyes Only,’ giving the group its name ‘Five Eyes.’
- Initially, the scope was limited to “communication intelligence matters only,” facilitating the unrestricted exchange of intelligence products in six areas:
 - Collection of traffic
 - Acquisition of communication documents and equipment
 - Traffic analysis
 - Cryptanalysis
 - Decryption and translation
 - Acquisition of information regarding communication organizations, practices, procedures, and equipment.
- The arrangement was later expanded to include ‘second party’ countries—Canada joined in 1948, while Australia and New Zealand became part of the alliance in 1956.

46TH ANTARCTIC TREATY CONSULTATIVE MEETING

The 46th Antarctic Treaty Consultative Meeting (ATCM) and the 26th Meeting of the Committee for Environment Protection (CEP) will be held in Kochi from May 20-30.

- Antarctic Treaty Consultative Meeting is pivotal in the international community's ongoing efforts to safeguard Antarctica's fragile ecosystem and promote scientific research in the region.
- It is convened annually under the Antarctic Treaty System, these meetings serve as forums for Antarctic Treaty Consultative Parties and other stakeholders to address Antarctica's pressing environmental, scientific, and governance issues.
- CEP was established under the Protocol on Environmental Protection to the Antarctic Treaty (the Madrid Protocol) in 1991.
- The CEP advises the ATCM on environmental protection and conservation in Antarctica.
- Antarctic Treaty was signed in 1959 and entered into force in 1961.
- It established Antarctica as a region dedicated to peaceful purposes, scientific cooperation, and environmental protection. Over the years, the Treaty has garnered widespread support, with 56 countries currently party to it.



India Military Withdrawal From Maldives

India has completed the withdrawal of its military personnel from the Maldives, an action that fulfils one of President Mohamed Muizzu's major campaign promises.

- This event marks a notable shift in Indo-Maldivian relations, especially considering his perceived pro-China stance.
- The final batch of troops left the Maldives a day before the deadline of May 10, 2024.
- The request for the withdrawal of Indian military forces came after relationships between India and the Maldives became tense.
- President Muizzu insisted on the removal of Indian personnel who managed and operated three significant military platforms gifted by India two helicopters and a Dornier aircraft.

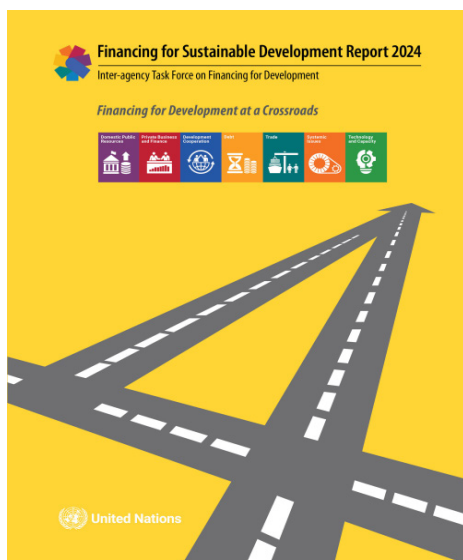
UN Financing for Sustainable Development Report 2024

A new report released by the United Nations (UN) stated that more investment is needed if the 17 Sustainable Development Goals (SDGs), agreed upon by all United Nations members back in 2015, are to be achieved by 2030.

- The reason for this situation is due to staggering debt burdens and sky-high borrowing costs faced by developing countries that prevent them from responding to the confluence of crises they face.

Key Highlights of UN Financing for Sustainable Development Report 2024:

- Rising geopolitical tensions, climate disasters and a global cost-of-living crisis have hit billions of people globally, which has halted the progress on healthcare, education, and other development targets.
- Debt services in the Least developed countries (LDC) will increase from USD 26 billion annually in 2022 to USD 40 billion annually between 2023 and 2025.



- Stronger and more frequent disasters, caused by the ongoing climate crisis, account for more than half of the debt upsurge in vulnerable countries.
- The poorest countries now spend 12% of their revenues on interest payments, 4 times more than they spent a decade ago.
- Roughly 40% of the global population live in countries where governments spend more on interest payments than on education or health.
- In Least developed countries, development fundings are slowing down.
- Due to several reasons such as low domestic revenue growth due to tax evasion and avoidance, falling rate of corporate tax (which was 28.2% in 2000 to 21.1% in 2023), due to globalisation and tax competition etc.
- This number was USD 2.5 trillion before the Covid-19 pandemic began.

• Also, Official Development Assistance (ODA) from OECD countries and climate finance commitments are not being met.

• According to the Financing for Sustainable Development Report: Financing for Development at a Crossroads Report 2024, around USD 4.2 trillion investments is needed to close the development financing gap.

Global Report On Internal Displacement 2024

The number of internally displaced people increased to 75.9 million, from 71.1 million in the preceding year, according to the Global Report on Internal Displacement 2024 (GRID-2024) released recently.

• Global Report on Internal Displacement 2024 is an annual report published by the Geneva-based Internal Displacement Monitoring Centre (IDMC). It records internal displacements due to conflict and violence and disasters.

Highlights of GRID-2024 :

- The number of internally displaced people (IDP) increased to 75.9 million, from 71.1 million in the preceding year.
- Report says 7.7 million displaced by disasters (one-fourth of it was caused by earthquakes) and 68.3 million by conflict and violence.
- Sudan, Syria, the Democratic Republic of the Congo (DRC), Colombia, and Yemen host nearly half of the world's IDPs.
- At 1 million, Sudan has the highest number of IDPs recorded for a single country.
- Most of the new displacement this year happened in Sudan, the Palestinian territories, and the Democratic Republic of Congo, accounting for almost two-thirds of all new displacement.
- The IDMC said around 3 million people were living in internal displacement as a result of conflict and violence across South Asia at the end of 2023, 80 percent of whom were in Afghanistan.
- Conflict and violence triggered 69,000 displacements in South Asia in 2023, with Manipur violence alone accounting for 67,000.
- It is the highest number of displacements triggered by conflict and violence in India since 2018.
- There is a sharp decline in IDP in 2023 from 2.5 million internal displacements due to natural disasters in India in 2022. Internal displacements by natural disasters in 2023 was 528,000.



WORLD MIGRATION REPORT 2024



The World Migration Report 2024 was launched by the International Organization for Migration (IOM), revealing significant shifts in global migration patterns. World Migration Report is IOM's flagship report released biennially.

- The report highlighted that Mexico, China, the Philippines, and France were the other four nations in the top five remittance recipient countries, with India being the top country receiving remittances in 2010, 2015, 2020, and 2022.
- International remittances increased by 650% from USD 128 billion to USD 831 billion between 2000 and 2022 with India receiving the highest remittances at USD 111 billion in 2022 followed by Mexico.
- USD 647 billion of the total remittances were sent by migrants to low- and middle-income countries.
- Despite remittances acting as a crucial source of income for many South Asians, migrant workers from the region remain vulnerable to various challenges.
- These challenges include financial exploitation, excessive debt incurred due to migration costs, xenophobia (hostility towards foreigners), and workplace abuses.
- The number of displaced people hit a record high by the end of 2022 at 117 million.
- India is the origin of the largest number of international migrants in the world (nearly 18 million), with large diasporas in countries like the UAE, the US, and Saudi Arabia.
- According to the report, India has a slightly higher share of female immigrants than males. Countries with a significantly high proportion of male emigrants include India, Bangladesh and Pakistan.
- Gulf Cooperation Council (GCC) countries remain significant destinations for migrant workers, especially from India, Egypt, Bangladesh, Ethiopia, and Kenya, employed in sectors like construction, hospitality, security, domestic work, and retail.

Marine Cloud Brightening (MCB)

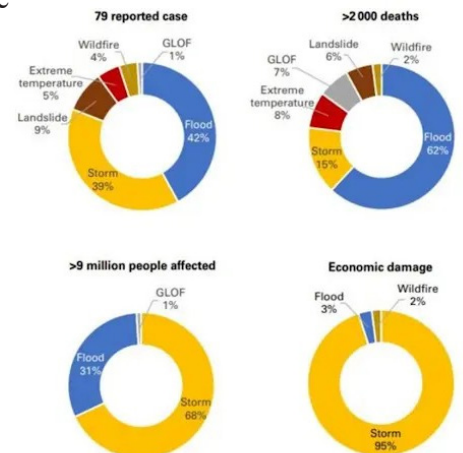
- Scientists are testing a geoengineering technique called marine cloud brightening that involves using machines to inject tiny saltwater particles into marine stratocumulus clouds, aiming to increase their reflectivity and cool the Earth.
- The Brightening clouds is one of several ideas to push solar energy back into space sometimes called solar radiation modification, solar geoengineering, or climate intervention.
- Marine Cloud Brightening (MCB) is a scientific initiative that explores how altering atmospheric particles (aerosols) can impact cloud reflectivity
- By releasing tiny aerosol particles into the atmosphere, researchers aim to enhance cloud brightness, leading to increased sunlight reflection.
- Aerosols of the right size and concentration could significantly increase the reflectivity of specific types of clouds.
- This phenomenon is visible in satellite images of clouds brightened by ship emissions (known as “ship tracks”).
- It helps in better understanding of the present-day effects of pollution aerosols on clouds.
- Investigate whether aerosol particles made from sea salt could be used to intentionally reduce near-term climate warming while greenhouse gas concentrations are brought down to safer levels.

STATE OF THE CLIMATE IN ASIA: REPORT

• Rapid Warming in Asia: The World Meteorological Organisation’s 2023 ‘State of the Climate in Asia’ report reveals that Asia has warmed faster than the global average since 1960.

• Extreme Climate Events: Released on April 23, the report highlights that Asia is grappling with extreme climate events such as floods and heatwaves, with record-breaking temperatures and precipitation recorded across the continent.

• Human Impact: In 2023, extreme climate events in Asia resulted in over 2,000 deaths and affected more than nine million people, with over 80% of



these events related to storms and floods.

