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Affairs



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CULTURE AND HERITAGE

1. Surya Tilak in other temples in India



Source: The Indian express

- Suriyanar Kovil Temple (Tamil Nadu):** It was built between 11th-12th centuries, sunlight illuminates specific areas throughout the year, including the deity Suriyanar and his consorts.
 - Nanarayanawamy Temple (Andhra Pradesh):** Sunlight bathes the Matsya avatar of Lord Vishnu from feet to navel progressively during the five-day Surya Puja Mahotsavam festival.
 - Mahalakshmi Temple (Maharashtra):** During the biannual Kiranotsav festival, rays of the sun grace the feet of Goddess Mahalaxmi's idol.
 - Koba Jain Temple (Gujarat):** Each year, during the Surya Abhishek event, the forehead of the Mahaveerswami statue is lit by direct sunlight for three minutes precisely at 2:07 pm.
 - Unav Balaji Surya Temple (Madhya Pradesh):** This temple is designed such that during its annual festival, the first rays of the sun align perfectly to illuminate the deity in the innermost sanctum.
 - Konark Sun Temple (Odisha):** The architectural design of this temple allows the sun's first rays to enter the main entrance and reach the deepest sanctum.
- Gavi Gangadhareshwara Temple (Karnataka):** On Makar Sankranti, sunlight penetrates this cave temple, lighting up the Nandi and subsequently the Shivlingam.

UPSC Prelims point: Temples of India
- ## 2. Tripura: Matabari Pera Prasad, Rignai Pachara textiles get GI Tag
- Context:**
- Three traditional products from Tripura have recently received Geographical Indication (GI) tag. The products are Matabari pera prasad and Rignai pachara textiles. With this, Tripura now has 4 GI Protected products.
- Matabari pera Prasad:**
- The 'Matabari pera prasad' is a sweet offering at the renowned Tripureswari temple in Tripura. Made from milk and sugar, this delicacy is famous for its distinctive taste and deep-rooted cultural traditions.
 - With the increasing demand for the peda among locals and visitors, companies have started marketing the product to customers worldwide. The peda can now be ordered online, as well as through Facebook and WhatsApp.
- Rignai Pachara Textiles:**
- 'Rignai pachara' is a traditional hand-woven attire meticulously crafted by skilled artisans using indigenous materials and techniques. This garment holds symbolic value within Tripura's cultural tapestry and reflects the rich legacy of the region's textile heritage.
 - The 'Rignai pachara' has garnered significant interest among urban dwellers, particularly in metropolitan areas, for its traditional allure.

Risa:

- Risa, another traditional product from Tripura, received the GI tag earlier this month. Known for its surprising and stylish designs, exclusive multi-colour combinations, and lasting texture, Risa carries great significance for the art of Tripuri.
- Tripuri tribal women make all the fabrics, including Risa, using loom looms. They create the most amazing and stylish designs by using multi-coloured warp and weft threads on the loom.

Queen Pineapple of Tripura:

- In addition to the recently recognised products, the queen pineapple of Tripura had already received a GI tag through the initiative of the North Eastern Regional Agricultural Marketing Corporation (NERAMAC). This nutrient-rich pineapple is one of the 13 fruits and vegetables from the Northeast that have been awarded the GI tag.

About GI Tag:

- The GI tag ensures legal protection against unauthorised imitation or misuse of the products produced in particular geographical region, safeguarding their authenticity and preserving the cultural heritage associated with them. This recognition also facilitates market access and promotion, both domestically and internationally, thereby fostering economic opportunities for local communities involved in their production.
- GI tag also serves as a catalyst for sustainable development initiatives, encouraging responsible production practices and empowering indigenous communities involved in the production and trade of these products.

UPSC Prelims point: GI tagging**3. Chithirai Festival:****Context:**

Lord Kallazhagar's annual ritual in Alagar Temple, Madurai during the Chithirai festival saw thousands of devotees gathering to witness his ceremonial entry into the Vaigai river.

**About the festival:**

- The festival, merging narratives of Lord Kallazhagar and Goddess Meenakshi's marriage, holds historical significance and promotes harmony.
- Alagar Temple is situated at the base of Alagar hills in Madurai, Tamil Nadu, and is one of Lord Vishnu's 108 abodes, revered as Kallazhagar.
- Enclosed by fortress walls, it boasts six corridors and is mentioned in the Tamil epic Silappadikaram and Alvars' hymns.
- The temple's mandapam pillars showcase Nayaka's art style, adding to its historical and architectural significance.
- Vaigai River originates in the Western Ghats (Varushanad Hills) and flows through the Pandya Nadu region of Tamil Nadu.
- Stretching 258 kilometres, it ultimately joins the Palk Strait near the Pamban Bridge in Ramanathapuram district.
- Vaigai holds historical significance as it flowed through Madurai, the capital of the ancient Pandya kingdom, and is mentioned in Sangam literature.

UPSC Prelims point: Chithirai festival

4. Kuchipudi : Struggle

Context:

Kuchipudi artists are struggling for survival and going through a tough phase due to lack of patronage.



About Kuchipudi:

- Kuchipudi is one of the Indian Classical dance belongs to the Andhra Pradesh.
- It was originally performed by a group of itinerant actors known as Bhagavathalu, who would travel from village to village, performing plays and dances based on Hindu mythology.
- In the 15th century, the great poet and musician, Siddhendra Yogi, played a

major role in the development of Kuchipudi. He is credited with transforming the dance form from a simple folk art to a sophisticated and refined classical dance form.

- It is characterized by its intricate footwork, graceful movements and subtle facial expressions. It incorporates both pure dance (Nritta) and expressive dance (Nritya) elements, as well as storytelling through dance (Natya).
- It is also performed on the edge of a brass plate (known as Tarangam) on the beats of Carnatic music.
- It is largely developed as a Hindu god Krishna-oriented Vaishnavism tradition, and it is most closely related to Bhagavata Mela.
- The Kuchipudi performer apart from being a dancer and actor has to be skilled in Sanskrit and Telugu languages, music and manuscripts of the performance.

UPSC Prelims point: Kuchipudi dance

INDIAN POLITY, POLICY AND INTERNAL SECURITY

1. Managing competition in a digital world.

Context:

The article discusses how network effects in digital products can lead to monopolies. It explores past regulations in industries like telephony and suggests a **multi-stakeholder approach**, inspired by internet governance, to regulate the digital economy and ensure competition and innovation.



The network economy:

- The network economy is where products or services gain more value as more people use them, due to network effects.
- Examples include **Google Search, Facebook, and WhatsApp**, which dominate the market because their value increases with each new user.
- Digital networks can lead to monopolies, as seen with AT&T in telephony a century ago.
- This economy's significance is growing, with digital networks now a major part of the global GDP, underscoring the necessity for effective regulatory measures.

The network effects and their impact on digital markets:

- **Network Effects Defined:** Network effects occur when a product or service becomes more valuable as more people

use it. This is common in the digital economy.

- **Impact on Market Dynamics:** Strong network effects can lead to monopolies or oligopolies as dominant players emerge. For instance, Google Search and Facebook have become almost indispensable due to their vast user bases.
- **Historical Context:** Similar effects were seen in traditional network industries like telephony, where companies like AT&T once described their services as natural monopolies.
- **Digital Examples:** Today, platforms like WhatsApp and Android OS demonstrate network effects by becoming more functional and essential as more users join.
- **Economic Implications:** As these networks grow, their role in the economy expands, significantly influencing GDP and requiring new forms of regulation to manage their dominance and ensure fair competition.

The governments historically managed networks:

- **Regulatory Measures:** Governments have traditionally managed networks such as telephony through strict regulatory frameworks intended to prevent monopolies and ensure competitive markets.
- **Licensing and Price Controls:** These regulations often included licensing requirements, territorial subdivisions, and price controls to encourage market entry and competition.
- **International Frameworks:** At a global level, entities like the International

Telecommunication Union were set up to oversee network standards and practices internationally.

Results of Regulation: Despite regulatory efforts, these measures often resulted in slowed innovation and perpetuated high costs, maintaining the dominance of a few players in the industry.

Way forward:

Implement Ex Ante Regulation: Proactive regulations are recommended to prevent anti-competitive practices in digital markets before they become dominant. This approach has been endorsed by the Parliamentary Standing Committee on Finance and the Committee on Digital Competition Law.

Adopt Multi-Stakeholder Governance: Following the internet governance model, a multi-stakeholder approach involving academia, startups, industry, and civil society can ensure fair representation and prevent any single entity from dominating.

Maintain Minimal Government Interference: The government should avoid direct intervention while retaining oversight to address national security and public interest concerns, promoting a balance between regulation and innovation.

Mains point: The role of network effects in the emergence of monopolies in digital markets.

2. New data law- A barrier to journalistic free speech .

Context:

Three previous drafts of the Digital Personal Data Protection (DPDP) Act had exemptions for journalistic activities. However, the final law has withdrawn such an exemption.

In general, data protection laws don't require journalists to inform users or

get their consent before using their personal data.



Some important provisions of Digital Personal Data Protection (DPDP) Act:

- It is required to obtain users consent before the processing of their personal data.
- It provides basic rights such as access to and erasure of data. It also places some obligations on companies,
- The act mandates the establishment of a complaints body for grievance redressal.

The issues with the removal of 'journalistic exemption' in Digital Personal Data Protection (DPDP) Act:

- Accountability of elected representatives-**Journalists will find it extremely difficult to extract accountability of MPs and MLAs by exposing their scams or illicit sources of wealth.
- This is because as per DPDP act, personal data of MP is protected and if a journalist wants to use this data, they need to ask for permission of MP before publishing it. It is highly unlikely that any MP will give such permission.
- Threat to confidentiality-**Journalists must maintain confidentiality of their sources and research documents to ensure the safety of their sources. However, The DPDP Act empowers the government to obtain information from any data processor in India.
- This may impact the confidentiality of sources of journalists. It may impede a

journalist's ability to discharge their role as the fourth estate, that is, holding the state accountable.

Lack of transparency- The government has not made any comments on the draft's public. This makes it hard for citizens to know what various groups said and whose voices were considered in shaping the final law that led to removal of journalistic exemption.

The way forward:

There is a need to enable an open and transparent consultation process.

The Act empowers the central government to exempt any data processor or groups of data processors from parts of the law. This gives the government broad authority to grant or withdraw exemptions on its own. Thus, the government should allow Indian journalistic exemptions under this law.

Mains point: The removal of 'journalistic exemption' in Digital Personal Data Protection (DPDP) Act.

3. "Siachen: 40 years of Op Meghdoot"

Context:

April 13, 2024, marks 40 years since the Indian Army preemptively seized the Siachen Glacier on the Saltoro Ridge.

About Operation Meghdoot:



Operation Meghdoot was the Indian Armed Forces' operation that commenced on April 13, 1984, to seize control of the **Siachen Glacier** which is a strategically significant area in Northern Ladakh.

The glacier had been a point of contention between India and Pakistan following the ambiguous delineations of the 1949 Karachi Agreement.

This military campaign was led by Lieutenant General Manohar Lal Chibber, Lieutenant General PN Hoon, and Major General Shiv Sharma. It marked the first combat use of the world's highest battlefield.

The operation was India's assertive response to counter what it viewed as Pakistan's "**cartographic aggression**" in the undefined territory north of the NJ9842 map reference, which was the last demarcated point on the Line of Control (LoC) agreed upon by New Delhi and Islamabad.

Prompted by intelligence of an impending Pakistani military operation, India moved to preemptively secure the high-altitude passes of Sia La and Bilafond La.

The operation involved complex coordination between the Indian Army and the Air Force, deploying troops and dropping supplies via airlift to strategic heights.

The successful execution of Operation Meghdoot not only precluded Pakistani control over the crucial passes but also resulted in complete Indian dominion over the Siachen Glacier.

IAF's Role and Evolution in Operation Meghdoot:

The Indian Air Force (IAF) has played a crucial role in Operation Meghdoot using transport and helicopter aircraft to move troops and supplies.

Over time, the IAF expanded its role to include fighter aircraft like **the Hunter, MiG-23s, and MiG-29s**, operating from high-altitude bases in Leh and Thoise.

This expansion allowed for fighter sweeps and simulated bombing runs over the glacier, boosting morale and deterring adversaries.

- In 2009, **the IAF introduced the Cheetal helicopters**, specifically modified for high-altitude performance, to its fleet.
- A notable demonstration of its enhanced capabilities came in 2013 when a Lockheed **Martin C-130J Super Hercules** successfully landed at Daulat Beg Oldie, the highest airstrip in the world located near the Line of Actual Control in Ladakh.
- Presently**, the IAF employs a diverse array of aircraft, including the Rafale, Su-30MKI, Chinook, and Apache, to support the ongoing Operation Meghdoot, ensuring robust aerial capability over the contested region.

Prelims point: About Operation Meghdoot

4. Voting process reforms in India.

Context:

The Supreme Court has decided to hear petitions asking for 100% cross-verification of Voter Verifiable Paper Audit Trail (VVPAT) slips against the electronic vote count from Electronic Voting Machines (EVMs).



The voting process evolved in India since the first general election:

- First two elections**-In the first two general elections of 1952 and 1957, there was a separate box for each candidate with their election symbol. Voters had to put a blank ballot paper into the box of the candidate they wanted to vote for.
- Third election**-Starting from the third election, ballot papers with candidate names and symbols were introduced,

and voters put a stamp on the candidate of their choice.