- **Heat Waves and Mortality:** Severe heat waves were recorded in several parts of Asia, leading to multiple fatalities. However, the report notes that heat-related mortality is widely underreported. In India, heat waves in April and June resulted in around 110 deaths due to heat stroke.
- **Floods, Landslides, and Lightning in India:** In August 2023, floods and landslides in Himachal Pradesh and Uttarakhand, India, caused at least 25 deaths and significant infrastructure damage. Additionally, lightning strikes throughout the year led to 1,200 deaths across India. The report underscores an “alarming gap” between climate projections and the capacity of Asian countries to adapt to and mitigate climate change impacts.

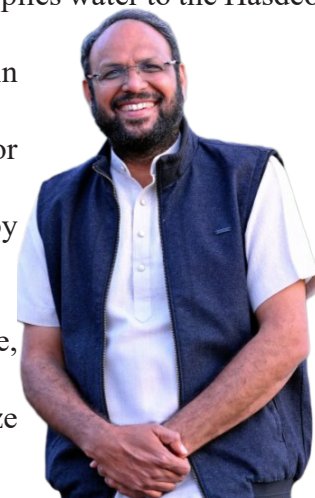
REGENERATIVE BLUE ECONOMY: INTERNATIONAL UNION FOR CONSERVATION OF NATURE

- **IUCN’s Regenerative Blue Economy Report:** The International Union for Conservation of Nature (IUCN) has released a report detailing a roadmap for a Regenerative Blue Economy (RBE).
- **Beyond Sustainability:** The RBE approach aims to actively restore and revitalize oceans, going beyond mere sustainability.
- **Hierarchical Structure of Blue Economy:**
 - **Ocean/Brown Economy:** Encompasses all economic activities related to the ocean, synonymous with the traditional marine economy or maritime sectors, including shipping, ports, fisheries, and offshore oil/gas, following a business-as-usual approach focused on economic contribution.
 - **Sustainable Blue Economy:** Integrates principles of environmental sustainability and ecosystem protection.
 - **Regenerative Blue Economy:** RBE seeks not only to maintain but also to restore and revitalize marine ecosystems. This model combines the regeneration and protection of marine and coastal ecosystems with sustainable, low or no carbon economic activities, promoting fair prosperity for both people and the planet, now and in the future



Goldman Environmental Prize 2024

- Alok Shukla, a forest and tribal rights activist, has been awarded the prestigious Goldman Environmental Prize 2024 for his successful campaign that saved 4.45 lakh acres of biodiversity-rich forests from 21 planned coal mines in Chhattisgarh’s Hasdeo Aranya region.
- The forest of the Hasdeo Aranya is spread over 1.70 lakh hectares across the districts of Korba, Surajpur, and Surguja in Chhattisgarh, known as the “lungs of Chhattisgarh”, with rich biodiversity and home to 25 endangered species, 92 bird species, and 167 rare and medicinal plant species.
- The Hasdeo River, which flows into the Mahanadi River, is fed by these forests and supplies water to the Hasdeo Bango reservoir, irrigating 741,000 acres of farmland.
- Chhattisgarh, where 44% of the land is forested, has the third largest forest coverage in India.
- Furthermore, nearly 15,000 Indigenous peoples rely on the Hasdeo Aranya forests for their livelihood, cultural heritage, and food.
- The Goldman Environmental Prize also known as the Green Nobel Awards awarded by the Goldman Environmental Foundation.
- The Prize was founded by Richard and Rhonda Goldman in 1989.
- It recognises grassroots environmental leaders from six regions (Asia, Africa, Europe, North America, South and Central America) and lastly, islands and island nations.
- The winners are selected by an international jury and awarded USD 200,000 as prize money.





Carbon Farming : Technique To Reduce Greenhouse

Some techniques within carbon farming can reduce greenhouse gas emissions.

- By adopting carbon-smart farming methods, we can simultaneously meet food demands and combat climate change.
- Carbon farming also known as carbon sequestration refers to a set of practices aimed at reducing greenhouse gas emissions from agriculture and land use.
- It aimed at storing carbon in the soil, crop roots, wood, and leaves.

Techniques in Carbon Farming:

- Rotational Grazing: This involves moving livestock between pastures to allow vegetation to recover, enhancing soil carbon storage.
- Agroforestry: Incorporating trees and shrubs into farming systems to sequester carbon in vegetation.
- Conservation Agriculture: Practices like zero tillage, crop rotation, and cover cropping to minimize soil disturbance and improve organic content.
- Integrated Nutrient Management: Using organic fertilizers and compost to promote soil fertility and reduce emissions.
- Livestock Management: Optimizing feed quality and managing animal waste to lower methane emissions.

UNITED NATIONS FORUM ON FORESTS : 19TH SESSION

Delegates at 19th Session of the United Nations Forum on Forests (UNFF19) entered into informal negotiations over the draft texts of the High-Level Declaration

- United Nations Forum on Forests was established in 2000 by the UN Economic and Social Council of the United Nations (ECOSOC). It promotes the management, conservation, and sustainable development of all types of forests.



- The Forum meets annually at the UN Headquarters in New York, bringing together representatives of all member states and forest-related agencies for high-level dialogue on technical matters in odd years and policy matters in even years.
- The forum has universal membership, and is composed of all Member States of the United Nations and specialized agencies.
- India is a founding member of UNFF.
- The declaration of the 19th session aims to achieve agreement on a high-level political commitment to forest protection, with specific actions for effective implementation of the UN Strategic Plan for Forests (UNSPF) by UNFF and its stakeholders.

World Hydrogen Summit 2024

The Indian Pavilion, organised by the Ministry of New and Renewable Energy, stands as one of the largest at the esteemed World Hydrogen Summit 2024 in Rotterdam, Netherlands. It serves as a platform to showcase the nation's notable advancements in green hydrogen.

- India launched the National Green Hydrogen Mission (NGHM) in January 2023 with a budget of Rs. 19,744 crores.
- The mission aims to achieve a green hydrogen production capacity of 5 MMT (Million Metric Tonnes) by 2030. Currently, tenders have been awarded for setting up 412,000 tonnes of Green Hydrogen production capacity and 1,500 MW of electrolyzer manufacturing capacity.
- Under NGHM a dedicated portal was launched to provide information on the mission and steps for developing the green hydrogen ecosystem in India.
- India has also released scheme guidelines for the use of Green Hydrogen in steel, transport, and shipping sectors.
- The Department of Science and Technology has initiated Hydrogen Valley Innovation Clusters to foster innovation and promote the green hydrogen ecosystem in India.

World Wildlife Crime Report

The 2024 World Wildlife Crime Report was released by the United Nations Office on Drugs and Crime on May 13, 2024. This report provides insights into the illegal wildlife trade that occurred between 2015 and 2021.

- The rhino and pangolin were the animal species most affected:
- Rhino Horn Market: Largest at 29%
- Pangolin Scales Market: Second largest at 28%
- Elephant Ivory Market: Third largest at 15%
- Additional affected species include eels, crocodilians, parrots, cockatoos, carnivores, turtles, tortoises, snakes, seahorses, and other animals constituting various smaller percentages.
- Plant Species
- Cedars and other Sapindales were the most affected plant species:
- Cedars and Sapindales Market: Largest at 47%
- Rosewoods Market: Second largest at 35%
- Agarwood and other Myrtales Market: Third largest at 13%
- Other affected plant species include golden chicken fern, orchids, and several others.
- Corals: 16% of seizures
- Crocodilians: 9%
- Elephants and Bivalve Molluscs: Each 6%



- India has also released scheme guidelines for the use of Green Hydrogen in steel, transport, and shipping sectors.
- The Department of Science and Technology has initiated Hydrogen Valley Innovation Clusters to foster innovation and promote the green hydrogen ecosystem in India.



Taam Ja Blue Hole

- Scientists have yet to reach the bottom of the Taam Ja' Blue Hole in Mexico's Chetumal Bay, which new measurements hint could be connected to a labyrinth of submarine caves and tunnels
- Taam Ja' Blue Hole is the deepest known underwater sinkhole in the world.
- It sits in Chetumal Bay off the southeast coast of the Yucatan Peninsula in Mexico.
- It is 390 feet (119 m) deeper than the previous record holder the 990-foot-deep (301 m) Sansha Yongle Blue Hole, also known as the Dragon Hole, in the South China Sea.
- Spread over an area of 13,660 square meters, the giant, underwater cavern has been named Taam Ja' which means "deep water" in Mayan.
- The submerged blue hole has a nearly circular shape at its surface with steep sides that form a large conic structure covered by biofilms, sediments,



Project ISHAN

- India has started the process of unifying its four airspace regions under Project Indian Single Sky Harmonized Air Traffic Management at Nagpur (ISHAN).
- This initiative is expected to enhance air traffic management, benefiting airlines and passengers by making operations more efficient and safer.
- Challenges include technological implementation, process changes, and retraining of staff.
- Currently, Indian airspace is divided into 4 FIRs:
 - Mumbai, Kolkata, Delhi, Chennai, and a sub-FIR in Guwahati, each managed separately.
- The Airports Authority of India (AAI) has called for expressions of interest to prepare a detailed project report for the Indian Single Sky Harmonized Air Traffic Management (ISHAN) initiative, centered in Nagpur.
- This consolidation is expected to streamline operations, enhance capacity, and alleviate congestion, benefiting both airlines and passengers.



HANGOR CLASS SUBMARINE:

- China has launched the first of eight Hangor-class submarines being built for Pakistan. It is a diesel-electric attack submarine.
- It is bigger than the Indian Navy's Kalvari class submarines, with a displacement of 2,800 tons compared to 1,775 tons for the Kalvari class.
- The Hangor class has Air independent propulsion (AIP).
- AIP allows submarines to stay submerged for longer periods.
- AIP is planned to be installed on the first Scorpene class submarine INS Kalvari in 2024.
- In terms of armament, both carry torpedoes and anti-ship missiles, The Kalvari class likely has more modern and battle-tested armament.
- The bigger size of the Hangor class may hamper its manoeuvrability in littoral waters compared to the smaller Kalvari class.



TacticAI

GATI SHAKTI CARGO TERMINALS INITIATIVE

- The Railway Ministry plans to expand its Gati Shakti Cargo Terminals initiative, aiming to offer an additional 200 terminals to corporate entities and freight operators.
- This expansion follows the success of the initial 100 terminals announced in the Union Budget of 2022-23.
- With 77 terminals already operational, the initiative aims to boost rail-based supply chains, increase rail freight volumes, and generate additional revenue for the railways.
- The Gati Shakti scheme (launched in 2021) is a national master plan aimed at coordinating infrastructure projects to reduce logistics costs.
- Key points include integrating planning for infrastructure projects, cutting costs, boosting trade, and improving connectivity.



- Google's DeepMind developed and evaluated TacticAI in a multi-year research collaboration with experts from Liverpool Football Club.
- TacticAI is an AI system that can provide experts with tactical insights, particularly on corner kicks (football), through predictive and generative AI.
- It can be used by football team managers as an assistant for tactics.
- It is developed by Google's DeepMind.
- It has been incorporated both a predictive and generative component to allow coaches to effectively sample and explore alternative player setups for each corner kick and to select those with the highest predicted likelihood of success.
- Corner kicks are apt for strategising by leveraging AI tools, primarily because they are moments when the game is effectively frozen and always starts from the same kind of position at the corner of the pitch while giving players an immediate opportunity to score.
- Strategies for corners are usually also decided long before the players actually go on to the pitch, so that there is no confusion on match day.

K2-18b Exoplanet

- The James Webb Space Telescope is gearing up for a significant mission targeting K2-18b, a distant planet with potential for extra-terrestrial life.
- Scientists are focusing on detecting dimethyl sulphide (DMS) in its atmosphere, a gas primarily produced by life on Earth. Preliminary data suggests a high probability of DMS presence.
- The presence of dimethyl sulphide (DMS) in the atmosphere of a distant planet, such as K2-18b, could indicate the possibility of extraterrestrial life.
- On Earth, DMS is primarily produced by marine phytoplankton, making it a potential biological marker.
- If detected on another planet, it suggests the presence of organic or biological processes similar to those found on Earth.
- K2-18b Exoplanet was discovered in 2015 during NASA's K2 mission, located over 120 light-years away from Earth.
- Size is over 8 times larger than Earth.



Salmonella Contamination

- The United States has taken stringent measures in response to salmonella contamination in shipments from Mahashian Di Hatti Pvt Ltd (MDH).
- The situation underscores the importance of stringent quality control measures in food production and distribution. Authorities worldwide are closely monitoring such incidents to protect consumers and maintain food safety standards.
- Salmonella is a group of bacteria that can cause gastrointestinal illness and fever, a condition known as salmonellosis.
- These bacteria naturally reside in animals' intestines and can be found in their faeces.
- Humans can contract salmonella if they come into contact with infected animals or contaminated items in their environment.
- This ubiquitous and hardy bacteria can survive for several weeks in a dry environment and several months in water.
- People infected with salmonella might experience diarrhea, fever, and stomach cramps.
- The United States Centers for Disease Control and Prevention (CDC) estimates that salmonella causes approximately 1.2 million illnesses, 23,000 hospitalizations, and about 450 deaths in the United States every year.

Supersonic Missile-Assisted Release of Torpedo (SMART) System

- DRDO Tests SMART System: The Defence Research and Development Organisation (DRDO) has tested the Supersonic Missile-Assisted Release of Torpedo (SMART) system, a next-generation torpedo release mechanism.
- Development and Launch: Designed and developed by DRDO, the SMART system was launched from a ground mobile launcher on Dr. APJ Abdul Kalam Island off the Odisha coast.
- Extended Targeting Range: This missile-based system enables lightweight torpedoes to target submarines hundreds of kilometers away, far beyond the conventional range of such torpedoes.
- Operational Use: The SMART system will be particularly useful for immediate action in the absence of other assets upon detecting an enemy submarine.
- Advanced Features: The canister-based missile system includes advanced subsystems like two-stage solid propulsion and precision inertial navigation. It carries an advanced lightweight torpedo missile as a payload, utilizing a parachute-based release mechanism. The test validated several state-of-the-art mechanisms, including symmetric separation, ejection, and velocity control.

LSAM 16: Indian Navy

- The Indian Navy has launched the sixth barge of the LSAM 16 (Yard 130) series, named 'Ammunition Cum Torpedo Cum Missile Barge, LSAM 20 (Yard 130),' built by a private firm, Suryadipta Projects Pvt Ltd, in Thane, Maharashtra.
- The launch ceremony took place recently, at the launch site of Suryadipta Projects Pvt Ltd and was presided over by Madhusudan Bhui, INAS, GM NAD (Karanja).
- LSAM stands for "Landing Ship Ammunition," indicating the barge's role in transporting ammunition for the Indian Navy.
- The Indian Navy has been focusing on enhancing its operational capabilities and logistics support through the acquisition of various types of vessels, including barges, to support its fleet.
- Private sector participation in defense manufacturing has been encouraged under the 'Make in India' initiative, aiming to reduce dependency on imports and strengthen the domestic defense industry.



Antares

- IIA Films Moon Passing Antares: The Indian Institute of Astrophysics (IIA) in Bengaluru has captured footage of the moon passing in front of Antares, a prominent red star.
- About Antares: Also known as Alpha Scorpii, Antares is the brightest star in the constellation Scorpius and the 15th-brightest star in the night sky.
- Characteristics of Antares: Antares is a massive red supergiant star, 10,000 times brighter than our sun and one of the largest known stars, with a diameter 700 times that of the sun, large enough to engulf the orbit of Mars if placed at the center of our solar system.
- Density and Temperature: Despite its enormous size, Antares has an overall density less than one-millionth that of the sun. It is also relatively cool, with a surface temperature of about 6,100 degrees F (3,400 degrees C), compared to the sun's surface temperature of approximately 10,000 degrees F (5,500 degrees C).
- Color and Temperature: The low temperature of Antares accounts for its reddish color, distinguishing it from many other stars.



STANDARD ESSENTIAL PATENTS

- There are growing concerns regarding the use of 'Standard Essential Patents' (SEPs) by certain technology companies against the telecom manufacturing sector in India.
- A Standard Essential Patent (SEP) is a patent for a technological invention that is crucial for the implementation and functioning of a standard.
- SEPs are patents essential to a standard and adopted by a Standard Setting Organization (SSO).
- SSOs can be governmental, quasi-governmental, or private industry associations that are independently governed.
- SSOs are responsible for setting, developing, coordinating, interpreting, and maintaining standards.
- These standards enable industry participants to collaborate on a single technical solution.
- When a patent is recognized by an SSO and designated as an SEP, manufacturers must first acquire a license under the SEP to produce their goods.
- From an antitrust perspective, the lack of competing technologies gives the SEP holder monopolistic control over the SEP.



Lakshya Aircraft

The Aeronautical Development Establishment (ADE), a Bengaluru-based lab under the Defence Research and Development Organization (DRDO), which developed the Lakshya aircraft, was recently visited by the Central Bureau of Investigation (CBI).

- The Lakshya aircraft is an indigenously developed micro-light, pilotless target aircraft designed and built by ADE for the Indian Armed Forces.
- It was inducted into the Indian Air Force in 2000, the Indian Navy in 2001, and the Indian Army in 2003.
- This cost-effective, reusable high subsonic aerial target system is powered by a gas turbine engine designed and manufactured by Hindustan Aeronautics Limited (HAL) in Bangalore. It is essential for the evaluation and development trials of new surface-to-air and air-to-air weapon systems.
- The Lakshya carries two tow targets, each with a tow length of 1.5 km, featuring radar, IR or visual signature augmentation, and a Miss Distance Indication Scoring System.



Boeing Starliner

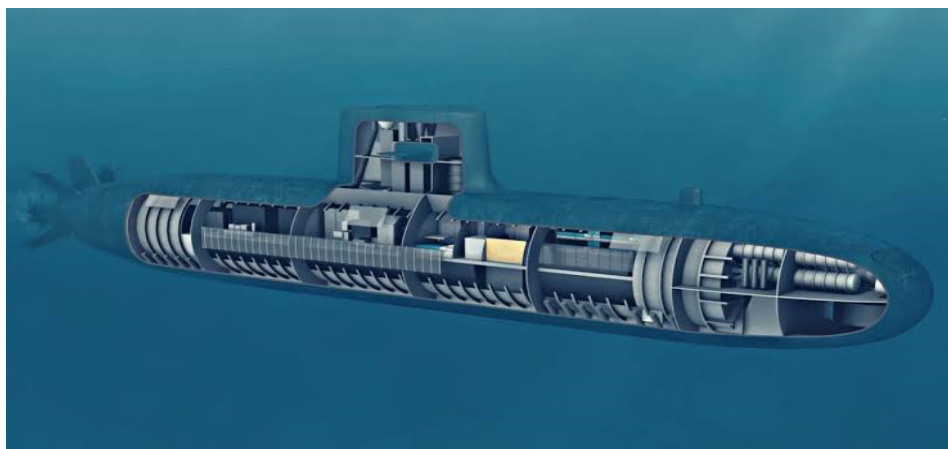
These targets are used for training land- or ship-based gun and missile crews and combat aircraft pilots in weapon engagement.

- Designed for launch from either land or sea via a zero-length launcher, the Lakshya is recovered by a dual-stage parachute system. It can be controlled from the ground control station (GCS) through pre-programmed hardware and software systems and is reusable for up to 15 missions. The aircraft is capable of simulating airborne incoming enemy targets.