- Introduction of EVM**-The EVM was introduced on a trial basis in 1982 in the Assembly constituency of Paravur in Kerala. They were deployed in all booths during the Assembly elections of Tamil Nadu, Kerala, Puducherry and West Bengal in 2001. In the 2004 general elections to the Lok Sabha, EVMs were used in all 543 constituencies.
- Introduction of VVPAT**- The Supreme Court In Subramanian Swamy versus Election Commission of India (2013) held that a paper trail is an indispensable requirement for free and fair elections. From 2019 general elections, EVMs backed with 100% VVPAT in all constituencies were introduced.

The benefits of EVMs:

- It has eradicated booth capturing by limiting the rate of vote casting to four votes a minute and thus significantly increasing the time required for stuffing false votes
- It has eliminated the problems of invalid votes in the elections.
- It is eco-friendly as it reduces the consumption of paper.
- It provides administrative convenience for the polling officers on the day of the poll and has made the counting process faster and error-free.

The mechanisms to uphold the integrity of EVM and VVPAT process:

- There is random allocation of EVMs to booths before polls
- Mock polls are conducted before the actual poll to display the correctness of EVMs and VVPAT.
- EVM serial numbers and total votes cast are shared with candidates' agents during vote counting for verification.
- As per the Election Commission of India, EVM is a standalone device like a calculator with no connectivity to any

external device and hence free from any kind of external hack

The issues associated with EVMs:

- EVMs are susceptible to hacking as it is an electronic device.
- Currently, the sample size for checking EVM counts with VVPAT slips is five per assembly constituency/segment. This isn't based on scientific criteria and may not detect faulty EVMs during counting.
- In the present process, booth-wise polling behaviour is identified by various parties. This **may result in profiling and intimidation.**

The way forward:

- **Scientific approach**-The sample for comparing EVM count and VVPAT slips should be determined scientifically by dividing each state into larger regions. If there's even one mistake, all VVPAT slips for that area should be counted fully, and they should decide the results.
- **Introduction of Totaliser machines**-Totaliser machines that are equipped to aggregate votes in 15-20 EVMs before revealing the candidate-wise, count can be introduced. This would minimise the possibilities of profiling and intimidation.

Mains point: The demand for 100% cross verification of Voter Verifiable Paper Audit Trail (VVPAT).

5. Supreme Court has just put the Delhi metro on track – and given a roadmap.

Context:

The article discusses a legal case between Delhi Metro (DMRC) and Delhi Airport Metro Express (DAMEPL) about a partnership gone wrong. The Supreme Court decided that earlier decisions were incorrect and ruled in favor of DMRC, emphasizing proper legal review in arbitration cases.



The legal dispute between DMRC and DAMEPL:

- The legal dispute between DMRC and DAMEPL centered on the operation of the Airport Metro Express Line.
- DAMEPL terminated the contract in 2012, citing defects in the infrastructure provided by DMRC which they claimed were not fixed within the agreed 90 days.
- **DMRC and DAMEPL** even approached the commissioner for metro rail safety to inspect and reopen the line, which happened in 2013.

The courts respond:

- Initially, the arbitration tribunal ruled in favor of DAMEPL, granting them a termination payment of Rs 2,782 crore plus interest, citing a valid termination notice by DAMEPL.
- The Delhi High Court upheld this award in 2018, emphasizing that the award was reasonable and plausible, requiring no further interference.
- A Division Bench of the Delhi High Court later reversed this decision, citing overlooked safety inspections and other procedural issues, setting aside the arbitration award.

The Supreme Court's decision:

- **Special Leave Petitions** were filed in the Supreme Court, which, in September 2021, set aside the High Court's order that had previously nullified the arbitral award and restored the original arbitration decision favoring DAMEPL.

- DMRC's subsequent review petition against this decision of the Supreme Court was dismissed, maintaining the restored arbitral award.
- As a final measure, DMRC filed a curative petition, which the Supreme Court agreed to hear, exercising its inherent powers under **Article 142 of the Constitution**.
- This led to the Supreme Court's final decision to overturn its previous ruling, acknowledging a grave miscarriage of justice and restoring the order of the Delhi High Court's Division Bench.

The implications of this judgment:

- The judgment sets a precedent for the careful review of arbitral awards by courts, particularly in infrastructure and public service contracts.
- It emphasizes the importance of courts not interfering unduly in arbitration decisions unless there is a clear miscarriage of justice.
- The ruling highlights the role of arbitration in resolving disputes while underscoring the necessity of ensuring that arbitration tribunals do not overlook vital evidence or legal principles.
- This case demonstrates the potential for curative petitions as a last recourse in correcting legal errors, particularly under **Article 142** of the Constitution, ensuring justice in complex contractual disputes.

Mains point: The significance of the Supreme Court's decision in the legal dispute between Delhi Metro (DMRC) and Delhi Airport Metro Express (DAMEPL).

6. How India's 'one citizen, one vote' democracy came to be.

Context:

The article discusses the start of India's 2024 general elections, reflecting on the history and significance of voting rights. It compares India's direct

implementation of universal adult suffrage to the gradual extension of voting rights in the U.S. It also mentions global elections occurring in 2024, highlighting the widespread political activity this year.

The voting evolved in India compared to the United States:

- Founding Principles:** Right from its first general elections in 1951-1952, India implemented the "one citizen, one vote" principle, allowing all adults to vote regardless of property, education, or gender. The U.S., established in 1787, initially restricted voting to property-owning white men.
- Progressive Amendments:** India implemented universal suffrage from its inception, unlike the U.S., which required several amendments (15th (African American men), 19th (women), and 26th (lowering the voting age to 18).) to expand voting rights. During the drafting of the Indian Constitution (1946-1950), advocates like Alladi Krishnaswami Ayyar argued for inclusivity, ensuring no exclusions based on qualifications.
- First Elections and Participation:** India's first general elections in 1952 saw 173 million people vote. In contrast, earlier U.S. elections had far fewer voters due to restrictive qualifications.
- Election Management:** India's elections are managed by an independent Election Commission, ensuring impartiality and fairness across vast and diverse voter demographics.

The global context of elections in 2024:

- Global Election Wave:** In 2024, countries accounting for over 60% of the world's economic output and more than half its population will hold elections, highlighting a significant year for global democracy.
- Examples of Elections:** Specific countries mentioned include

Bangladesh, Pakistan, Russia, the United Kingdom, the United States, and South Africa, all participating in this electoral wave.

Economic Implications: According to a Reuters report citing the Institute of International Finance, the “tsunami” of elections in 2024 could impact the already substantial global debt, which was estimated to have hit \$310 trillion by the end of 2023.

Varying Electoral Outcomes: Russia saw Vladimir Putin retain his presidency predictably in March, illustrating the varying political landscapes and outcomes of these elections.

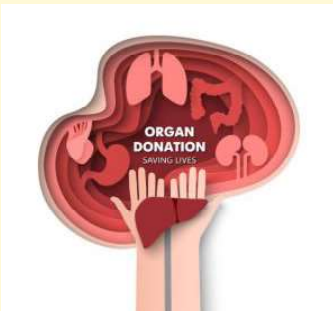
Mains point: The evolution of voting rights in India compared to the United States.

7. Unique ID for organ donation

Context:

The Union Health Ministry has recently issued the directive to eliminate commercial dealing in organs, especially those involving foreign citizens.

About the latest directive:



Source-iStock

NOTTO-ID for both the donor and the recipient-All organ transplants, whether from a living or deceased donor, will receive a unique National Organ and Tissue Transplant Organisation (NOTTO) ID for both the donor and recipient.

Role of the hospitals-To prevent illegal organ trading, hospitals need to create

this ID using the NOTTO website (www.notto.mohfw.gov.in).

Role of state government-They need to enhance monitoring and stop malpractices, especially with organ transplants involving foreigners. Local authorities should scrutinize more closely.

Regular inspection-State authorities have to monitor registered hospitals performing transplants to ensure quality and proper follow-up for donors and recipients. Any violation of the Transplantation of Human Organs and Tissues Act (THOTA), 1994 and its rules will be investigated.

About National Organ and Tissue Transplant Organisation (NOTTO):

Description-It is a National level organisation set up under Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

Established-It is established under the Transplantation of Human Organs (Amendment) Act 2011.

Functions-

It would serve as the central hub for coordinating and connecting nationwide activities related to organ and tissue procurement, distribution, and donation/transplantation registry in India.

It lays down policy guidelines and protocols for various functions.

It handles the dissemination of information to all concerned organisations, hospitals and individuals.

8. Our housing policy framework needs a comprehensive rethink”

Context:

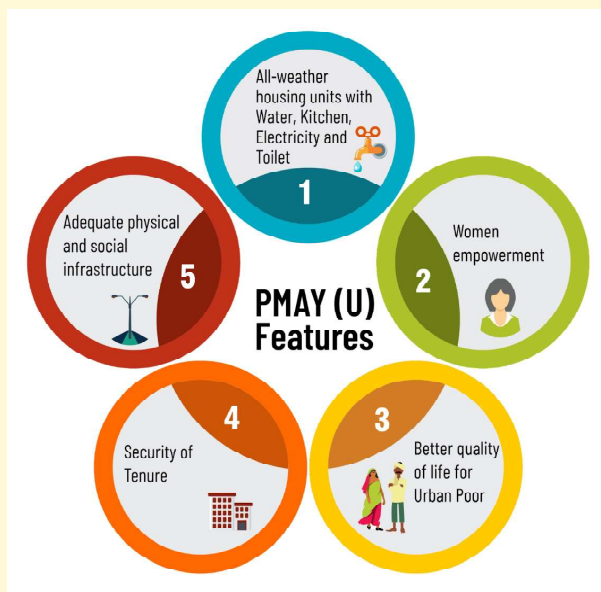
The article discusses challenges in India’s public housing programs, especially in urban areas.

The status of public housing in India:

- The PM Awas Yojana-Urban (PMAY-U) was launched in June 2015 with a goal to provide housing for all by December 2024.
- As of April 7, about 8.2 million out of the nearly 11.7 million approved urban houses have been completed.
- The completion rate in urban areas is lower compared to rural areas, where 25 million out of 29.5 million targeted houses were completed by November 2023.

The urban public houses less demanded:

- Many urban public houses under PMAY-U are not in “liveable condition,” lacking basic components such as windows and doors.
- There have been reports of illegal occupancy by “anti-social elements,” deterring legitimate beneficiaries.
- The selection process for beneficiaries has faced criticism for inaccuracies, with ineligible individuals receiving housing benefits.
- Urban public housing often involves apartment complexes, which present challenges in shared-resource maintenance and community living, known as the ‘tragedy of commons’.



The urban migrants affected the demand for urban public houses:

- **Community and Cultural Comfort:** Urban migrants often seek housing with people from their own states, preferring community familiarity and cultural comfort, which public housing may not provide.
- **Assimilation Challenges:** Assimilation into larger urban communities can be challenging and time-consuming for migrants, making them hesitant to apply for public housing.
- **Difficulties with Officials and Barriers:** Migrants may face difficulties with local public officials due to language and cultural barriers, complicating access to public housing.
- **Lack of Information:** Unclear information dissemination about available rental housing and application processes also affects migrants' decisions regarding public housing.

Way forward:

- **Promote Rental Vouchers:** Implement the National Urban Rental Housing Policy's rental voucher scheme more broadly to help urban poor and migrants afford private rentals in suitable locations.
- **Unlock Private Housing Stock:** Amend rental laws to encourage homeowners to lease their properties, thus increasing the supply of available rental accommodations.
- **Simplify Regulations:** Ease building regulations to facilitate faster construction of new homes, increasing overall housing supply in urban areas.
- **Focus on Urban Housing Needs:** Redirect some resources from rural to urban housing projects to support the workforce in urban and semi-urban settings, thereby enhancing labor mobility and economic productivity.

Mains point: The effectiveness of the Pradhan Mantri Awas Yojana-Urban (PMAY-U) in addressing the housing needs of urban areas in India.

9. Political space for disability rights, a sliver of hope.

Context:

The article discusses efforts to amend India's Constitution to protect people with disabilities from discrimination. It highlights the long-standing demands of disability rights groups and notes recent political support for this cause in election manifestos by Congress and CPI(M).

The current status of disability rights:

UN Convention on the Rights of Persons with Disabilities (UNCRPD): Adopted in 2006, this convention established global standards to ensure equal rights for persons with disabilities. Over 160 countries have ratified it, committing to uphold the rights of disabled persons.

Legal Framework: India ratified the UNCRPD in 2007 and passed the Rights of Persons with Disabilities Act in 2016, but these have not amended the Constitution to give disability rights constitutional protection.

Recent manifestos from Indian political parties like Congress and CPI(M) show a commitment to amending the Constitution to specifically include disability as a ground for discrimination.

The amending Article 15 important for disability rights:

Inclusion in Fundamental Rights: Currently, Article 15 does not mention disability as a ground for discrimination. Amending it would elevate disability rights to the level of a fundamental right, offering stronger legal protection against discrimination.

Alignment with International Standards: The amendment would bring India's constitution in line with the UN Convention on the Rights of Persons with Disabilities, which India ratified in 2007. This aligns domestic law with global commitments to protect the rights of persons with disabilities.

Closing Legal Loopholes: The Rights of Persons with Disabilities Act 2016 allows exceptions in cases deemed to have a 'legitimate aim.' By embedding disability rights in the Constitution, these exceptions would be scrutinized more rigorously, reducing potential misuse.