Air Independent Propulsion (AIP) Technology

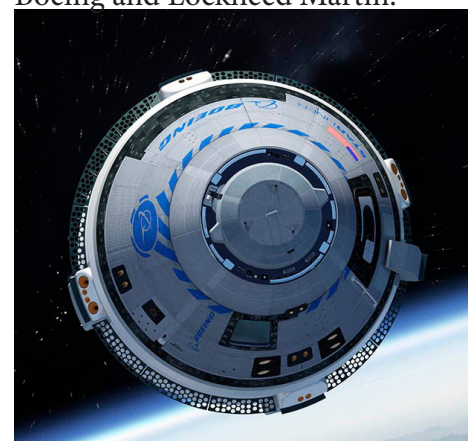
A Rs 60,000 crore contract to modernize the Indian Navy's submarine fleet, involving the construction of six stealth submarines equipped with Air Independent Propulsion (AIP) technology, has commenced.

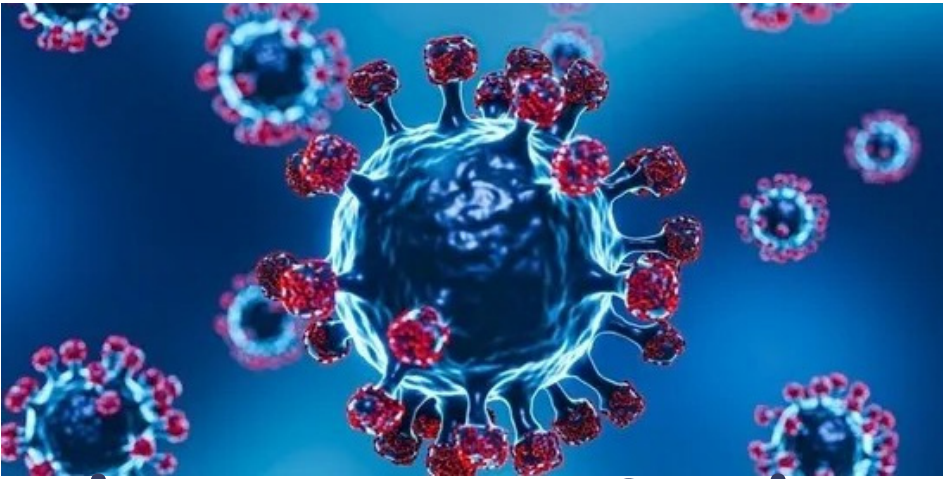
- The advent of submarines brought the challenge of finding effective underwater propulsion systems. Traditional diesel-electric submarines need to surface frequently to charge their batteries and can only remain submerged for a few days.
- Although battery technology improvements have increased the endurance of these submarines, they still cannot last beyond a week underwater.
- In 1908, the Imperial Russian Navy launched the Pochtovy submarine, which used a gasoline engine with compressed air and exhausted underwater. These early approaches laid the foundation for modern AIP systems, characterized by either using a fuel that provides energy to an open-cycle system or supplying oxygen to an aerobic engine in a closed cycle.
- Most AIP systems generate electricity that either drives an electric motor for propulsion or recharges the submarine's batteries, significantly improving underwater endurance and providing a distinct advantage.
- AIP technology is typically implemented as an auxiliary power source, with the traditional diesel engine used for surface propulsion. AIP can be retrofitted into older-generation submarines by adding a new hull section. While a typical conventional power plant provides a maximum of 3 megawatts, an AIP source provides around 10% of that, and a nuclear submarine's propulsion plant exceeds 20 megawatts.



An Atlas V rocket is set to lift off with a team of two veteran astronauts sitting inside a crew capsule called Starliner, built by Boeing.

- Starliner is a spacecraft that transports astronauts into space after being launched there by a rocket.
- It consists of a crew capsule and a service module.
- The crew capsule houses the astronauts; like others of its kind, it will be able to survive reentry and return to the ground.
- The service module consists of the equipment and systems the astronauts need to survive in space, including air and temperature control, water supply, sanitation, etc., plus the engines and fuel required to manoeuvre the spacecraft.
- The service module won't be reusable.
- Starliner is more than 4 meters wide and can house up to seven astronauts.
- The Starliner has an innovative, weldless structure and is reusable up to 10 times with a six-month turnaround time.
- It also features wireless internet and tablet technology for crew interfaces.
- It can be fit atop an Atlas V rocket, operated by United Launch `Alliance, a joint venture between Boeing and Lockheed Martin.





FLiRT: New COVID-19 Variants Increase Concern In US

A series of COVID-19 variants within the Omicron JN.1 lineage, known as FLiRT, including the KP.2 and KP 1.1 variants, is rapidly spreading in the United States, exhibiting new mutations which increase their contagiousness.

- The symptoms are largely similar to those of other Omicron infections and hospitalisation rates remain low. KP.2 has reportedly become more prevalent than the JN.1 variant, and while KP.1.1 is present in the US, it is less widespread.
- The Infectious Disease Society of America detailed that “FLiRT” derives from the scientific names of the mutations.
- The ‘Omicron JN.1 lineage’ is a variant of the SARS-CoV-2 virus, which is an offshoot of the Omicron variant, also known as B.1.1.529.
- The lineage was identified by Chinese researchers, leading to its ‘JN.1’ label.
- This variant is characterized by a series of mutations that differ it from the main Omicron lineage.

However, the severity, infectiousness, and potential resistance to vaccines of this variant are yet to be determined, necessitating continued surveillance and research

SPACE For Indian Navy

Defence Research and Development Organisation (DRDO) has set up a premier testing & evaluation hub for SONAR Systems named “SPACE” in Kerala which is dedicated to the Indian Navy.

- It stands for Submersible Platform for Acoustic Characterisation and Evaluation (SPACE).
- It will mainly be utilised for evaluation of complete Sonar Systems.
- Floating Part is a platform which

floats on the water surface.

- Submerged Part is a submersible platform which can be lowered to any depth upto 100 m using winch systems.
- Upon completion of operations, the submersible platform can be winched up and docked with the floating platform.
- It will allow quick deployment and easy recovery of scientific packages such as sensors and transducers.

FWD-200B : India’s First Indigenous Bomber

India’s first indigenous bomber UAV aircraft, the FWD-200B, developed by Flying Wedge Defence, an Indian defence and aerospace company, was unveiled recently.

- FWD-200B is an indigenous military grade bomber unmanned aerial vehicle (UAV). It is India’s first indigenous unmanned bomber aircraft.
 - It is designed and manufactured by Flying Wedge Defence and Aerospace Technologies, an Indian defence and aerospace company.
 - It has a payload capacity of 100 kg and is classified as a MALE (medium-altitude, long-endurance) Unmanned Combat Aerial Vehicle.
 - The Unmanned Aerial System (UAS) consists of optical surveillance payloads and is integrated with missile-like weapons for precision air strikes.
 - It has a maximum speed of 370 kmph (200 knots), an endurance capacity of 12 to 20 hours, and a ground control station range of 200 km.
 - It will be suitable for survey, sampling, and data collection of air, surface, mid-water, and reservoir floor parameters using modern scientific instrumentation.
 - It will bring a new era of Anti-Submarine Warfare research capabilities.
- SONAR (SOund Navigation And Ranging):
- It is a device used for measuring distance using ultrasonic waves.
 - The sonar technique is used to determine the depth of the sea and to locate underwater hills, valleys, submarines, icebergs, sunken ships etc.

GAIA BH3: MASSIVE BLACK HOLE

Astronomers have discovered a massive Black Hole in our Galaxy, named “Gaia BH3”.

- It's the 2nd-closest known Black hole to Earth. It is 33 times heavier than the sun and the most massive black hole of stellar origin in the Milky Way, surpassing Cygnus X-1.
- Stellar black holes are formed as a result of the collapse of a single star.
- Black holes are extraordinarily dense objects with gravity so strong that not even light can escape, making it difficult to spot them.
- They are formed when a massive star collapses in on itself at the end of its life, creating an incredibly dense object with a gravitational pull that is so strong that it warps space-time around it.
- Supermassive Black Hole masses ranging from millions to billions of times that of the sun, found at the centres of most galaxies including our own Milky Way galaxy.



China's Chang'e-6 Mission : Launched Successfully



China's Chang'e-6 mission, launched successfully, aims to collect rocks from the Moon's far side, a complex endeavour requiring precise planning.

- Chang'e-6, China's mission to the Moon's far side, aims to retrieve 2 kilograms of samples, a feat never accomplished before. Unlike the Chang'e-5 mission, which brought back samples from the near side in 2020, this mission targets the unexplored territory of the far side.
- The spacecraft, equipped with a communications satellite called Queqiao-2, will land in the South Pole-Aitken basin, the Moon's largest impact basin.

Leber Congenital Amaurosis

Researchers have used a CRISPR-Cas9 tool to restore vision in a group of adults and children with congenital blindness known as Leber congenital amaurosis (LCA).

- Leber Congenital Amaurosis is a rare genetic eye disorder affected infants are often blind at birth. Children born with LCA have light-gathering cells (rods and cones) of the retina that do not function properly.
- It affects about one in 40,000 people and causes severe vision loss at an early age.
- This blindness is caused by a gene mutation that prevents a protein from functioning properly.
- That protein CEP290 is critical for sight.
- Scientists used a human gene editing tool, CRISPR-Cas9, to restore vision of people who are affected by this disorder and the trial was called “BRILLIANCE”.
- Participants in the study received a single dose of a CRISPR gene therapy

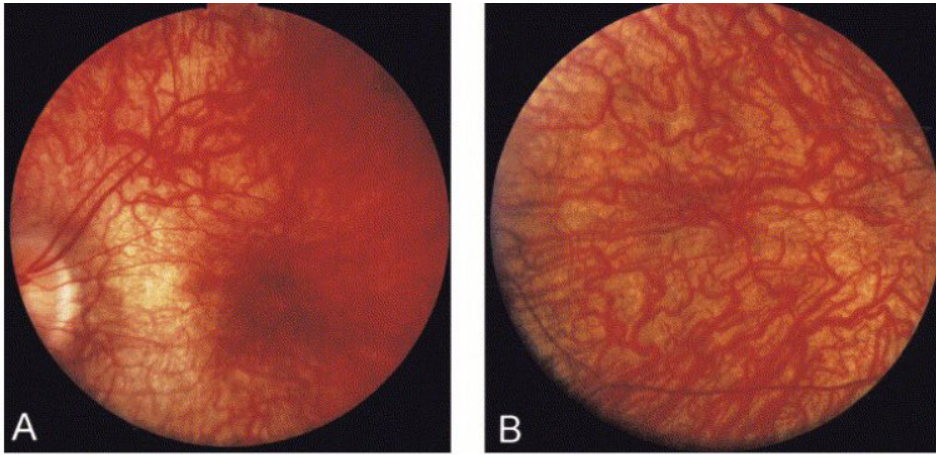
India, France Set For 7th Joint Military Exercise Shakti

India and France are set to conduct the 7th edition of the Joint Military Exercise 'Shakti' between May 13-26, 2024, in the Umroi region of Meghalaya.