Promoting Equality: Recognizing disability in the Constitution would address historical injustices and recognize the unique challenges faced by disabled persons, promoting true equality and integration into society.

Judicial and Political Responsibility: The amendment would shift responsibility for protecting disability rights from the judiciary to the legislature, fostering more proactive governance and less reliance on the courts to interpret protections.

The disability rights groups advocating:

Disability rights groups in India are advocating in several effective ways:

Manifesto Release: In February 2024, organizations like the National Centre for Promotion of Employment for Disabled People and the National Disability Network released a disability-focused manifesto, urging political parties to prioritize disability issues.

Consistent Advocacy: These groups have consistently pushed for the inclusion of disability as a ground for discrimination under Article 15 of the Constitution.

Political Engagement: They have successfully influenced political parties

to include promises for constitutional amendments in their election manifestos, reflecting a shift in political attention toward disability rights.

Mains point: The significance of amending Article 15 of India's Constitution for disability rights, considering both its legal and social implications.

10. Criminalisation of Indian Politics .

Context:

According to a report submitted by amicus curiae to the Supreme Court, candidates with criminal cases have won more seats in the 17th Lok Sabha than those without any criminal records.

Key findings of the amicus curiae's 20th report:



Source-iPleaders

- It cited the report by the Association of Democratic Reforms (ADR) on the Lok Sabha elections 2024 which revealed that in Phase I and Phase II of the elections, out of 2,810 candidates (1,618 in Phase I and 1,192 in Phase II), 18% had criminal cases. Among them, 12% were facing serious charges punishable with 5 years or more of imprisonment.
- NOTE-Amicus Curiae meaning- Friend Of the court**
- As per data from the Registrar Generals of State High Courts, till January, there were 4,472 unresolved criminal cases against lawmakers.

- In the 19th report, the amicus curiae noted that out of 5,175 pending cases as of November 2022, 2,116 cases (40%) had been awaiting trial for over 5 years.
- Information regarding cases in Special Courts designated to try MPs and MLAs was not available on any websites.

The recommendations made by the amicus curiae report:

- It highlighted the significance of voter's right to information. Voters have the right to know about lawmakers criminal history, including trial progress and reasons for delays.
- It highlighted the need for a dedicated tab on the homepages of State High Courts' websites that gives a specific and detailed information, district wise, of criminal trials against legislators.
- The Supreme Court may suggest creating a model website, similar to the National Judicial Data Grid, to upload real-time information.

Prelims Point: Key findings of the amicus curiae's 20th report.

11. Rules regarding star campaigner.

Context:

Sunita Kejriwal, wife of Delhi Chief Minister Arvind Kejriwal, was recently appointed as a 'star campaigner' by the Aam Aadmi Party (AAP) for its campaign in Gujarat.

About Star campaigners:

- Description-** A star campaigner is a celebrity vote seeker in an election for a party. This person can be anyone, a politician or even a film star. However, as per the RP Act, 1951, these star campaigners have to be members of the political parties that appoint them.

Legal provisions-

- Section 77 of the Representation of the People Act, 1951 (RP Act)** provides for law relating to expenditure incurred by 'leaders of a political party.

- As per the Act, a recognised political party (national or State) can appoint a maximum of 40-star campaigners, whereas a registered unrecognised political party can appoint up to 20.
- These names must be shared with the Election Commission (EC) and Chief Electoral Officer (CEO) of the States within 7 days from the announcement of election dates.

Benefits enjoyed by the political parties-

- The RP Act states that money spent by “**leaders of a political party or star campaigner**” for travelling, whether by air or other means, to campaign for their party, doesn’t get included as part of a candidate’s election expenses for that party.
- However, this is applicable only if the star campaigners limit themselves to general campaigning for the party.

The issues with the star campaigners:

- The star campaigners of all parties have been guilty of using inappropriate and abusive words against leaders of other political parties.
- They have appealed to caste/communal feelings of electors and made allegations without evidences.
- The Election Commission of India does not have power to revoke the status of star campaigners.
- The reported expenses of star campaigners are often much lower than what was actually spent because of inaccurate assessment of the expenses for the rallies or meetings of these star campaigners.

The way forward:

- The EC must be empowered to revoke the ‘star campaigner’ status of a leader, in case of any serious violation of the Model Code of Conduct.
- The evaluation and division of expenses for rallies or meetings where star campaigners campaign for specific

candidates should be made more robust.

Prelims point: About Star campaigners

12. Excessive restrictions on meetings and processions during elections.

Context:

The article raises the issue of imposition of prohibitory order imposed during election time that restricts all public gatherings and meetings. This imposition has been challenged by certain activists before the Supreme Court.

- In this case, petitioners have not been allowed to hold any public programmes aimed at creating awareness among voters about the election. SC has also raised the question against such blanket ban during hearing. It has directed executive magistrates to decide applications for public meetings and yatras within 3 days. Excessive restrictions on meetings and processions during elections

The rationale behind imposing such blanket prohibitory orders:

- These orders are imposed by the police and revenue officers, who are vested with magisterial powers under **Section 144 of the CrPC**, to prevent any disturbance to public order during election campaigns.

The arguments against these blanket prohibitory orders:

- Infringes upon voters right to know-** These restrictions are also applied for civil society organization whose intention is to educate voters. This infringes upon the rights of voters to know about their contesting candidates.
- Discourage public participation:** Such restrictions are not justified against activities aimed at educating voters, which can limit public participation in the democratic process.

Statutory concerns: It also raises unclear questions:

- Whether election can be a sufficient ground to make such activities subject to statutory discretion.
- Whether statutory powers may be transferred from the designated authority to the ECI during elections.

Mains point: The prevention of public order during election provide sufficient justification for blanket curbs on public participation.

13. "Material resources of the community" under Article 39(b)**Context:**

The Supreme Court of India is hearing a case about whether the government can redistribute private property as "community resources" under the Constitution's Article 39(b).

The judicial views on "material resources of the community" under Article 39(b):

- State of Karnataka v Shri Ranganatha Reddy (1977)
- Majority Opinion: Private properties do not fall within the scope of "**material resources of the community**" under Article 39(b).
- **Minority Opinion by Justice Krishna Iyer:** Stated that private properties should be considered community resources, aiming to facilitate redistribution in a socialist manner.
- **Sanjeev Coke Manufacturing Company v Bharat Coking Coal (1983) Court Ruling:** Confirmed the government's right to nationalize coal mines by treating them as community resources under Article 39(b), aligning with Justice Iyer's interpretation.
- **Judicial View:** Extended the application of Article 39(b) to include the transformation of private property into public ownership.
- Mafatlal Industries Ltd v Union of India (1996)

Opinion by Justice Paripoomnan: Supported the broad interpretation of "**material resources**" in **Article 39(b)** to encompass both natural and man-made, as well as private and public properties.

The Current Legal Challenge:

- **Case Context:** The Supreme Court is currently reviewing a challenge to the 1986 amendment to the Maharashtra Housing and Area Development Act, focused on cessed properties in Mumbai.

- **Specific Dispute:** Property owners are challenging the amendment's provision that allows the state to acquire properties if 70% of the occupants request it, with the aim of redistributing them to "needy persons."

- **Legal Argument:** The property owners contend that this amendment violates their Right to Equality under Article 14 of the Constitution.

- **Previous Judicial Decision:** The Bombay High Court had ruled that laws promoting the Directive Principles, like Article 39(b), could not be challenged on the basis of violating the right to equality, per Article 31C of the Constitution.

- **Supreme Court Involvement:** The case reached the Supreme Court in December 1992. The central question became whether "material resources of the community" under Article 39(b) includes privately owned resources like cessed buildings.

Way forward

- The outcome of this hearing could redefine the scope of government power over private property in India, particularly in how wealth is distributed for public benefit. This decision will build on decades of legal interpretation and potentially affect property rights and social policies moving forward.

Mains point: The interpretations of “material resources of the community” under Article 39(b) of the Indian Constitution have evolved through judicial decisions.

14. Article 244(A) of the Constitution.

Context:

In the tribal-majority Diphu Lok Sabha constituency in Assam, candidates representing various political parties have committed to implementing Article 244(A) of the Constitution.

MEGHALAYA <ul style="list-style-type: none"> ● Khasi Hills Autonomous District Council ● Jaintia Hills Autonomous District Council ● Garo Hills Autonomous District Council 	<ul style="list-style-type: none"> ● Mara Autonomous District Council
MIZORAM <ul style="list-style-type: none"> ● Chakma Autonomous District Council ● Lai Autonomous District Council 	TRIPURA <ul style="list-style-type: none"> ● Tripura Tribal Areas Autonomous District Council
	ASSAM <ul style="list-style-type: none"> ● Dima Hasao Autonomous Council ● Karbi Anglong Autonomous Council ● Bodoland Territorial Council

About Article 244(A) of the Constitution:

- **Introduction in the constitution-** Article 244(A) was introduced by Twenty-second Amendment Act of 1969.
- **About 244A-** It grants Parliament the authority to establish an autonomous region within Assam, potentially encompassing tribal areas such as Karbi Anglong. In this autonomous region, there could be a separate governing body- like a Legislature or Council of Ministers, or both.
- **More power as compared to sixth schedule areas-** This arrangement represents a significant advancement compared to the existing governance structure outlined in the Sixth Schedule. Unlike the councils established under the Sixth Schedule, which have limited authority over law enforcement and financial matters, Article 244(A) provides for greater autonomy, particularly in terms of law and order control, to tribal areas.

About Diphu

- Diphu is the least densely populated among Assam’s 14 Lok Sabha constituencies.
- It is designated as a reserved constituency for Scheduled Tribes (STs).
- **It encompasses six legislative Assembly segments across three tribal-majority hill districts of Assam:** Karbi Anglong, West Karbi Anglong, and Dima Hasao.
- It is governed under the Sixth Schedule of the Constitution.
- These districts are under the jurisdiction of two autonomous councils: the Karbi Anglong Autonomous Council (KAAC) and the North Cachar Hills Autonomous Council.
- The electorate in this constituency comprises diverse communities including the Karbi (the third largest tribe in the state), Dimasa, Hmar, Kuki, Rengma Naga, Zeme Naga, Bodo, Garo, Assamese, Gorkha, and others.

Prelims point: About Article 244(A) of the Constitution

15. Courting action: Courts should deal firmly with violators of existing food safety regulations.

Context:

The article discusses a Supreme Court case in India where Patanjali Ayurved and other companies are being criticized for false advertising about their products’ health benefits. The court is also questioning why government agencies haven’t stopped these misleading ads.

The Supreme Court’s view on false advertisement:

- The Supreme Court is critical of false advertising, especially by companies like Patanjali Ayurved, which claimed their products could cure diseases like

COVID-19 and diabetes without scientific backing.

- The court has expanded its scrutiny to include other companies, such as Nestlé, after finding disparities like higher sugar content in baby formulas sold in India compared to Europe.
- It has demanded apologies from companies for misleading advertisements and expressed frustration over the lack of government action in regulating such ads.
- **The court emphasizes** that enforcing advertisement regulations should not fall to the judiciary but to designated regulatory bodies and the government.

The broader issues related to false advertisements:

- **Government Inaction:** Regulatory bodies like the Food Safety and Standards Authority of India and the Ministry of AYUSH have not effectively stopped misleading ads, even when flagged by entities like the Advertising Standards Council of India.
- **Public Health Concerns:** Misleading ads contribute to non-communicable diseases by promoting products with unhealthy ingredients under the guise of health benefits.
- **Legal Challenges:** Individuals and professionals who try to expose these false claims face legal threats, highlighting the lack of protection for whistleblowers against powerful corporate interests.

Mains point: The Supreme Court's stance on false advertising in India.

16. The issue of Winning an Election with Contest.

Context:

The article discusses how being elected unopposed, though legal, can be problematic for democracy. It compares election laws with financial rules and suggests that while laws allow this, it

might not be entirely fair or democratic as it limits voter choice.

The law say about Uncontested elections:

- **Automatic Election:** According to Rule 11 of the Conduct of Election Rules 1961, if the number of candidates is equal to or less than the number of seats available, the returning officer is required to declare these candidates elected automatically.
- **Legal Precedent: Section 53 of The Representation of the People Act, 1951** also supports this mechanism, mandating that if the number of candidates does not exceed the number of seats, no polling is needed, and candidates are declared elected.
- **Reissuing a call for candidates:** The Representation of the People Act (RPA) provides for the possibility of reissuing a call for candidates if no one files for an election initially. However, the Act does not specify what should be done if no candidates come forward after a second call.

The Issues Arise from Uncontested Elections:

- **Limited Voter Choice:** Uncontested elections mean voters only have one candidate to choose from, essentially depriving them of a meaningful choice. This situation occurred in the Surat Lok Sabha seat, where other candidates were disqualified or withdrew, leaving only one candidate.
- **Undermining Democracy:** With no competition, the democratic process is undermined as the electorate does not truly 'elect' but merely 'acknowledges' the sole candidate. In Arunachal Pradesh, 10 Assembly seats were filled without any contest, illustrating this issue.
- **Effectiveness of NOTA:** In uncontested elections, the None of the Above (NOTA) option becomes irrelevant since it does not influence the outcome,

which questions the purpose of providing a NOTA option.

Way forward:

Introduce Minimum Vote Requirements: Consider amendments to require a minimum percentage of votes for a candidate to win, ensuring they have substantial support from the electorate.

Mains point: Uncontested elections affect voter choice and democracy and propose a potential solution to address this issue.

17. Supreme Court Gives Verdict – EVMs are safe

Context:

Many oppositions political parties demanded 100% recount of all VVPATs, instead of the current method of sampling the number of recounts, to have full transparency.

The directives issued by the Supreme Court in this case:

The Symbol Uploading Units (SULs) must be stored in a secure room for 45 days after the results are announced. Like EVMs, they can also be inspected and reviewed.

If any candidate comes second or third, they can request for EVMs in their area to be checked. In case of such a request, 5 % of machines per assembly segment will be examined.

The steps have the Election Commission of India taken to assuage the concerns about safety of EVMs:

The Election Commission of India has assuaged these concerns constantly, including by holding hackathons.

The ECI has introduced the VVPAT system to ensure a paper trail to test machines after the Supreme Court's verdict in 2012.

The significance of the Supreme court's recent judgement:

It has put in place interventions that would dispel doubts about the integrity of India's voting system.

The directive on mandatory storage of **Symbol Uploading Units (SULs)** will ensure that votes have not been miscounted.

Rechecking of EVMs allows a window to address the legitimate concerns of contesting candidates.

The judgement will affirm the credibility of India's voting process.

Mains point: The interventions have been put in place by the Supreme Courts to dispel doubts about the integrity of India's voting system.

18. Sounding the gavel on curative jurisdiction.

Context:

The article discusses the Supreme Court of India's use of "Curative Jurisdiction" to overturn a previous decision it made regarding an arbitral award. This is controversial because it reflects a shift from the court's usual stance of minimal interference in arbitration cases.

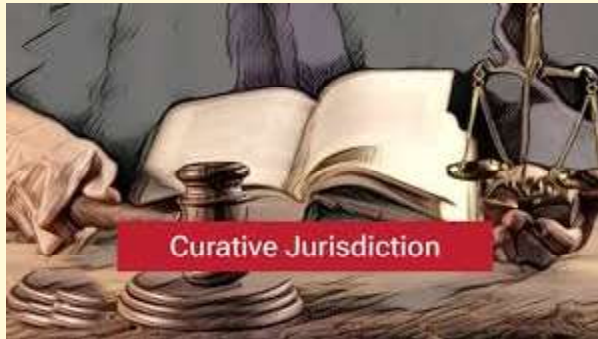
Curative Jurisdiction:

Introduction in 2002: Curative Jurisdiction was introduced by the Supreme Court of India in 2002 to ensure that injustices in its final judgments can be corrected.

Different from Review: It goes beyond typical review mechanisms, which primarily address apparent errors on the record, by allowing for the reconsideration of final decisions if they result in gross miscarriage of justice.

Example: In the 2024 case of DMRC vs. DAMEPL, the Court used its Curative Jurisdiction to overturn an earlier decision which had upheld an arbitral award, thus demonstrating its commitment to justice over strict adherence to past judgments.

Enhances Judicial Integrity: By admitting and correcting its errors, the Court upholds judicial integrity and adapts to evolving legal standards and societal values.



The Problems with Curative Jurisdiction:

Undermines Finality: Curative Jurisdiction challenges the principle of finality in legal judgments. Frequent reversals could erode confidence in the Supreme Court's decisions.

Potential for Overuse: There's a risk of this power being overused, leading to instability in the legal system as decisions could be perpetually open to challenge.

Impact on Judicial Consistency: The case of DMRC vs. DAMEPL in 2024 illustrates how Curative Jurisdiction can lead to inconsistencies. Initially, the Supreme Court supported minimal interference with arbitration awards, but reversed this stance dramatically in the curative petition.

Questioning Precedents: By overturning its own decisions, the Court risks creating an uncertain legal environment, where past judgments are viewed as potentially reversible, not as stable precedents.

Mains point: The implications of the Supreme Court of India's use of Curative Jurisdiction on judicial integrity, legal consistency, and the principle of finality in legal judgments, using the case of DMRC vs. DAMEPL as an example.

19. Viksit panchayats offer us a pathway to Viksit Bharat"

Context:

The article highlights the crucial role of Gram Panchayats (GP) and Sarpanches in advancing India's development, emphasizing the decentralization of power and the use of digital tools for better governance. It also stresses the importance of empowering women leaders to enhance public services and meet development goals by 2047. Viksit panchayats offer us a pathway to Viksit Bharat

The Concept of Viksit Bharat:

Concept of Viksit Bharat: Inspired by Rabindranath Tagore's vision in "Gitanjali," Viksit Bharat aims for India to become a developed nation by 2047, emphasizing a society where knowledge is free and everyone is dignified.

Rural Focus: With 64.1% of the population in rural areas governed by Gram Panchayats, the development in these regions is vital.

Empowering Local Governance: States with greater power devolution like Kerala and Karnataka have shown better socio-economic outcomes through programs like Kudumbashree and the GP Human Development Index, exemplifying effective local governance.



Gram Panchayats in Achieving Viksit Bharat:

Central Role in Development: Gram Panchayats are crucial for grassroots empowerment, directly impacting India's journey towards becoming a developed nation by 2047.

- **Decentralization of Authority:** Effective decentralization, where local bodies like Gram Panchayats have the autonomy to plan and implement projects, correlates with improved socio-economic development.
- **Policy Support:** The GP Development Plan (GPDP) encourages local stakeholder involvement, enhancing the efficiency and relevance of development initiatives.
- **Digital innovations such as Aadhaar, UPI, Co-win, ABHA, and the Universal Citizen Interface** are transforming citizen services. These tools help Sarpanches make informed decisions and align local development plans with state and national schemes.

The women empowered through local governance:

- **Constitutional Mandate:** The 73rd Constitutional Amendment Act mandates a 33.3% reservation for women in Panchayati Raj Institutions, ensuring women's participation in local governance.
- **Impactful Leadership:** Empowered women leaders at the grassroots have driven significant societal changes. For example, Jyoti Behar Devi, a Sarpanch from Jharkhand, successfully banned alcohol in her panchayat and promoted livelihood opportunities. Anita Devi from Bihar transformed her vehicle into an ambulance, reducing home deliveries from 65% to 8% by improving healthcare access.

Way forward:

- **Empower Gram Panchayats:** As seen in Kerala and Karnataka, where devolution of powers has boosted socio-economic development, similar strategies should be implemented nationwide.
- **Implement Local Sustainable Development Goals (LSDGs):** Aligning

projects with community needs through GP Development Plans.

- **Customize Good Governance Models:** Scale models like Andhra Pradesh's 'village secretariat' for streamlined governance and improved service delivery across different regions.
- **Build Competent Leadership Teams:** Develop strong leadership and organizational structures within Gram Panchayats to ensure the timely delivery of quality services, mirroring successful team dynamics seen at higher levels of governance.

Mains point: The role of Gram Panchayats in advancing India's development, focusing on decentralization, digital tools, and the empowerment of women leaders.

INTERNATIONAL RELATIONS

1. India's Arctic imperative.

Context:

In March 2024, India has successfully completed its first winter mission in the Arctic. While scientists will be proud, India's previous hesitation to undertake a year-round Arctic mission needs reflection. For more than ten years, India's National Centre for Polar and Ocean Research didn't find the necessity of winter Arctic mission.



The reasons for India's change in policy towards the Arctic region:

- **Climate change**-Scientific data revealed that the Arctic was warming faster than expected. When proof linked severe climate events in India to the melting Arctic Sea ice, decision-makers felt the need to change policy towards the Arctic.
- **Geo-economic reasons**- New Delhi is interested in using Arctic Sea routes, especially the Northern Sea Route, for Indian trade. This could lower costs and save time, fuel, and enhance security for shipping goods.
- **Geopolitical reasons**-Russia's decision to grant China an expanded access to

the Northern Sea Route has necessitated the need of enhanced involvement of India in the arctic region.

India's present policy towards Arctic regions:

- India's current policy is to work with Arctic nations on green energy and clean industries to enhance its reputation as a responsible stakeholder.
- **Denmark and Finland**- India has collaborated in areas such as waste management, pollution control, renewable energy, and green technology.
- **Norway**- Ties with Norway will emphasize on scientific research and climate/environmental protection. These are 2 of India's six Arctic Policy pillars. Partnership with Norway could help in tackling issues such as the blue economy, connectivity, maritime transportation, investment and infrastructure, and responsible resource development.
- While India is interested in benefiting from seabed mining and resource exploitation in the Arctic, it should demonstrate its commitment to the principle of environmental sustainability.

Mains point: Highlight the reasons for India's change in policy towards the Arctic region.

2. Myanmar and regional security"

Context:

The article discusses the complex political situation in Myanmar. It highlights the long-standing conflicts involving Myanmar's military, ethnic groups, and civilian government. India's interactions with Myanmar, influenced by security and insurgency concerns, are also covered, showing a

need to possibly rethink support to Myanmar's military.



The Myanmar's political landscape evolved:

- **Independence to Military Dominance:** Myanmar gained independence from Britain in 1948 and quickly entered a state of internal conflict. The military junta, known as the Tatmadaw, has been a dominant force, consistently clashing with ethnic groups across the country. These groups have either sought independence or a significant degree of autonomy.
- **Era of Civilian Government:** The National League for Democracy (NLD), led by Aung San Suu Kyi, represented significant civilian governance attempts. Despite the military's underlying control, there were brief periods when democracy seemed to take root. However, these were always precarious due to the military's power.
- **Military Coups:** The military has repeatedly disrupted Myanmar's democratic processes through coups, notably rejecting the 2021 election results, which were overwhelmingly in favor of the NLD. This led to the arrest of Aung San Suu Kyi and other political leaders, with the military justifying their actions by declaring the elections invalid.
- **Armed Resistance:** Facing relentless oppression, various ethnic armed groups alongside the NLD formed the National Unity Government (NUG) and established the People's Defense Force (PDF). This coalition has actively resisted Tatmadaw rule, aligning forces

and gaining control over strategic areas, significantly challenging the military's authority.

The impact of Myanmar's internal conflicts:

- **Impact on Myanmar:** The conflicts have led to alliances between various ethnic armed groups and the NLD, forming a resistance against the military. This includes the People's Defense Force (PDF) and groups like the Karen National Union. Their successes, especially in controlling border areas, have weakened the military's control and morale.
- **Impact on India:** The ongoing civil war in Myanmar has led to refugees, including civilians and soldiers, fleeing to India. This has pressured the northeastern states, especially Mizoram, which has provided shelter to ethnic kin from Myanmar. India's measures like border fencing and suspending free entry have not fully controlled the spillover of conflict.
- **Impact on China:** Strategic Maneuvering- China plays a dual role, supporting the Myanmar military while also making local deals with ethnic groups controlling border outposts, ensuring influence regardless of internal fluctuations in power.

Way forward:

- **Reassess Support for Myanmar's Military:** India should reconsider its tacit support to the military due to the legitimacy and resistance strength of the National Unity Government (NUG).
- **Engage with Resistance Forces:** Discreet engagement with the NUG and ethnic resistance groups might help maintain stability in India's Northeast and influence outcomes favorably.
- **Enhance Border Security Measures:** Strengthening security measures along the border is crucial, particularly by improving infrastructure and increasing

patrols to manage refugee inflows and prevent insurgent crossings.

Mains point: The impact of Myanmar's internal conflicts on India's northeastern states.

3. India's nuanced approach in the South China Sea.

Context:

The article discusses India's changing foreign policy towards the South China Sea. It details India's support for countries like the Philippines against China's maritime claims, emphasizing India's shift from economic interests to strategic security concerns in the region.



India's new position in the South China Sea dispute:

- **Support for the Philippines:** India expressed full backing for the Philippines in their sovereignty dispute with China, as stated by External Affairs Minister S. Jaishankar in Manila in March 2024.
- **Adherence to International Law:** India advocates for China to respect the 2016 International Court of Justice ruling favoring Manila and to follow the rules-based maritime order.
- **Increased Strategic Engagement:** Transitioning from the Look East to Act East Policy under Modi's administration, India emphasizes stronger strategic and security cooperation within the Indo-Pacific region.
- **Counter to China's Claims:** India's shift includes increased naval activities and military cooperation with Southeast

Asian nations, acting as a deterrent against China's aggressive territorial assertions in the South China Sea.

India's foreign policy evolved:

- **From Economic to Strategic Focus:** India's foreign policy shifted from the economic-driven Look East Policy to the more comprehensive Act East Policy under Prime Minister Narendra Modi. This emphasizes not only economic integration but also strategic partnerships and expanded security cooperation with Indo-Pacific nations like Vietnam, Malaysia, Singapore, and the Philippines.
- **Proactive Geopolitical Strategy:** India recognizes the changing geopolitical dynamics and has adopted a more proactive and multifaceted approach. This includes forward positioning, mission-based deployments, reinforced maritime domain awareness, and the development of deep-water maritime facilities.

India's relations with China influence its South China Sea policy:

- **Historical Border Tensions:** India's relationship with China is strained due to long-standing border disputes, notably intensified by the Galwan Valley incident in 2020 where China made incursions into Indian territory.
- **Military Posturing:** In response to these tensions, India deployed a frontline warship to the South China Sea, showcasing its capability for asymmetric deterrence against China's military actions.
- **Strategic Alignments:** India's evolving South China Sea policy is a direct counter to China's assertive territorial claims. Regular naval exercises and strengthening military cooperation with Southeast Asian countries are part of India's strategy to ensure regional security and counter China's influence.