- This version of the drill builds on the strong defense ties that have been gaining a lot of strength, as shown by Chief of Defence Staff General Anil Chauhan's trip to France.
- The primary aim of the upcoming joint exercise is to improve the joint military capabilities of India and France to carry out Multi-Domain Operations in a Sub-Conventional scenario.
- In modern warfare, where conventional and unconventional tactics are used in many areas, such as the air, land, sea, and cyberspace, these kinds of activities are very important.
- Joint Military Exercise Shakti is a bilateral exercise conducted between the Indian Army and the French Army.
- Established in 2011, the exercise is focused on improving military cooperation, counter-terrorism tactics, and interoperability between the two forces.



The seventh edition of the Exercise 'Shakti' commenced on May 13



of a CRISPR gene therapy called EDIT-101.

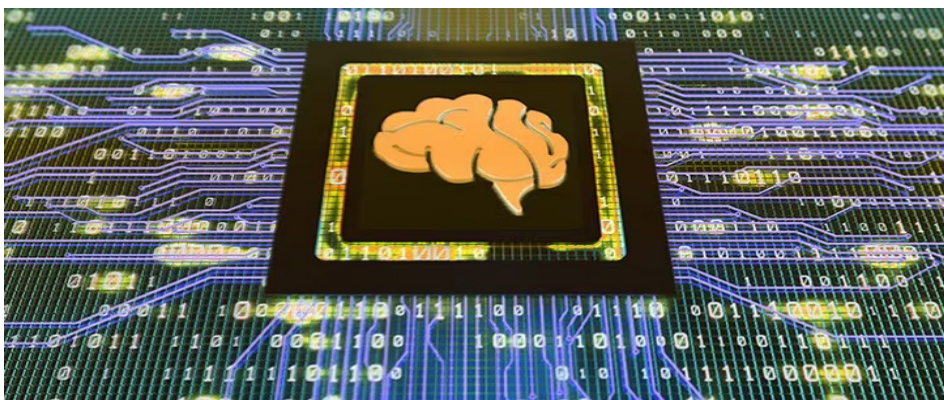
- In the case of EDIT-101, the treatment cuts out the mutation in CEP290 and inserts a healthy strand of DNA back into the gene.
- This restores normal function of the protein CEP290, allowing the retina to detect light.
- CRISPR-Cas9 is a unique technology that enables geneticists and medical researchers to edit parts of the genome by removing, adding or altering sections of the DNA sequence.

Neural Processing Unit (NPU):

Apple company debuted the M4 chip with the iPad Pro and the most prominent change in this chip is the 16-core Neural Engine, which is Apple's term for Neural Processing Unit (NPU).

- Neural Processing Unit (NPU) is a dedicated processor designed specifically for accelerating neural network processes.
- A neural network is essentially a type of machine learning algorithm that mimics the human brain for processing data.
- It is highly capable for handling machine learning operations that form the basis for AI-related tasks, such as speech recognition, natural language processing, photo or video editing processes like object detection, and more.

In most consumer-facing gadgets such as smartphones, laptops and tablets, the NPU is integrated within the main processor, adopting a System-on-Chip (SoC) configuration





Auroras

The night sky was lit up by northern lights, or aurora borealis, at Hanle village in Ladakh.

- Auroras are essentially natural lights that appear as bright, swirling curtains in the night sky and can be seen in a range of colours, including blue, red, yellow, green, and orange.
- These lights primarily appear near the poles of both the northern and southern hemispheres all year round but sometimes they expand to lower latitudes.
- These are called as aurora borealis in the north and in the south, it is known as the aurora australis.
- It is due to activity on the surface of the Sun. The star continuously releases a stream of charged particles, mainly electrons and protons, and magnetic fields called the solar wind.
- As the solar wind approaches the Earth, it is deflected by the planet's magnetic field, which acts like a protective shield.
- However, some of the charged particles are trapped in the magnetic field and they travel down the magnetic field lines at the north and south poles into the upper atmosphere of the Earth.
- These particles then interact with different gases present there, resulting in tiny flashes that light up the night sky.
- When solar wind particles collide with oxygen, a green colour light is produced. Interaction with nitrogen produces shades of blue and purple.

CHABAHAR PORT

India and Iran signed a 10-year contract on Monday for the operation of a terminal at the strategically important Chabahar port in Iran.

- The long-term bilateral contract was signed between Indian Ports Global Limited (IPGL) and the Port & Maritime Organisation (PMO) of Iran, enabling the operation of the Shahid Beheshti terminal at the Chabahar Port for 10 years.
- The pact replaces one-year contracts that were being signed to keep the port operational until now.

- Chabahar is a deep water port in Iran’s Sistan-Baluchistan province.
- It is the Iranian port that is the closest to India, and is located in the open sea, providing easy and secure access for large cargo ships.
- Modern Chabahar came into being in the 1970s, and Tehran realised the strategic importance of the port during the Iran-Iraq war of the 1980s.
- In January 2003, President Khatami and then Prime Minister Atal Bihari Vajpayee signed off on an ambitious roadmap of strategic cooperation.
- Among the key projects the two countries agreed on was Chabahar, which held the potential to link South Asia with the Persian Gulf, Afghanistan, Central Asia, and Europe.
- The timelines for the project were undone by India’s growing relationship with the United States.
- The US, which declared Iran as one of the “axis of evil” along with Iraq and North Korea, pushed New Delhi to abandon its strategic relationship with Tehran, and the Chabahar project became a casualty.
- While India spent about \$100 million to construct a 218-km road from Delaram in western Afghanistan to Zaranj on the Iran-Afghan border to link with Chabahar, the port project itself progressed at a glacial pace.
- IPGL (India Ports Global Ltd) has been operating Chabahar port through its wholly owned subsidiary, India Ports Global Chabahar Free Zone (IPGCFZ), since December 24, 2018.
- The port has handled more than 90,000 twenty-foot-equivalent units (TEUs) of container traffic and more than 8.4 million metric tonnes (MMT) of bulk and general cargo since then.



HIGH ENERGY PHOTON SOURCE

China is set to become the first country in Asia with a fourth-generation synchrotron light source with the completion of the High Energy Photon Source (HEPS).

- This advanced facility will produce some of the world’s brightest X-rays, significantly enhancing research capabilities across various scientific fields.
- HEPS will accelerate electrons to 6 gigaelectron volts, enabling high-resolution imaging at nanometre scales and facilitating rapid experiments.
- HEPS (High Energy Photon Source) is recognized as the brightest synchrotron X-ray source in Asia.
- Synchrotrons use electricity to generate intense beams of light, over



a million times brighter than the sun.

- They utilize a multi-bend achromat lattice, a complex array of magnets, to produce narrower and brighter X-ray beams.

Nancy Grace Roman Telescope

NASA’s upcoming Nancy Grace Roman Space Telescope, set to launch in late 2026, will search for tiny primordial black holes dating back to the Big Bang.

- These hypothetical black holes, with masses similar to Earth or even large asteroids, could revolutionize theoretical physics if detected
- Detection of these small black holes, which would be impossible to form by any known process, would utilize gravitational lensing, where the black holes bend light from distant sources.
- This technique, currently used to find rogue planets, will help differentiate between these black holes and other objects statistically.
- Confirming their existence would have profound implications for understanding galaxy formation, dark matter, and cosmic history, challenging Stephen Hawking’s theory that smaller black holes should have evaporated through Hawking radiation over 13.8 billion years.

Exercise Tarkash

The India-U.S joint exercise in conducting coordinated operations in urban counter terrorism contingencies will conclude in Kolkata.

- Exercise Tarkash is the seventh edition of the Indo-U.S. joint counter terrorism exercise.
- It is held between the elite National Security Guard (NSG) and the U.S. Special Operations Forces (SOF) commenced on April 22, 2024.
- The primary objective of the bilateral exercise is to build functional relation and enhance interoperability between the two special forces in conducting coordinated counter terror operations in urban counter terrorism contingencies.
- It is also aimed at improving bilateral cooperation between India and the U.S. in matters relating to combating terrorism, in all its forms and manifestations,” a statement said.
- It also involved sharing of best practices, tactics, techniques and procedures, over a wide spectrum of counter terror operations, in urban environment including close quarter battle, building intervention drills and hostage rescue operations etc.

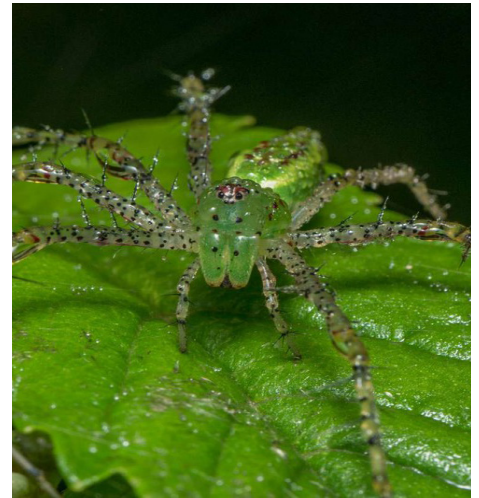


Russian President has bolstered the country's military capabilities by ordering the addition of a new nuclear-capable missile known as the Bulava into the Russian military arsenal.