ASEAN play in India's strategy:

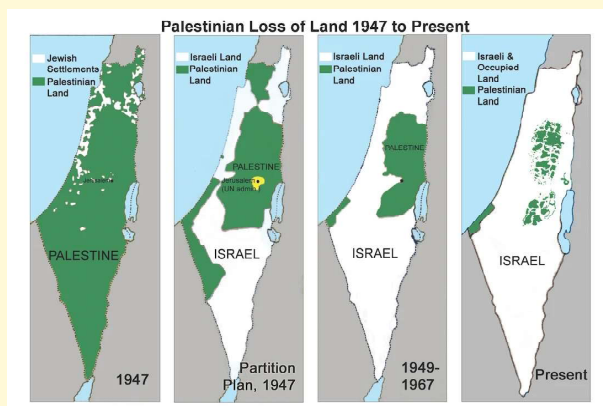
- **Central to Regional Strategy:** ASEAN's centrality in the Indo-Pacific region is crucial to India's strategic recalibration, as India aims to support ASEAN in maintaining regional stability against Chinese dominance.
- **Support for Maritime Norms:** India advocates for freedom of navigation and overflight in the South China Sea, principles vital to both ASEAN's and India's economic and security interests.
- **Challenges within ASEAN:** Despite internal differences within ASEAN affecting collective actions, India continues to emphasize the importance of ASEAN unity to effectively counter challenges in the South China Sea.

Mains point: India's evolving foreign policy towards the South China Sea and its implications for regional security and strategic alliances.

4. Israel, a two-state solution, some recent perceptions.

Context:

The article discusses the complex and ongoing conflict between Israel and Palestine, including historical events, negotiations, and differing perspectives on solutions. It mentions various factors like territorial disputes, security concerns, international diplomacy, and shifts in public opinion regarding conflict.



The origin of the Israeli-Palestinian conflict:

- The origin of the Israeli-Palestinian conflict is rooted in disputes over land and national identity.
- Historical debates challenge myths about Israel's founding, including that Palestine was an empty land and Zionism equates to Judaism.
- Key events shaping the conflict include the wars of 1948, 1956, and 1967, and UN resolutions 242 and 338.
- The 1967 war particularly altered the landscape, benefiting Israel and leading to ongoing territorial disputes.
- The conflict has been compounded by international diplomatic efforts, shifts in public opinion, and varying narratives from both Israeli and Palestinian perspectives.

The views on Israeli-Palestinian conflict:

Israeli Views:

- Israeli scholars like Ilan Pappé have questioned foundational myths of Israel, arguing against ideas such as "Palestine was an empty land."
- Political movements within Israel, like the Likud Party, support annexing West Bank settlements, asserting a biblical right to the land.

Palestinian Views:

- Palestinians seek recognition of their state based on the 1967 borders.
- The Palestine Liberation Organization (PLO) has been recognized as the "sole legitimate representative of the Palestinian people" since 1974.

International Perspective:

- The U.S. supports a two-state solution with a de-militarized Palestine.
- The Arab League has endorsed solutions promoting a normalized Palestinian state under conditions like those in the Abraham Accords.
- Arab countries, influenced by the Arab Spring, look for a peaceful solution involving a state for Palestinians that would not threaten Israel.

The recent developments influenced the situation:

- **Political Actions:** In 2018, Israel's Likud Party endorsed the annexation of West Bank settlements, reinforcing hardline policies against compromise.
- **International Dynamics:** Recent U.S. policies have provided unprecedented diplomatic and military support for Israel, yet there's growing criticism of Israel's actions.
- **Public Opinion Shifts:** Younger Jewish Americans and Israelis are distancing themselves from traditional pro-Israel stances, reflecting a shift in attitudes.

Mains point: The impact of recent developments, including political actions, international dynamics, and shifts in public opinion, on the Israeli-Palestinian conflict.

5. World Crafts Council International .

Context:

The World Crafts Council International (WCCI) has chosen Srinagar to map its craft clusters before it's officially nominated as the World Craft City (WCC) from India this year

About World Crafts Council International:



Source-LinkedIn

Aspect

Details

Description

It is a Kuwait-based organisation working on the recognition and preservation of traditional crafts across the globe.

Founders

It was founded by Ms. Aileen Osborn Vanderbilt Webb, Ms. Margaret M. Patch, and Smt Kamaladevi Chattopadhyay at the 1st World Crafts Council General Assembly in New York on June 12, 1964

Objective

To strengthen the status of crafts in cultural and economic life.

Functions

- 1) It promotes fellowship among craftspersons by offering them encouragement, help, and advice.
- 2) It fosters and assists cultural exchange through conferences, international visits, research study, lectures, workshops, exhibitions, and other activities.

Status with UNESCO

Since its inception, it has been affiliated with UNESCO under Consultative Status for many years.

About the World Craft City Programme

- **Description-**It is a groundbreaking initiative launched in 2014 by the World Crafts Council AISBL (WCC-International).
- **Objective-**To recognize the pivotal role played by the local authorities, craftspeople, and communities in cultural, economic, and social development worldwide.
- **Indian cities-**Under these initiatives Jaipur (Rajasthan), Mammalapuram (Tamil Nadu) and Mysore have been added as craft cities from India.
- **Significance for Srinagar-**Being listed in the WCC will bring attention to Srinagar's crafts and showcase its ancient techniques to the world.
- **Note-Kashmir Craft**
It is mostly influenced by Central Asian countries, which are in the list of the WCC.

Prelims point: About the World Craft City Programme

6. India and Maldives relations, after Muizzu's re-election.

Context:

Maldives President Mohamed Muizzu has won the recent elections, with huge number of seats. It will provide him with the power to make all the major legal and legislative changes.

The anti-India steps have been taken by Muizzu:

- . One of the pillars of Muizzu's politics is an anti-India stance.
- . First, he campaigned on an "India Out" theme, asked for withdrawal of Indian troops,
- . Second, he scrapped agreements allowing Indian hydrographic surveys by India.
- . Third, he has drawn Maldives closer to China, by giving them infrastructure projects.
- . However, the parliamentary elections were fought on domestic issues like corruption, economy, housing, jobs and shifting political alliances rather than foreign policy issues. Therefore, it should not be taken as a country's stand.

India's approach to Muizzu's anti-India Stance:

- . First, India has done well not to overreact to Maldives' attempts to distance itself and treat it with a soft approach, recognizing a neighbour's domestic politics is their own affair.
- . Second, Maldives is an important part of India's Neighbourhood First and SAGAR policies. Given Maldives' proximity and importance, India must continue engaging with the country no matter the government to make bilateral ties "politics proof" in the long run.

7. B-READY for business: India's investment culture needs strengthening.

Context:

The article discusses India's preparation for the new World Bank Index Business

Ready (B-READY), replacing the defunct Ease of Doing Business (EoDB) Index.

The B-READY Index:

- . The B-READY Index is a new metric designed by the World Bank to assess business environments, set to launch in September 2025.
- . It aims to replace the now-defunct Ease of Doing Business Index and plans to cover 180 economies.
- . This index focuses on broader qualitative assessments, including regulatory quality and environmental considerations.

India Preparing for the B-READY Index:

- . India is gearing up for the B-READY Index through proactive steps taken by the Department for Promotion of Industry and Internal Trade (DPIT).
- . DPIT is conducting bi-monthly meetings with nodal ministries to evaluate responses to over 1,300 questions from the B-READY questionnaire.
- . These meetings aim to assess and enhance India's position in terms of business readiness and attractiveness for foreign investments.

India need B-READY Index:

- . **Addressing Subdued FDI:** India has seen limited success in attracting foreign direct investment (FDI), making the B-READY Index crucial for enhancing its investment climate.
- . **Improving Business Environment:** The B-READY Index aims to go beyond the former Ease of Doing Business metrics by including qualitative assessments that more accurately reflect the business landscape.
- . **Policy and Implementation Gaps:** Examples like Apple's vendors leaving India and Vinfast's subsidy issues highlight the need for clearer policies and better communication, issues the B-READY Index seeks to address.

Encouraging Multinational Presence:
A refined index could help attract more multinationals, as current policy uncertainty has deterred significant investments.

Mains point: India's preparation for the B-READY Index and its significance in improving the country's business environment and attracting foreign investments.

8. UK's Rwanda Bill: Why it's a solution that doesn't work"

Context::

The article discusses the UK's new "Rwanda Bill," which allows the government to send asylum seekers to Rwanda for processing. It compares this with similar policies in Australia and other Western countries, discussing the broader implications for national sovereignty and international relations.



The Rwanda Bill allows the UK to send asylum seekers to Rwanda for processing if they entered the UK illegally after January 1, 2022.

Asylum seekers processed under this bill cannot return to the UK and must choose to settle in Rwanda or another country.

The bill was introduced by Prime Minister Rishi Sunak's government and aims to deter people from using dangerous routes, like small boats across the English Channel, to enter the UK.

Rwanda will receive substantial financial compensation from the UK for hosting these processing centers.

Its implications:

Political Implications:

The Rwanda Bill is seen as a strategy to assert UK sovereignty over its borders. It reflects a trend in Western politics where strict border control is used to gain electoral support, as evidenced by Rishi Sunak's statements on sovereignty and international courts. He said that international courts will not dictate UK domestic policy.

Economic Implications:

The Rwanda Bill fosters an "emerging asylum economy," where rich nations, like the UK, pay poorer countries to process asylum seekers. This arrangement economically benefits Rwanda, which receives substantial financial payments from the UK.

Social Implications:

The Rwanda Bill may compromise the rights and safety of asylum seekers, evident from the tragic incident where five passengers died trying to cross the English Channel. Outsourcing asylum processing to poorer countries like Rwanda raises ethical concerns about exploiting vulnerable populations and perpetuating a neo-colonial economic dynamic.

The Rwanda Bill compare to international practices:

The UK's Rwanda Bill is similar to Australia's offshore processing in Nauru, where Australia paid Nauru to handle asylum seekers, making up two-thirds of Nauru's revenue in 2021-2022. Western countries, including the EU and the USA, have established refugee-blocking and processing arrangements in third-world countries, reflecting a trend in using external territories for immigration control.

- These practices illustrate a broader Western strategy of managing immigration by outsourcing to economically dependent nations, often under the guise of maintaining border security and sovereignty.

Mains point: The Rwanda Bill compares to Australia's offshore processing policies in terms of political, economic, and social implications.

9. Sri Lanka & Bangladesh look east.

Context:

The article discusses Sri Lanka's efforts to improve its economy by joining larger Asian trade groups and making agreements with countries like Thailand. These moves aim to diversify exports, boost investment, and develop connections with other Asian economies. This shift could also influence regional trade dynamics, especially with India and China.

The challenges is Sri Lanka facing:

- Economic Recovery:** Sri Lanka is still in the midst of recovering from its economic difficulties (recent external debt crisis).
- Narrow Export Range:** The country relies heavily on a limited range of exports, including textiles, tea, rubber, and tourism.
- Labor Issues:** There is a decreasing labor productivity and an aging workforce, alongside increased out-migration of young workers.
- Regional Trade Competition:** Changing dynamics in regional trade are challenging, particularly with China's growing influence in South Asian trade compared to India.

Sri Lanka doing to improve its economy:

- Joining RCEP:** Sri Lanka has expressed its intention to join the Regional Comprehensive Economic Partnership, aiming to integrate more closely with

East Asian economies and diversify its export markets.

- Signing FTAs:** The country has signed a free-trade agreement with Thailand, which includes substantial tariff reductions and covers areas like investment and intellectual property rights, aiming to attract more foreign investment.
- Exploring SEZ Linkages:** Sri Lanka is developing connections between Port City Colombo and Thailand's Eastern Economic Corridor to enhance trade and logistics routes.
- Seeking External Investment:** The nation is actively encouraging investment from ASEAN countries, leveraging its strategic position to boost its economic standing and recovery efforts.

The benefits does these effort will offer to Sri Lanka:

- Enhanced Export Diversification:** Joining RCEP and signing FTAs will diversify Sri Lanka's export base beyond traditional commodities like tea and rubber, promoting industrial development.
- Increased Foreign Investment:** The trade agreements, particularly with regulatory enhancements, are expected to attract foreign investment, notably in the manufacturing sector.
- Economic Integration:** Access to regional value chains through RCEP offers opportunities for Sri Lanka to integrate into East Asian economic dynamics, boosting its export capabilities.
- Improved Trade Policies:** The "lock-in" effect of the agreements will promote structural reforms, enhancing Sri Lanka's regulatory environment and making it more conducive to business and investment.
- Labor Market Benefits:** By engaging more in labor-intensive industries,

these efforts could offer more employment opportunities, supporting the country's labor force development.

Sri Lanka's trade strategy impact regional dynamics:

- **Shift in Trade Focus:** Sri Lanka's efforts to join the RCEP and sign FTAs like the one with Thailand indicate a strategic pivot towards East Asia, moving away from traditional reliance on Western markets.
- **Increasing China's Influence:** By integrating with East Asian regional value chains, Sri Lanka may inadvertently boost China's trade influence in South Asia, as China already plays a significant role in regional imports and exports compared to India.
- **Inspire other regional economies:** Sri Lanka's actions (joining RCEP, signing the FTA with Thailand) might inspire other regional economies like Bangladesh to pursue similar integration efforts with East Asian trade agreements.

Mains point: The challenges faced by Sri Lanka in improving its economy and the strategies it is implementing to overcome them.

10. Protests at U.S. universities against the war in Gaza a sign of the crisis

Context:

The article discusses how protests at U.S. universities against the war in Gaza reflect broader crises in liberal democracy, the university system, and the nature of anti-war protests themselves.



The protests at U.S. universities against the war in Gaza a sign of the crisis of liberal democracy:

- **Political Immunity and Inaction:** The U.S. political system has not responded to the catastrophic events in Gaza, despite having significant influence over Israel. This inaction reveals a crisis where political mechanisms are unresponsive to humanitarian crises, leading to frustration among citizens, especially young people.
- **Threat to Free Speech:** Despite strong First Amendment protections, free speech is being challenged. Congress's actions against university presidents suggest a future where free expression may be further restricted, reflecting a deeper crisis in maintaining democratic values.
- **Polarization:** The polarized reactions to the protests and the political manipulation of these events deepen societal divisions, indicating a weakening of democratic consensus and increasing risks similar to those seen in other polarized nations.

The protests at U.S. universities against the war in Gaza a sign of the crisis of the university:

- **Politicization of Education:** Universities are increasingly targeted politically, not to enhance educational quality but to control academic discourse. The criticism of Israel is used as a pretext to challenge the legitimacy of universities, showing a crisis in maintaining academic freedom.

- **Loss of Institutional Neutrality:** The university's abandonment of neutrality has put it in the middle of power struggles, influenced by vocal trustees and donors, undermining its educational mission.
- **Repressive Measures:** The deployment of police for campus protests, as seen at Columbia University, and the application of arbitrary protest rules diminish trust in university administration and highlight a crisis in governance and freedom within the academic environment.

The protests at U.S. universities against the war in Gaza a sign of the crisis of anti-war protests:

- **Misdirected Focus:** The protests often target university policies rather than governmental or international bodies that have a direct impact on war policies. This misdirection reduces the effectiveness of the protests in influencing meaningful political change.
- **Perception as Conflict Rather Than Principle:** The protests are seen more as a conflict between groups (anti-Semitism vs. Islamophobia) rather than as principled stands against the war. This framing risks diminishing the moral clarity and impact of the protests.
- **Dilution of Universal Principles:** The emphasis on internal university issues rather than the broader ethical implications of the war obscures the universal principles underlying the protests. This shift diverts attention from the core issues of the war itself, weakening the protests' call for broader humanitarian awareness and action.

Mains point: The protests at U.S. universities against the war in Gaza reflect broader crises in liberal democracy, the university system, and the nature of anti-war protests themselves.

11. ASEAN Future Forum 2024.

Context:

India's External Affairs Minister took part in the First ASEAN Future Forum 2024.



Source: VNA

- **About:** It is a platform for ASEAN and its partners to share new ideas and policy recommendations.
- **Aim:** This forum aims to be an annual multi-stakeholder, track 1.5 dialogue platform for open and constructive discussions about the future of ASEAN.
- **Mission:** Its mission focuses on shaping a resilient, inclusive, and future-oriented ASEAN. This involves effectively adapting to the changing regional and global environment, while upholding core values and addressing the needs of its Member States.
- **Significance of the forum:** Critical questions about ASEAN's future relevance and centrality are addressed through this forum.
- It is to explore innovative ideas and practical steps to ensure ASEAN's continued success in promoting peace, security, and development in the region.

Prelims point: ASEAN

12. India's West Asia security dynamics.

Context:

The article discusses the ongoing Israel-Hamas conflict, its implications, and broader geopolitical dynamics involving the United States, Iran, and

Arab states. It also covers India's stance and interests in the region.

The current situation in the Israel-Hamas conflict:

- . The Israel-Hamas war is ongoing, with no clear end in sight.
- . Israeli Prime Minister Benjamin Netanyahu may be extending the conflict for his political survival.
- . The war has escalated regionally, highlighted by Israel's airstrike on the Iranian consulate in Damascus, targeting Iranian officers.
- . The U.S. intervened to prevent further escalation, with Iran also showing restraint.
- . The focus has shifted from Israel's extensive damage in Gaza and aggressive actions in the West Bank, including the expansion of illegal settlements.
- . These actions have further diminished the prospects for a two-state solution, making it an unrealistic goal at this point

Its impacts on India:

- . **Energy Security and Economic Interests:** The ongoing conflict could destabilize the region, threatening India's energy imports and economic interests due to its heavy reliance on oil from West Asian countries.
- . **Diaspora Welfare:** The stability is crucial for the safety and welfare of approximately six million Indians living and working across West Asia.
- . **Strategic Diplomacy:** India is using the opportunity to balance and strengthen its diplomatic and strategic ties with both Israel and the Arab states, maintaining a neutral stance to manage its broad international relations effectively.
- . **Defense Enhancement:** The conflict has led to closer defense ties between India and Israel, especially as Israel seeks partners to counterbalance Chinese influence in the region.

Mains point: India's stance, interests, and impacts in the ongoing Israel-Hamas conflict.

ECONOMY

1. Explained: Tamil Nadu’s decentralized industrialization model

Context:

Significance of Decentralized industrialization model

The article highlights the reason behind Tamil Nadu’s success in achieving industrialization and diversification beyond agriculture. Tamil Nadu is India’s No.1 state in terms of economic complexity, measured by the diversity of its gross domestic product (GDP) and employment profile.

Share of respective industries in Tamil Nadu’s GDP

According to the data table, Tamil Nadu’s farm sector contributes less to its gross value added (GVA) and employs fewer people compared to the national average. However, the state has higher shares of industry, services, and construction in its economy compared to the whole of India.

	Gross Value Added*		Workforce	
	All-India	Tamil Nadu	All-India	Tamil Nadu
Agriculture	18.19	12.55	45.76	28.87
Industry**	18.80	22.69	12.27	17.88
Construction	8.84	11.70	13.03	18.04
Services	54.18	53.05	28.94	35.21

*At Basic Prices; ** Includes manufacturing, mining, electricity and utilities. GVA is GDP net of product taxes and subsidies. Source: National Accounts Statistics and Periodic Labour Force Survey.

Reasons behind TN’s relative success in achieving industrialization and diversification beyond agriculture

Cluster-based industrialization

- Tamil Nadu’s economic shift hasn’t been driven much by big corporations but by medium-sized businesses whose turnover range from Rs 100 crore to Rs 5,000 crore. The state’s industrialization has also been more widespread and

decentralized, focusing on the development of clusters.

For ex- Tirupur for cotton knitwear, Coimbatore for spinning mills and engineering goods, Sivakasi for safety matches etc.

Sub-specialized clusters

- There are many sub-specialized clusters that have developed in small towns or areas near cities in Tamil Nadu. These clusters provide jobs for people from nearby villages and prevent rural to urban migration.

Further, these clusters have helped in providing job opportunities beyond farming and reducing the number of agriculture dependent population in Tamil Nadu.

Grass root entrepreneurship

- Recent decentralized industrialization in Tamil Nadu has been led by entrepreneurs from ordinary farming backgrounds and local merchant communities.

For ex-Coimbatore’s spinning mills, foundries, machines and pumps & valves etc ,were mostly started by Kammavar Naidus.

Diverse entrepreneurial culture

- Tamil Nadu’s entrepreneurial culture is diverse, spreading among different communities and across various industries. For ex- Christians-MRF, Johnson Lifts and Aachi Masala Foods and Muslims -Farida Group etc.

The grassroots entrepreneurship, along with substantial investments in public health and education, helps in explaining Tamil Nadu’s relative success in industrialization and diversification away from agriculture.

Mains Point: Decentralized industrialization model**Differences in the quality of consumer spending between rural and urban areas in food and non-food categories****2. Rural-urban consumption disparity: Less than it looks****Context:**

Difference in rural and urban consumption

As per the government's latest data on household consumption expenditure, the per-person monthly spending in urban areas of India in 2022-23 was 1.72 times that in rural areas. The article highlights the fact that there is not much difference in rural and urban consumption. The increase in spending in rural areas indicate their rising aspirations.

Categories that create the gap in rural-urban consumption

1) Rent

The average monthly rent spending is only ₹ 30 in rural areas, whereas it is ₹ 423 in urban areas. This is because most families live in their own homes in rural areas.

2) Conveyance

rural areas, it is ₹. 285, while in urban areas, it is ₹. 555.

3) Beverages and processed food

The average rural spending was ₹. 363 and nearly double that in urban areas. Similarly, the rural-urban gap in spending on entertainment and other goods is also high.

4) Impact of government transfer

As per the survey result, the average government transfers are higher in rural areas as compared to urban areas. Additionally, the large difference in education and healthcare spending between rural and urban areas may decrease once government subsidies are taken into consideration.

In order to calculate the real consumption levels, there is a need to remove the impact of inflation in rural and urban areas over the last decade.

1) Food categories-

A) Rural areas spend slightly more per person each month on vegetables compared to urban areas. The difference in spending on pulses and pulse products between rural and urban areas is also small. In the main protein-rich foods like eggs, fish, and meat, the rural-urban gap in average monthly spending is only about ₹. 21.

B) In consumption of sugar, salt, and spices, the gap in real consumption between rural and urban areas is marginal.

C) Fruits and milk products-Two nutritious item groups are fruits and milk and milk products. The average monthly urban real spending on fruits is about 1.7 times that in rural areas and about 1.5 times that of milk and milk products.

However, spending levels alone doesn't indicate if the gaps between rural and urban consumptions is due to lack of affordability or lack of accessibility.

For ex- in rural areas, there are probably fewer cold storage facilities for perishable items like fruits and milk compared to urban areas.

2) Non-food categories-

In consumption of paan, tobacco and other intoxicants, rural-urban gap is smaller and almost negligible.

This data about rural-urban spending indicates

Once all government transfers are considered, spending in rural India will

resemble that of urban India more closely.

Way forward

In order to experience real welfare gains by householders, it is important to ensure that family members don't have to separate in search of jobs. So, to achieve this objective, there is a need to create non-farm jobs in rural areas and minimise relative cost of housing in urban areas by providing affordable housing.

Mains Point: Difference in rural and urban consumption

3. Lessons from India's alternate development plan

Context:

India's strong economic growth, focusing on renewable energy, digital technology, and female empowerment. The article discusses India's strong economic growth, focusing on renewable energy, digital technology, and female empowerment. It highlights India's success in these areas and the potential to use these strategies in other developing countries. The World Bank supports these efforts, helping to expand and replicate them globally.

India advancements in renewable energy

Renewable Power Capacity:

Renewable sources account for 42% of India's total power generation capacity.

Investment in Renewables:

Annually, about \$10 billion is invested in renewable energy sectors.

Global Standing:

India ranks as the world's fourth largest renewable energy market.

Solar Manufacturing:

It holds 3% of global solar manufacturing capabilities.

World Bank Support:

The World Bank has invested approximately \$1 billion in India's solar

projects, notably in solar parks and rooftop solar installations, stimulating substantial commercial investment in the sector.

Some innovations are occurring in digital infrastructure

Digital Public Infrastructure (DPI):

Facilitates millions in accessing social safety nets, banking, and government services digitally, reducing the need for in-person interactions.

Efficiency in Payments:

The implementation of digital payments has shortened the payout time for maternal health programs by 43%.

Expansion of Business Reach:

Women micro-entrepreneurs in Tamil Nadu are leveraging digital networks to serve broader markets and access finance, illustrating the transformative impact of DPI on rural business activities.

World Bank Involvement:

The World Bank is taking lessons from India's digital infrastructure to assist other countries, highlighting the successful application and benefits of these innovations.

Female empowerment being promoted through

National Rural Livelihoods Mission:

Organizes rural women into self-help groups, supporting women-led cooperatives and rural enterprises.

Credit Mobilization:

More than \$4 billion in commercial credit has been mobilized to empower women in business.

Labor Force Participation:

Female participation in industry is now 43% of the national total.

Safe Urban Housing:

Policies promoting investment in safe urban housing are helping more women enter the workforce.

World Bank Support:

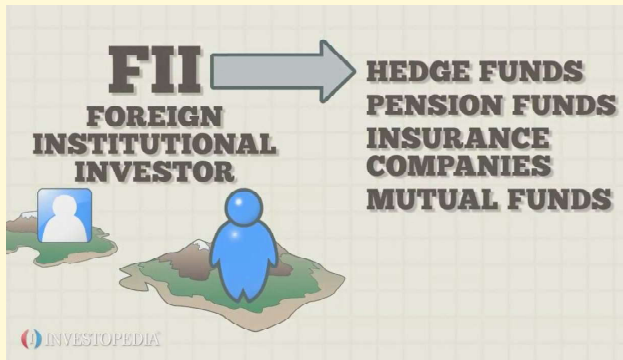
The World Bank's backing assists in scaling these initiatives, enhancing female empowerment across the country.

Mains Point: India's strong economic growth**4. Why has India Allowed FIIs to Invest in Green Bonds?****Context:**

India allows FIIs to Invest in Green Bonds

Recently, the Reserve Bank of India (RBI) has allowed investments in the country's Sovereign Green Bonds (SGrBs) by Foreign Institutional Investors (FIIS).

This decision will expand the available capital for the country's ambitious objectives, as committed by Prime Minister Narendra Modi at the 2021 COP26 in Glasgow.