- RSM-56 Bulava (NATO reporting name: SS-N-32) is a Russian submarine-launched intercontinental ballistic missile (ICBM).
- Designed by the Moscow Institute of Thermal Technology, development of the missile was launched in the late 1990s, and is designed to be deployed on Russia's Borei-class submarines.
- Bulava represents a core component of Russia's future strategic nuclear force.
- It is a three-stage solid-propellant
- The missile has a launch mass of about 8 tonnes and a throw weight of 1,150 kg.
- It measures 12.1 meters in length in a launch container and 2 meters in diameter.
- Bulava has a maximum range of 8,300 km (5,160 miles) and a payload of up to 10 multiple independently targetable re-entry vehicles, or MIRVs, capable of delivering nuclear warheads to different targets.
- The missile's RVs are capable of in-flight maneuverability and re-targeting to out maneuver any enemy defense.
- The RVs have an expected accuracy of around 250 to 300 m.

PEUCETIA CHHAPARAJNIRVIN : SPIDER SPECIES

- Daryapur-based arachnologist recently identified a green lynx spider, named *Peucetia chhaparajnrvin*, which was never discovered earlier.
- *Peucetia chhaparajnrvin* is a new species of green lynx spider.
- The spider was found in Tal Chhapar Wildlife Sanctuary in Churu district of Rajasthan.
- The spider species has been named *Peucetia chhaparajnrvin* after the area in Rajasthan, Tal



Chhapar, where it was discovered.

- This spider is found on the green leaves of the *Vachellia nilotica* (babul) tree.
- Their green hue aids in blending with their surroundings and ambushing prey, while their long legs allow them to move quickly.
- This spider is nocturnal and feeds on small insects.
- Lynx spiders, (family Oxyopidae) are any of several groups of active spiders (order Araneida) that do not build a nest or web but capture their prey by pouncing upon them.

Batillipes chandrayaani: New Species of Marine Tardigrade

- A new species of marine tardigrade has been discovered off the southeast coast of Tamil Nadu and named *Batillipes chandrayaani* in honor of the Chandrayaan-3 mission.
- *Batillipes chandrayaani* was found in the intertidal beach sediments at Mandapam in Tamil Nadu.
- Similar in size to other tardigrades, it grows to a length of 0.15 millimeters and a width of 0.04 millimeters.
- The species features a trapezoid-shaped head and four pairs of legs with sharp-tipped sensory spines. Both males and females share the same morphology and size.
- This species is the 39th described under the genus *Batillipes*.
- Tardigrades, commonly known as 'water bears,' are microscopic marvels.
- Marine tardigrades constitute 17% of all known tardigrade species and are found in all the world's oceans.





EURASIAN WHIMBREL: MIGRATORY BIRD

For the first time, a long-distance migratory bird, the Eurasian or common whimbrel, tagged with a Global Positioning System (GPS) transmitter, was captured on camera in the state of Chhattisgarh.

- Eurasian Whimbrel is a wading bird in the large family Scolopacidae.
- Scientific Name: *Numenius phaeopus*
- They have an extensive range that spans across five continents: North America, South America, Asia, Africa, and Europe.
- They breed in the subarctic regions of Siberia and Alaska during the summer months before migrating south to wintering grounds in southern USA, Central America, South America, Africa, and South Asia, including Nepal.
- Habitat: Winters mainly along the coastline, coastal wetlands, mangroves, marshes, and larger rivers.
- Whimbrels are known for their high-pitched call consisting of a repetitive series of seven notes.
- Conservation Status: IUCN Red List: Least Concern



Glyptothorax punyabratai

The ICAR-NBFGR discovered a new catfish species in the pristine waters of Arunachal Pradesh, India and named it as *Glyptothorax punyabratai*.

- The ICAR-NBFGR discovered a new catfish species in the pristine waters of Arunachal Pradesh, India and named it as *Glyptothorax punyabratai*.
- The species was collected from Tung Stream, a tributary of the Tissa River, in the Brahmaputra River basin. It is a new catfish species.
- Catfish represent one of the largest groups of freshwater fishes, with more than 2000 species.
- Most catfish are found in freshwater but a few are marine. Most species of catfish are nocturnal.
- Catfish are primarily benthic or bottom-dwellers.



OLEANDER LEAVES : BANNED

Death of a 24-year-old woman, Surya Surendran, who accidentally consumed oleander leaves, two major religious temple boards in Kerala have imposed a ban on the use of oleander flowers in temple offerings.

- The incident occurred when the victim, unknowingly chewed oleander locally known as Arali in Kerala leaves, leading to severe poisoning and her subsequent death.
- This prompt action by the Travancore Devaswom Board and the Malabar Devaswom Board aims to prevent future incidents by restricting the flower's use in religious offerings and prasadam.
- *Nerium oleander*, commonly known as oleander, is a highly toxic plant despite its widespread cultivation for ornamental purposes.

Leopard Cat: Spotted



A leopard cat has been spotted in Maharashtra's Pench Tiger Reserve for the first time, a senior forest official said recently.

- Leopard Cat is a species of forest-dwelling cat, of the family Felidae. It is noted for its leopard-like colouring.
- They are the most widely distributed Asian small cats.
- Their range extends from the Amur region in the Russian Far East over the Korean Peninsula, China, Indochina, the Indian Subcontinent, to the West in northern Pakistan, and to the south in the Philippines and the Sunda Islands of Indonesia.
- They are found in agriculturally used areas but prefer forested habitats.
- They live in tropical evergreen rainforests and plantations at sea level, in subtropical deciduous and coniferous forests in the foothills of the Himalayas at altitudes above 1000 m.
- They vary widely in size and appearance across their range. The colouration ranges from pale tawny, to yellow, red or grey above, with the underparts white and spotted.
- There are usually four black stripes running down the forehead to the nape, breaking up into short bands and elongate spots on the shoulders.
- They are solitary, nocturnal carnivores.
- Conservation Status: IUCN Red List: Least Concern

CAENORHABDITIS ELEGANS

Researchers found that once *C. elegans* worms eat a disease-causing strain of bacteria, its children inherited the 'knowledge' to avoid making the same mistake up to four generations.

- *Caenorhabditis elegans* is a nematode worm which is a small, relatively simple, and precisely structured organism.
- It grows within 3-5 days from a fertilised egg to a millimetre-long adult, and it has informed

profound insights into the human body, as well as biology.

- It is widely used in research to understand neuronal and molecular biology. It was the first multicellular organism to have its full genome sequenced and neural wiring mapped.
- It has two sexes—a hermaphrodite and a male.
- The hermaphrodite can be viewed most simply as a female that produces a limited number of sperm:

PEREGRINE FALCON

Project Raptor Watch (PRW) of the Madras Naturalist's Society, who have been tracking peregrines, aims to document, study and monitor raptor species in Tamil Nadu.

- Peregrine Falcon is one of the most widespread birds in the world.
- It is found on all continents except Antarctica and on many oceanic



islands

- They prefer open habitats, such as grasslands, tundra, and meadows.
- They are most common in tundra and coastal areas and rare in sub-tropical and tropical habitats.
- They nest on cliff faces and crevices.
- They are active during the day. When not breeding they are primarily solitary and establish and defend territories.
- They are high level predators, peregrine falcons play an important role in regulating populations of their prey, particularly pigeons and doves.

she can reproduce either by self-fertilization, using her own sperm, or by cross-fertilization after transfer of male sperm by mating.

- Self-fertilization allows a single heterozygous worm to produce homozygous progeny.

Himalayan Magpies : Study



The enchanting Himalayan magpies have garnered increased attention as researchers delve deeper into their habitats and behaviours.

- These captivating birds adorn the mountainous landscapes from Kashmir to Myanmar, adding vibrancy to the region.
- Corvidae Family and Magpies: Magpies belong to the Corvidae family of birds, which includes crows, jays, and ravens.
- Corvids are generally considered to be noisy, inquisitive birds that are often associated with omens, both good and bad, in folklore from around the world.
- Despite their folklore associations, magpies are striking in appearance, and some of the most noticeable species are found in the Himalayas.
- Himalayan magpies are classified as “least concern” on the IUCN Red List of Threatened Species.

Red Colobus Monkeys

A recent study suggests that Red Colobus Monkeys, a rare and endangered population of monkeys found in various regions of Africa are facing threats to their survival and are at risk of becoming extinct.

- These monkeys act as “indicator species,” meaning their presence and well-being reflect the overall health of the forest ecosystem.
- Colobines are primarily leaf-eaters.
- They also play a vital role in seed dispersal, contributing to the regeneration of diverse plant life.
- Their unique digestive system allows them to consume and disperse seeds, ensuring the continuation of various plant species.
- Across Africa, there are 17 red colobus species (18 if subspecies are counted), spanning from Senegal to the Zanzibar Archipelago.
- 14 of them are classified as Endangered or Critically Endangered on the IUCN Red List of Threatened Species.



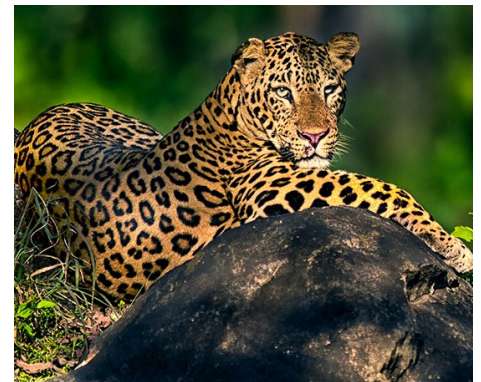
Shaksgam Valley

- India has lodged a strong protest with China over construction activities in the Shaksgam Valley, condemning it as an “illegal” attempt to alter the situation on the ground.
- The Shaksgam Valley, also known as the Trans Karakoram Tract, is part of the Hunza-Gilgit region of Pakistan-Occupied Kashmir (POK) and is a disputed territory claimed by India.
- It borders the Xinjiang Province of the People’s Republic of China (PRC) to the north, the Northern Areas of POK to the south and west, and the Siachen Glacier region to the east.
- In 1963, Pakistan ceded the valley to China when both countries signed a boundary agreement to settle their border differences.
- The agreement stipulated that after the resolution of the Kashmir dispute between Pakistan and India, the sovereign authority concerned would re-open negotiations with China to sign a formal Boundary Treaty to replace the present agreement.
- This agreement laid the foundation for the Karakoram Highway, which was built jointly by Chinese and Pakistani engineers in the 1970s.