About Foreign Institutional Investors (FIIS)

1. Foreign institutional investors (FIIs) are those institutional investors who invest in assets belonging to a different country other than that where these organizations are based.
2. Investors such as pension funds, mutual funds, insurance companies, banks, and other significant financial institutions from abroad are included in Foreign Institutional Investors (FIIs).
3. FIIs are crucial to a country's financial markets as they enhance liquidity, boost trading volumes, and affect stock prices.

4. These investors deploy their capital into various financial instruments like stocks, bonds, and derivatives, driven by their strategic investment plans and views on market conditions.
5. The capital influx from FIIs can positively or negatively impact the local economy, influenced by factors including market dynamics, governmental policies, and worldwide economic conditions.
6. FIIs in India are governed by the Securities and Exchange Board of India (SEBI), and the Reserve Bank of India (RBI). They also set the investment limits for them.
7. SEBI has over 1450 foreign institutional investors registered with it.

About green bonds

- Green bonds are bonds issued by any sovereign entity, inter-governmental groups or alliances and corporates with the aim that the proceeds of the bonds are utilised for projects classified as environmentally sustainable.
- The framework for the sovereign green bond was issued by the government on November 9, 2022.
- Green bonds are specifically designed to fund environmentally friendly initiatives. The projects they finance can include renewable energy, energy efficiency, clean transportation, sustainable agriculture, and more.
- Green Bonds provide investors with an opportunity to support environmentally sound practices, impacting the strategic decisions of the entities issuing the bonds.
- They offer a way to mitigate risks associated with climate change and aim to achieve returns that are comparable to, if not better than, traditional investments.

Mains Point: FIIs investments**Prelims Point: Sovereign Green Bonds (SGrBs)**

5. India & Brazil plan certification to regularize trade of genetic material

Context:

India and Brazil working to harmonize their certification systems

India and Brazil are working to harmonize their certification systems for the trade in biological genetic material as well as certificates for pork and fish.

About the Integrated certification

- The 'integrated certification' will involve authorization by the Food Safety and Standards Authority (FSSAI) and the Department of Animal Husbandry and Dairying (DAHD).
- The idea of the new certificates is to facilitate the imports. A health certificate is an official document issued by the exporting country, proving that the requirements established by the importing country are being met.
- This will make it easier for India to receive regular imports of biological genetic material, fish, pork meat and their products.
Note: Biological genetic material is used for breeding and improving animal productivity.
- It has been reported that Brazil will provide India bull semen genetic material to improve the productivity of Indian cattle. India through the National Dairy Development Board received its first batch of 40,000 doses of bull semen from Brazil.
Status of animal husbandry and dairy in India
- India is home to the world's largest livestock population. It is the top producer of buffalo meat and the largest global milk producer, with almost all its milk consumed domestically.
- In 2022-23, milk production was stagnant, partly due to an outbreak of lumpy skin disease.

- About half of its milk output comes from indigenous and non-descript buffaloes, with another 20% from similar types of cows.
- The 2023 Household Consumption Expenditure Survey reveals that daily per capita milk consumption is approximately 330 ml.

Prelims Point: India and Brazil and their certification systems

6. GST adoption gave north-eastern states a big developmental push

Context:

Increased tax collections in Northeast India

The article discusses how the introduction of the Goods and Services Tax (GST) in India in 2017 has significantly helped the northeastern states by increasing their tax revenues. This boost in funds has allowed these states to improve infrastructure and participate more in national economic activities.

Current status of tax collections in Northeast India

Exceptional GST Revenue Growth:

Since the GST was implemented in 2017-18, the northeastern states have experienced a compound annual GST revenue growth rate of 27.5% through to 2022-23, which is significantly higher than the pre-GST tax revenue growth rate of 9%.

Substantial Increase in State Revenues:

The northeastern states' total revenue contribution to the central exchequer now stands at around Rs. 20,000 crore annually, with Rs. 8,000 crore from GST and Rs. 12,000 crore from central excise. This demonstrates a major increase in financial resources due to efficient tax collection and compliance under GST. Financial transfers from the central government to northeastern states have significantly increased. For example,

Arunachal Pradesh received a 1,665% increase in tax devolution from 2014 to 2024. Other states like Mizoram, Manipur, Nagaland, and Sikkim also saw over a 500% rise in devolution, allowing them more budget for development.

Reasons for increased tax collections in Northeast India

Consumption-Based Tax System:

GST, levied at the point of consumption rather than production, benefited northeastern states which are primarily consumer states. This shift from the origin-based Central Sales Tax, which they hardly benefited from before, significantly increased their tax collections.

Improved Tax Compliance:

The GST system encourages better compliance through a tax-credit mechanism. This self-policing setup minimizes tax evasion, enhancing revenue collection.

Use of Technology:

States like Assam employed big-data software to identify tax discrepancies, which significantly improved collection efficiency, resulting in the recovery of about ₹ 730 crore in tax settlements.

Spillover Effects on Revenue Collection:

The implementation of GST has refined the overall mechanism of revenue collection in states, helping to streamline various tax collection processes beyond just GST.

Balancing Fiscal Imbalances:

GST has played a crucial role in addressing the vertical fiscal imbalances between the northeastern states and the Central government, contributing to a more equitable financial structure across the country.

Enhanced Participation in National Market:

The adoption of GST has enabled northeastern states to more actively engage in the national market, opening

up greater opportunities for trade and investment, which in turn boosts economic activity and development in the region.

GST has played major role during economic challenges

GST and the associated compensation packages helped northeastern states manage economic challenges during the COVID-19 pandemic. This support prevented a collapse in revenue and enabled continued investment in development projects.

Way forward

With the increase in revenue and development funding, northeastern states are encouraged to further develop their infrastructure and explore new economic opportunities. This will help them fully utilize their potential and contribute more significantly to the national economy.

Mains Point: Increased tax collections in Northeast India

Prelims Point: Increased tax collections

7. Payment mechanism for traders importing pulses from Myanmar simplified: Govt

Context:

Special Rupee Vostro Account (SRVA) India has simplified the payment mechanism for traders importing pulses from Myanmar by facilitating them to use the Rupee/Kyat direct payment system through the Special Rupee Vostro Account (SRVA).

About Special Rupee Vostro Account (SRVA)



About:

- SRVA is an additional arrangement to the existing system of settlement for international trade. It facilitates trade in Indian Rupees (INR) with partner countries.
- The goal is to promote exports, facilitate imports, and reduce dependence on hard (freely convertible) currencies like the US Dollar or Pound Sterling.
- Unlike the regular Rupee Vostro Account, SRVA requires prior approval from the Reserve Bank of India (RBI) before opening.

SRVA Mechanism:

- Transactions for both exports and imports must be invoiced exclusively in INR.
- The exchange rate for converting INR with the partner country's currency is determined by the market.
- All trade settlements are conducted in INR.
- Authorized domestic dealer banks (AD banks), which are permitted to deal in foreign exchange, are responsible for opening SRVA accounts for the correspondent banks in the partner countries.

Benefits of SRVA:

- It reduces dependence on foreign exchanges (like the US dollar).
- It helps domestic banks gain wider access to foreign financial markets.
- It also facilitates international banking services without physical presence abroad.

About Vostro account

- A Vostro account is an account that a domestic bank holds for a foreign bank in the domestic bank's currency. For eg. in the case of India, it is the rupee.
- The RBI allowed nine such accounts, including IndusInd Bank and Uco Bank.

Prelims Point: Special Rupee Vostro Account**8. Express View on FDI in space: Opening up****Context:**

New FDI rules in India's space sector
The article discusses India's new foreign direct investment (FDI) rules aimed at enhancing its space industry. These rules increase FDI limits for various space-related activities. The changes are part of India's broader strategy to strengthen its position in the global space economy.

New FDI rules in India's space sector

India has updated its FDI policy to boost its space sector:

- 74% FDI is now permitted under the automatic route for satellite manufacturing and data products.
- 49% FDI is allowed for launch vehicles and spaceports.
- Up to 100% FDI is possible for manufacturing components required by the space sector.

This change significant**Enhancing Global Standing:**

The new FDI rules aim to position India as a major player in the global space market. India currently holds 2-3% of this market, with aspirations to increase this share to over 10% by 2030. According to Indian National Space Promotion and Authorisation Centre (IN-SPACe), an investment of \$22 billion is projected over the next ten years to meet these growth targets.

Private Sector Engagement:

By allowing higher FDI limits, India is encouraging private companies to participate more actively. For instance, Skyroot Aerospace's launch of a privately built rocket demonstrates the potential and capabilities of private entities under this new policy framework.

Development of Infrastructure:

The allowance of up to 49% FDI in spaceports is particularly significant as

it opens up opportunities for private investment in critical infrastructure, which is currently operated by ISRO.

Alignment with National Objectives:

The policy changes align with India's broader strategic goals, enhancing space capabilities and supporting national security and development objectives. These initiatives include using advanced space technology for agriculture and climate change mitigation.

Should be done

Expand ISRO's role in R&D, aligning with the Space Policy to encourage both public and private sector contributions. Focus on regulatory clarity, such as specifying FDI limits in new segments like spaceports, to attract foreign investments and partnerships.

India's space economy now requires a proper mix of government regulation and freedom for the market.

Mains Point: New FDI rules in India's space sector

Prelims Point: New FDI rules in India's space sector

9. India's youth can give the country an edge – if they get the jobs they desire

Context:

Challenges of Demographic dividend in India

The article discusses the current economic and employment situation in India. It highlights the challenges and opportunities presented by India's demographic dividend.

Facts that establish India's demographic dividend

- 1) India's dependency ratio is low. There are around 100 workers for every 40 dependents.
- 2) There is an anticipation of the addition of around 10 million new workers annually for the next couple of decades.

- 3) India's economic transition from agrarian to non-agrarian sectors.
- 4) Gig work is not matching the aspirations of the youth, fueled by their education and growing economic power of India.

Challenges posed by the demographic dividend in India

Providing workers with productive jobs:

Labor flow from agrarian economy to industries is increased manifold. However, Indian firms are small, both in terms of employment and revenue, generating the limited demand for workers.

Skill deficit:

Firms, especially in the white-collar service sector, struggle to find workers with the required skills, reflecting the issues in the education system and student learning outcomes. Both ILO report and CMIE estimates suggest high unemployment among graduates and the young population.

Tax or regulatory policy environment:

Present policy environment and lack of ambition among small entrepreneurs, works against the growth of small firms. Therefore, firms are happy to stay small and avoid any ambition to compete with big firms.

Migration cost:

Since non-agrarian jobs are only available in urban areas, workers need to move and arrange accommodation. It is a costly affair, discouraging many.

Should be done

Incentivizing exports could be a solution to the labor market crisis, as firms that export tend to be larger and more productive. An export reorientation is likely to change the entrepreneurial mindset and encourage firms to scale up their ambitions, creating more employment opportunities.

Addressing the skill deficit and improving the education system are

also crucial steps to ensure a better match between the workforce's skills and the demands of the labor market.

Mains Point: Challenges of Demographic dividend in India

10. Why have private investments dropped?

Context:

Gross Fixed Capital Formation

The failure of private investment to pick up pace has been one of the major issues plaguing the Indian economy.

About Gross Fixed Capital Formation

1. GFCF refers to the growth in the size of fixed capital in an economy. Fixed capital require investment for their creation.
2. GFCF serves as a rough indicator of how much the private sector in an economy is willing to invest.
3. GFCF includes capital formation as a result of investment by the government.

It matters due to:

- a) GFCF helps in creation of fixed capital that helps to boost economic growth and improve living standards.
- b) Fixed capital largely determines the overall output of an economy.
Developed economies such as the U.S. possess more fixed capital per capita than developing economies such as India.

About the trend seen in private investment in India

- 1) In India, private investment began to pick up significantly mostly after the economic reforms of the late 1980s and the early 1990s that improved private sector confidence.
- 2) From independence to economic liberalisation, private investment largely remained either slightly below or above 10% of the GDP. Public investment as a percentage of GDP, on the other hand, steadily rose over the

decades from less than 3% of GDP in 1950-51 to overtake private investment as a percentage of GDP in the early 1980s.

- 3) Public investment began to drop post-liberalisation with private investment taking on the leading role in fixed capital formation. The growth in private investment lasted until the global financial crisis of 2007-08. It rose from around 10% of GDP in the 1980s to around 27% in 2007-08.
- 4) From 2011-12 onwards, however, private investment began to drop and hit a low of 19.6% of the GDP in 2020-21.

Prelims Point: Gross Fixed Capital Formation, private investment

Mains Point: Gross Fixed Capital Formation

11. Musk set to arrive: potential win-win for Tesla and India, some challenges too

Context:

Impacts of Elon Musk's plan for his visit to India

The article discusses Elon Musk's planned visit to India to potentially invest in a car manufacturing plant and other business opportunities. It covers Tesla's situation, India's electric vehicle policies, and meetings with Indian officials. Musk will also explore space and internet projects through his other companies.

Electric vehicle market performance in India

- Electric vehicle (EV) sales in India are growing from a small base.
- Currently, EVs account for 2% of all automobiles in the country.
- Projections suggest that by 2030, EVs will make up about 5% of all vehicles in India.
- This projection falls significantly short of the government's target of 30%.

Impacts of Elon Musk 's plan for his visit to India

Investment in Manufacturing:

Elon Musk plans to invest over \$2 billion in a new car manufacturing facility in India, potentially creating jobs and boosting the local economy.