Bhadra Tiger Reserve

The number of people visiting the Bhadra tiger reserve for safari has gone up and the tourists need to take adequate care not to disturb this eco-sensitive zone

- Bhadra Tiger Reserve is situated in the midst of the Western Ghats region of It is unique as it nestled within several hill ranges.
- It is drained by the river Bhadra and its tributaries.
- It boasts of a substantial tiger population and as such the sanctuary was declared the 25th Project Tiger reserve of India in 1998. The habitat also has an Elephant Reserve.
- It has dry-deciduous, moist-deciduous, shola and semi-evergreen patches.
- Teak, Rosewood, Mathi, Honne, Nandi and many medicinal plants etc.
- Tiger, Leopard, Leopard cat, Dholes, Indian Civet, ungulates like Gaur, Sambar and Barking Deer are common.





Pyrenees Mountains

The French President recently hosted Chinese President Xi Jinping at the Tourmalet Pass in the Pyrenees for private meetings

- Pyrenees Mountains are a chain of mountains in southwestern Europe that form a natural border between Spain and France.
- It is a fold mountain chain created by the continental collision of the microcontinent of Iberia with the massive Eurasian plate.
- They are quite old mountains in comparison to the Alps.
- It extends for about 500 km from the coasts of the Mediterranean Sea in the east to the Bay of Biscay (Atlantic Ocean) in the west.
- Politically, it is divided into the Spanish and French Pyrenees.
- The tiny country of Andorra is found sandwiched between them, in the eastern part of the Pyrenees Mountains.
- It separates the rest of continental Europe from the Iberian Peninsula.
- The western end of the Pyrenees Mountains merges with the Cantabrian Mountains, located in the northern part of the Iberian Peninsula.
- Located in Spain, Aneto Peak, is the highest mountain peak in the Pyrenees Mountains (3,404 m).

KALESAR WILDLIFE SANCTUARY : IN NEWS

The Supreme Court stayed the construction of four proposed dams inside Kalesar Wildlife Sanctuary in Haryana's Yamunanagar district as the construction will not only negatively impact the wildlife and local community but also harm the ecosystem.

- It was established in 1988 to protect the local wildlife and biodiversity and was declared a National Park on 8th December 2003.

It is situated in the foothills of the Shiwalik ranges of the Himalayas and is contiguous to Rajaji National Park (Uttarakhand) and Simbalbara National Park (Himachal Pradesh).

- It is spread across 13,209 acres and is rich in biodiversity, featuring dense sal and khair forests and grassland patches supporting diverse plant and animal life.
- It is home to many species of animals, including leopards, sambar deer, barking deer, hyenas, jackals, Indian porcupines, Indian pangolins, and langurs and several species of birds, such as the red junglefowl, grey partridge, Indian peafowl, and white-throated kingfisher

Doordarshan Logo : Changed Colour

• National broadcaster Doordarshan (DD) has changed the colour of its historic flagship logo from red to saffron.

• Political parties accused the public broadcaster of adopting a colour closely associated with the ruling political party, especially because the change was made in the middle of the election process.

• DD said the change was only one of visual aesthetics.

• It was first aired on 15th September 1959, as a public service telecasting service.

• It became a broadcaster with daily transmissions of morning and evening shows in 1965, having transmission in Delhi.

• On 1st April 1976, It came under the Information and Broadcast Ministry and in 1982, Doordarshan became the National broadcaster.



Great Rift Valley : Dam Burst

• Many people died when a dam burst its banks near a town in Kenya's Rift Valley, as heavy rains and floods battered the country.

• Great Rift Valley is one of the most extensive rifts on Earth's surface that runs along part of East Africa.

• It is part of a larger feature called the East African Rift System (EARS).

• It runs from Jordan in southwestern Asia to the coast of the Indian Ocean in central Mozambique.

• It runs across many countries: Eritrea, Djibouti, Ethiopia, Kenya, Tanzania, Uganda, Rwanda, Burundi, the Democratic Republic of the Congo (DRC), Malawi, Zambia, and Mozambique.

• The valley is situated in a region where three tectonic plates meet.

• It was formed about 40 million years ago when tectonic plates split and gave rise to the East African Rift.

• The area is geologically active and features volcanoes, hot springs, geysers and frequent earthquakes.

• A series of some thirty lakes lies along its length; the three largest in Africa are known as the Great Lakes and include Lake Tanganyika, the second deepest lake in the world, and Lake Victoria, the second-largest fresh



water lake by surface area in the world.

- Many of Africa's highest mountains—including Mount Kilimanjaro, Mount Kenya, and Mount Margherita—are in ranges fronting the Rift Valley.
- Rift Valley is a lowland region that forms where Earth's tectonic plates move apart, or rift.
- They are found on land and at the bottom of the ocean, where they are created by the process of seafloor spreading.
- They differ from river valleys and glacial valleys in that they are created by tectonic activity and not the process of erosion.



The Bombay High Court recently held that public sector banks (PSBs) cannot recommend or request the issuance of Look Out Circulars (LOCs) against loan defaulters.

- Look Out Circulars (LOCs) is an instrument issued by the government as a directive to its immigration authorities to restrict and regulate the physical movement of a person.
- The immigration department is tasked to stop any such individual against whom such a notice exists from leaving or entering the country.
- Law enforcement agencies often use LOCs as a coercive measure to stop any individual wanted or under suspicion by the police or an investigating agency from leaving or entering the country through designated land, air, and sea ports.
- LOCs are usually issued by the police, intelligence agencies, or other government agencies authorised by the Ministry of Home Affairs (MHA).
- LOC does not have express statutory backing in legislation, the power to issue LOCs and their regulation stems from the executive in the form of an Office Memorandum issued by the MHA in 2021, which provides consolidated guidelines for opening LOCs against Indian citizens or foreigners.
- The guidelines categorically provide that LOCs can only be opened in criminal or penal cases, and the reason for the LOC must be indicated with the issue of the circular.
- If there is no criminal or penal case pending, the LOC cannot be issued, and agencies can only request that they be informed of departure or arrival.
- However, the guidelines provide that in exceptional cases, an LOC may be issued against an individual even when the case is not a criminal case.
- This is in specified circumstances, such as when it is detrimental to the “sovereignty, or security, or integrity of India”, the “bilateral relations with any State”, or to the “strategic and economic interests of India”.
- LOCs are also permitted in cases where the individual is likely to engage in terrorism or offences against the State or when such departure would not be “in the larger public interest”.
- LOCs cannot be issued unless basic details — including name/parentage, passport number, and date of birth — are available, and such requests must be constantly monitored.

Walrus Death from Bird Flu in Arctic



- Christian Lydersen from the Norwegian Polar Institute reported the first recorded case of a walrus dying from bird flu on Hopen Island in the Svalbard archipelago.
- Six dead walruses were found in Svalbard, around 1,000 kilometers from the North Pole. Tests in a German lab confirmed bird flu in one walrus, but the specific strain (H5N1 or H5N8) is unknown.
- Concerns arise as walruses gather in large groups during summer when ice melts, potentially facilitating virus spread.
- While bird flu mainly spreads through birds like ducks and geese, mammals can also contract it by eating infected birds. Similar cases have occurred in sea lions and fur seals.
- Polar bears, which might consume infected walrus corpses, are at risk, with one already dying from bird flu in Alaska. Researchers stress the need for continuous monitoring to prevent further spread among marine mammals.

KUTCH AJRAKH

- Geographical Indication Certificate for Kutch Ajrakh: The Controller General of Patents, Designs, and Trademarks (CGPDTM) has awarded the Geographical Indication (GI) certificate to the traditional artisans of 'Kutch Ajrakh' from the vibrant Kutch region in Gujarat.
- Cultural Heritage: Ajrakh, a textile craft deeply rooted in the cultural heritage of Gujarat, particularly in Sindh, Barmer, and Kutch, boasts a legacy spanning millennia.
- Meticulous Craftsmanship: The art of Ajrakh involves a meticulous hand-block printing process on treated cotton cloth, resulting in intricate designs rich in symbolism

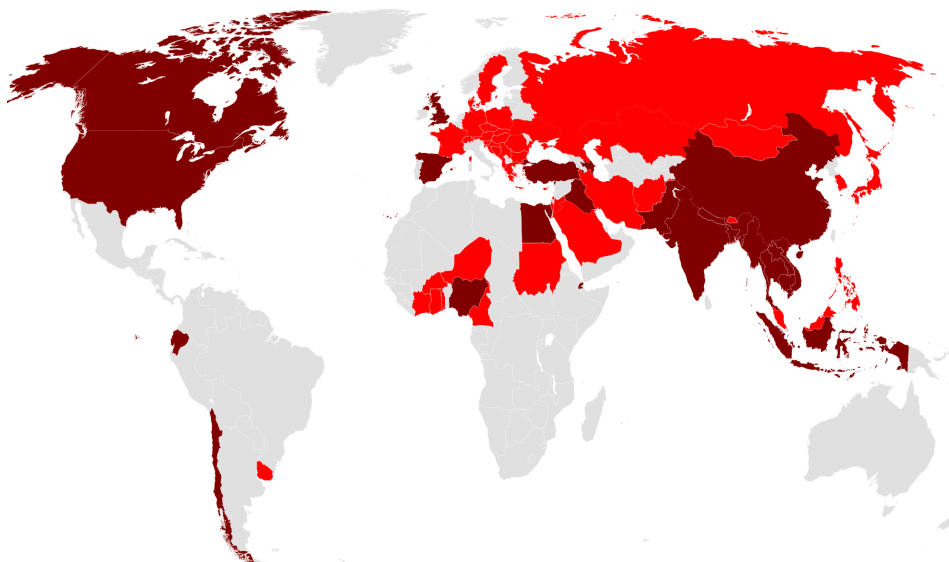
and history. The name 'Ajrakh' comes from 'Azrak,' meaning indigo, a dye commonly used to create a bluish effect.

- Traditional Colors and Techniques: Ajrakh prints traditionally feature three colors: blue (signifying the sky), red (signifying the land and fire), and white (signifying the stars). The textiles are treated with vegetable and mineral colors and undergo an eight-step washing cycle.
- Historical Introduction and Usage: Introduced over 400 years ago by Sind Muslims, Ajrakh is worn by nomadic pastoralist and agricultural communities such as the Rabaris, Maldharis, and Ahirs as turbans, lungis, or stoles.

Commission on Population and Development: Session

- The Permanent Mission of India to the United Nations and the Ministry of Panchayati Raj, in collaboration with the United Nations Population Fund, are organizing an event titled "Localizing the SDGs: Women in Local Governance in India Lead the Way" during the 57th Session of the Commission on Population and Development (CPD57).
- The Commission on Population and Development was established by the Economic and Social Council (ECOSOC) in 1946 and renamed by the General Assembly in 1994. It comprises 47 member countries.
- Member countries are elected by the Economic and Social Council for a four-year term based on geographic distribution.
- The Commission serves as a three-tiered intergovernmental mechanism that plays a primary role in following up on the implementation of the programme of action at national, regional, and international levels, advising the Council accordingly.
- Meetings of the Commission were typically held every two or three years until 1994, after which they have been held annually.





H5N1 Outbreak

- The H5N1 outbreak has underscored significant vulnerabilities in the industrial livestock sector, emphasizing the need for a comprehensive reassessment of animal welfare within India's environmental and legal frameworks.
- This outbreak highlights the importance of the One Health principle, which integrates public health, ecosystem health, and biodiversity conservation.
- Regular outbreaks of Avian Influenza (bird flu) disrupt production, lead to the culling of birds, and create market panic, impacting consumption.
- Newcastle Disease (ND) is another highly contagious viral disease that affects poultry health and productivity.
- Inadequate biosecurity measures in farms and live bird markets facilitate the spread of diseases.
- Chickens in industrial settings are often confined in high-density wired cages, known as 'battery cages,' leading to overcrowding and stress.
- This practice results in poor air quality, waste accumulation, and greenhouse gas emissions, contributing to environmental pollution and degradation.
- Volatile prices of crucial poultry feed ingredients, such as corn and soybean meal, significantly affect production costs and increase import dependence.
- Rumors and misinformation about poultry products during disease outbreaks can drastically reduce consumption, affecting overall market stability.
- This leads to spoilage and wastage, especially during peak production periods.
- A fragmented supply chain with multiple intermediaries raises transaction costs and lowers farmer profits, while poor transportation infrastructure hampers product movement, affecting delivery times and freshness.

Paliyar Tribes: Demand

A recent research carried out on 'Paliyar Tribals in Kodaikanal and Theni areas' urged the State government to take necessary and immediate steps to uplift the Paliyar tribes as well as the other such Adivasi communities.

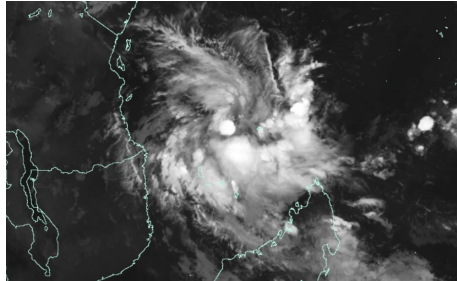
- Paliyar Tribe has been derived from the word 'Palaniyan', which in Tamil language means a man from Palani.
- They are and have been known by multiple names such as the Paliyans, Pazhaiyarares and Panaiyars.
- They are distributed in the districts of Madurai, Thanjavur, Pudukkottai Tirunelveli and Coimbatore of Tamil Nadu.
- They speak Tamil and use the Tamil script for both inter-group and intra-group communication.
- Traditionally, the Paliyars were hunters and gatherers, residing in the forests of the Western Ghats.
- The tribal people offer prayers to the Vanadevadaï in the interior forest.
- They also worship god Karuppan by visiting a remote area of the forest along with the families.
- The Paliyar tribes never burned the dead bodies.
- They had the customary practices of burying the dead bodies in an area near to their residential area on the western side.



CYCLONE HIDAYA

A severe storm named Cyclone Hidaya is set to hit the coast of Tanzania near Dar es Salaam from the Indian Ocean.

- Cyclone Hidaya (Guidance in Arabic), may bring heavy rain and strong winds to regions in Tanzania like Tanga, Morogoro, the islands of Unguja and Pemba.
- It formed over the South Indian Ocean and was named by France's over-seas tertiary in the Indian Ocean.
- Even though Kenya is usually considered safe from cyclones, now it is preparing for the impact of Cyclone Hidaya.
- Kenya falls within the latitude of 4° North and South and is considered safe from cyclones because they typically don't form within 5 degrees of the equator due to the weak Coriolis force there, which is necessary for creating cyclones.
- Tropical cyclones usually develop in areas between 5° and 30° North or South of the equator.
- Kenya now faces the possibility of being impacted by Cyclone Hidaya.



INDIAN OCEAN DIPOLE

According to recent reports, Positive Indian Ocean Dipole (IOD) or Indian Nino may re-emerge for the second consecutive year in the latter half of 2024.

o It is for the first time since 1960 that the event is recurring for a second consecutive year since record-keeping began.

o The Indian Ocean Dipole (IOD), also known as the Indian Niño, is an irregular oscillation of sea surface temperatures in which the western Indian Ocean becomes alternately warmer (positive phase) and then colder (negative phase) than the eastern part of the ocean.

o During a positive phase, warm waters are pushed to the Western part of the Indian Ocean, while cold deep waters are brought up to the surface in the Eastern Indian Ocean.

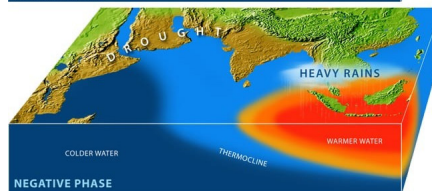
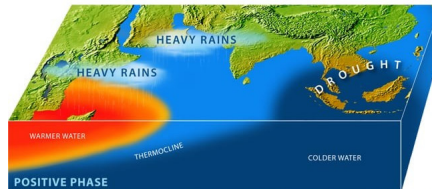
o This pattern is reversed during the negative phase of the IOD.

o The IOD can modulate the impact of El Niño on the Indian monsoon.

o When a positive IOD coincides with an El Niño event, it can partially offset the negative effects of El Niño.

o The IOD influences local weather, causing heavy rains and/or droughts in Africa and Australia.

o Associated sea-level changes can lead to increased threats of coastal flooding and related impacts.



Shinku La Tunnel

The Border Roads Organisation will construct the world's highest tunnel at Shinku La Pass at 16,580 feet to connect Himachal to Zaskar valley in Ladakh.

• The developments come at a time when the military standoff between India and China in eastern Ladakh has entered its fifth year, with no indication of a resolution to the outstanding problems along the contested Line of Actual Control (LAC).

• The Shinku La tunnel is a significant infrastructure project aimed at enhancing connectivity in the border areas of Ladakh.

• The tunnel will be constructed at an altitude of over 16,500 feet.

• It is situated on the Nimu-Pad-am-Darcha Road link, which connects Ladakh and Himachal Pradesh.

• The construction of this tunnel is expected to be completed by 2025.

• The primary purpose of the Shinku La tunnel is to provide all-weather connectivity to the border areas of Ladakh.

• It will facilitate the swift movement of troops and heavy weaponry to forward areas.

• It will provide the Indian military access to the border areas of Ladakh from the Himachal side

• The completion of this project will improve the financial condition of Zaskar Valley residents by giving impetus to tourism.

• It will significantly enhance connectivity and security in the region.



VENEZUELA BECOMES FIRST COUNTRY TO LOSE ALL GLACIERS

Venezuela is thought to be the first nation in modern times to have completely lost all of its glaciers.

- New research shows that the Humboldt glacier in the Andes, which used to be very big, has shrunk to less than 2 hectares, which means it is no longer a glacier but an ice field.
- The Sierra Nevada de Mérida mountain range in Venezuela used to have six glaciers.



- As of 2011, five of these glaciers had melted away, leaving only the Humboldt glacier. Professionals thought Humboldt would last for another ten years, but new tests show it has melted much more quickly than expected.
- It is located on the northern coast of South America with its capital located in Caracas.
- It is bounded by the Caribbean Sea and the Atlantic Ocean to the north, Guyana to the east, Brazil to the south, and Colombia to the southwest and west.
- A physiographically diverse country, Venezuela incorporates the northern Andean Mountain chains and interior highlands, the main portions of the Orinoco River basin with its expansive Llanos (plains), Lake Maracaibo, which is the largest lake in South America and the spectacular Angel Falls, the world's highest waterfall.
- Rio Negro (shared with Colombia and Brazil): 2,250 km.
- It is a major tributary of the Amazon River.
- Orinoco (shared with Colombia): 2,101 km. It is the third-longest river in South America, after the Parana and the Amazon.

Ambaji White Marble : GI Tag

Marble mined in Gujarat's Ambaji has recently been awarded the Geographical Indication, or GI tag, by the Central Government.

- Ambaji White Marble is a type of marble known for its stunning white appearance and unique natural patterns.
- It is named after the town of Ambaji in the state of Gujarat, where it is predominantly quarried.
- It is also known as Amba White Marble and Ambe White Marble.
- It is characterized by its pristine white colour, which often features subtle grey or beige veining.
- The veins can vary in intensity, ranging from fine and delicate to bold and pronounced, giving each slab a distinct and individualistic appearance.
- These variations occur naturally due to the presence of minerals and impurities during the marble formation process.
- It has very long-lasting shine and durability.
- The smooth and polished surface of the marble adds to its appeal and sophistication.
- It is widely used for luxury architectural projects, sculptures, and monuments.





(A project of MGOCSM, the student wing of the Malankara Orthodox Church)
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