Policy Engagement:

His visit includes a roundtable with space startups and a meeting with Prime Minister Narendra Modi, highlighting collaboration on future technology and policy initiatives.

Tariff Reductions:

The government has tailored policies specifically for Tesla, such as reducing import duties to 15% for 8,000 electric cars annually, which can increase Tesla's market presence in India.

Expansion of Technology:

Musk is expected to discuss Starlink, aiming to offer high-speed internet via satellites, which could improve connectivity in remote areas of India.

Political and Economic Influence:

His interactions might influence future economic policies, especially related to technology and manufacturing sectors, making India a potential hub for EV and technology exports.

Challenges does Tesla face in India

Market Size and Preference:

India's luxury car market is relatively small, limiting Tesla's mass market potential as their cars are positioned in the higher price segment.

Local Competition:

Tata Motors, a local leader, has succeeded by adapting existing models for EV technology rather than developing new EVs from scratch, providing stiff competition.

Infrastructure Challenges:

Tesla's Model 3 has faced issues like insufficient ground clearance for Indian

roads, requiring potential redesigns for local conditions.

Mains Point: Impacts of Elon Musk's plan for his visit to India

12. Climate change's 'physical risks' are increasingly catching up with banks

Context:

Impact of climate change on banking institutions

The Basel Committee on Banking Supervision warns that climate change could impact "the safety and soundness of banks and the stability of the broader banking system."

The risks posed by climate change to banking institutions

1) Transition risks-

These risks are tied to changes in asset values and other costs associated with the decarbonization of the global economy.

2) Physical Risks-

Physical risks for banks refer to potential losses or disruptions caused by climate-related events such as extreme weather events, rising sea levels, and natural disasters.

Banks compelled to pay greater attention to physical risks

Rising frequency of natural hazards

The rise in global temperatures is causing more wildfires, storms, and droughts has compelled the banks to pay more attention to physical risks associated with climate change.

For ex- Floods in Pakistan in 2022 caused a 2.2% loss in the country's GDP. Canada's worst wildfire season in 2023 had a significant impact on the local economy. Additionally, a severe drought at the Panama Canal affected a waterway that manages \$270 billion annually in global trade.

Water crisis

Climate change may accentuate the water crisis across the globe. Thus, it would be important for the banks to know the physical risks that they might face when making lending decisions. For ex-Will a semiconductor company face water stress?

Impact of extreme climate events on companies

- 1) Analysts at BloombergNEF released a report stating that extreme climate events can cause companies to lose revenue or even go bankrupt.,
- 2) It can lead to concerns about credit, liquidity, and operational risks.

Issues with companies facing the challenge of climate change**1) Lack of Pro Activism**

As per BloombergNEF published report, 65% of the over 2,000 companies studied didn't recognize parts of their operations that might be at risk from climate-related issues. Moreover, even fewer companies evaluated the financial impact of these risks.

2) Disregard for the warning

Despite growing concerns about the serious threat of unchecked global warming, American banks are still increasing their investments in the industries most responsible for its acceleration that is oil and gas.

Steps taken by banks to minimize physical risks associated with the challenge of climate change**Catastrophe modelers**

The bank is hiring catastrophe modelers that can estimate the potential impact of severe weather events on JPMorgan's real estate portfolios.

Climate Risk Heat Map

Citigroup Inc. bank has introduced Climate Risk Heat Map to assess the vulnerability of its credit exposures to climate risks. The map shows the

business areas with the highest physical risks and transition risks.

Mains Point: Impact of climate change on banking institutions**13. On the fall in household savings****Context:**

Status of household savings in India

The article discusses how household savings in India have decreased, mainly because people are borrowing more and saving less money in banks and other financial assets. This rise in borrowing is increasing households' debt levels, affecting their spending and overall economic stability.

The current status of household savings in India

- Household savings in India have declined, with the net financial savings to GDP ratio hitting a four-decade low.
- Net financial savings have significantly decreased, with the gross financial savings to GDP ratio falling from 7.3% to 5.3% in 2022-23.
- Physical savings have slightly increased, with the household physical investment to GDP ratio moving from 12.6% to 12.9% during the same period.
- Household debt has risen sharply, especially noticeable in the spike in the household borrowing to income ratio in 2022-23.
- Interest payments have increased, contributing to higher household debt and affecting overall net financial savings despite stable consumption rates.

Financial savings decreasing, because**Increased Consumption:**

Households are either borrowing more or using their savings to fund higher consumption, though this has not been a major factor recently since the consumption to GDP ratio has stayed almost the same (from 60.95% in 2021-22 to 60.93% in 2022-23).

More Physical Investment:

Some households are investing more in physical assets, slightly reducing their financial savings.

Higher Interest Payments:

Increasing interest rates have led to higher interest payments, prompting households to either borrow more or dip into their savings, which lowers their net financial savings.

Impact of Increasing Household Debt**Increased Debt Burden:**

As per the data, the sharp rise in the household debt to income ratio in 2022-23 signals a growing debt burden, potentially reducing households' financial stability and increasing their vulnerability to economic shifts.

Impact on Consumption:

Higher household debt leads to increased interest payments, reducing disposable income and consequently lowering consumption expenditure. The reduction in consumption was evident in 2023-24 when private final consumption expenditure significantly declined compared to the previous year.

Economic Fragility:

The rise in household leverage, coupled with a decrease in the financial wealth to GDP ratio, reflects a move towards a more financially unstable and fragile economic structure, threatening overall economic stability and growth.

Mains Point: Status of household savings in India

Prelims Point: Status of household savings in India

14. Asset tokenization can revolutionize financial systems

Context:

Asset tokenization for global financial systems

The article discusses a new idea called 'the Finternet' that could change how money and assets are managed globally. It suggests using digital technology to connect different financial systems and make transactions faster, cheaper, and safer.

About Finternet

The current financial system, with separate regulatory environments for different transactions, has become inefficient as transactions grow more complex. It is slowing operations, increasing costs, and restricting competition and innovation.

- Finternet aims to connect different financial systems globally using modern technology.
- The Finternet is a proposed digital framework by the Bank for International Settlements.
- Tokenization is at the core of the Finternet, where assets are represented as digital tokens with standardized rules.
- These tokenized assets can be transacted on a unified ledger, a shared digital system for managing various financial assets.

Benefits of the Finternet**Cheaper transactions:**

The Finternet reduces costs associated with financial transactions.

Faster transactions:

Transactions become quicker due to streamlined processes.

Safer transactions:

Reduced reliance on intermediaries decreases the risk of fraud.

Reduced counter-party risk:

Tokenized assets enable direct trading among holders, minimizing counter-party risk.

Automation of complex agreements:

Complex financial agreements can be automated and executed directly without intermediaries.

Development of new financial instruments:

The Finternet allows for the creation of new financial products and investment opportunities.

Challenges of the Finternet**Tokenizing real-world assets:**

Challenges arise in tokenizing tangible assets like art pieces, which lack public registries.

Double-spending problem:

Ensuring that tokenized assets cannot be sold simultaneously offline and online is a significant challenge.

Legal requirements:

Adapting legal frameworks to accommodate tokenized assets, especially for movable assets, presents hurdles. It is because, tokenizing real estate requires statutory amendments to convert government registers into tokenized ledgers.

Public registries:

For assets like land titles, converting existing public registries into tokenized ledgers may require substantial effort.

Comprehensive tokenization:

Ensuring all assets are tokenized and recorded on the unified ledger is a complex task that requires careful planning and execution.

Mains Point: Asset tokenization for global financial systems

Prelims Point: Asset tokenization for global financial systems

15. RBI draft rules for payment aggregators**Context:**

Rules for payment aggregators

The Reserve Bank of India is proposing new regulations for offline payment aggregators (PAs) to enhance safety.

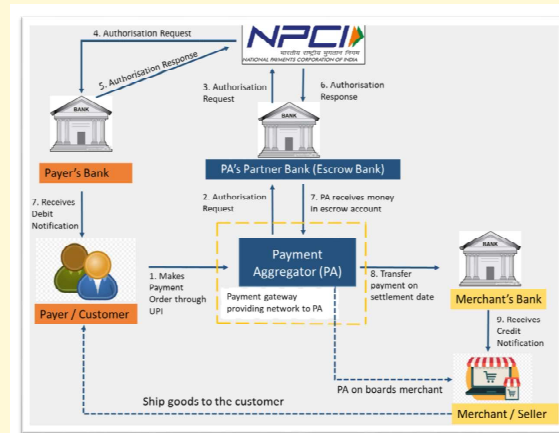
About the payment aggregators:

Fig 1: End to end non-bank payment aggregator transactional flow
The blue dotted lines in the fig. do not form part of payment system, but forms an important part of legal back in merchant onboarding process and shipment of goods to the customers in a PA business model.
Source: Author

About Payment Aggregators (PAs):

PAs are entities responsible for enlisting merchants and streamlining the process of collecting payments from customers for the purchase of goods and services. These aggregators unburden the merchants from creating a payment integration system of their own.

Methods employed by PAs to collect payments

PAs utilize various payment channels like online QR codes or physical point-of-sale (POS) machines to collect payments on behalf of the merchants. Subsequently, PAs settle the accumulated funds with the respective merchants.

Types of PAs:**Two major types of PAs are a part of the payments ecosystem in the country:**

This includes

PA-Online Point of Sale (PA-O) and
PA - Physical Point of Sale (PA-P).

Inclusion of PA

Physical Point of Sale (PA-P) in the revised definition of payment aggregators

The revised definition of payment aggregators has been modified to include physical point-of-sale payment providers such as Innoviti Payments,

Pine Labs, and MSwipe. Thus, they have been subjected to regulatory oversight.

About new RBI guidelines for payment aggregators

1. Non-bank PoS providers must notify RBI within 60 days and submit authorization applications by May 31, 2025.
2. Banks must close accounts for non-bank payment aggregators by October 31, 2025, unless authorized.
3. Net-worth requirements for PAs facilitating face-to-face transactions have been changed. PAs net worth requirements will be increased to Rs 25 crore by March 2028.
4. Medium merchants, defined as physical or online merchants with annual business turnover of less than 1 40 lakhs who are not registered under the GST, would also have to undergo contact point verification.
5. PAs have to bolster risk management with KYC norms, tailored for small and medium-sized merchants.
6. PAs can now use escrow accounts for both PA-O and PA-P activities, including goods delivery. All PAs must join the FIU to report suspicious transactions.
7. Starting August 1, 2025, only card issuers and networks can store card data for face-to-face transactions.

Mains Point: rules for Payment Aggregators

Prelims Point: Payment Aggregators

16. What makes wealth and inheritance taxes bad for India's economic progress

Context:

On Inheritance Tax

The article warns against popular demands for advancing wealth redistribution in India, that is taking wealth from the rich and giving it to the poor. According to the author, it could lead to sustained poverty and economic failure.

The mechanism to ensure this redistribution is levying Wealth tax and inheritance tax. However, these have not been very helpful in reducing poverty. They've already been tested in India before and hence shouldn't be brought back. On Inheritance Tax

Arguments against imposition of wealth and inheritance tax in India

Complexity in tax collection

In India, there was an estate duty from 1953 to 1985, with rates as high as 85%, but it wasn't collected much. Taxes on estates or inheritances are common in many advanced economies, but they contribute only 0.5% of tax revenues on average in OECD countries. However, collecting this small amount requires complex procedures, thus it is not economical.

Negligible tax revenue

Wealth tax was introduced in India in 1957. However, it has only brought in Rs 800 crore by 2012-13. Thus, it was scrapped in 2015. Wealth tax exists in four OECD countries but doesn't bring in much tax revenue there either.

Diversion of focus

Imposing these taxes lead to a loss of focus on the core business of establishing a sensible tax system in India. Furthermore, tax administration in India lacks fairness, adherence to the rule of law, and suffers from the arbitrary power of tax officials.

Disincentive to work hard

The first response to more taxation is to work less. If wealth and inheritance are penalized, people will work less hard to create wealth. This is harmful for the country.

Incentivize tax avoidance strategies

People may rearrange their affairs to pay fewer taxes. Instead of leaving assets in a will, they may give them to chosen heirs while alive. This changes behavior and makes it harder for the

government to collect taxes. Some parents may prefer to keep updating their wills instead of giving assets to their children early to avoid taxes.

Relocation of business activities

It leads to relocation of business activity to friendly jurisdictions such as Dubai, Sri Lanka, Cayman Islands, Singapore, or Ireland. This hampers tax revenues.

Way forward

There should be more emphasis on growth rather than wealth redistribution because sustained economic growth is crucial for poverty reduction. The author suggests focusing on raising the median income instead of redistributing wealth, as wealth redistribution might slow down economic growth.

Prelims Point: Inheritance Tax

Mains Point: Inheritance Tax

17. Centre accords AEO status to gem and jewellery sector

Context:

Authorised Economic Operator (AEO) programme

The Gem & Jewellery Export Promotion Council (GJEPC) stated that the government has granted Authorised Economic Operator (AEO) status to the gem and jewellery sector.

About Authorised Economic Operator (AEO) programme

It is a voluntary compliance programme which was introduced in 2011 as a pilot project by the Customs department.

Function under:

The AEO programme is under the World Customs Organisation (WCO) SAFE Framework of Standards to secure and facilitate global trade.

Aim:

The aim is to enhance international supply chain security and facilitate movement of legitimate goods.

How this programme works:

Under this programme, an entity engaged in international trade is approved by the Customs as compliant with supply chain security standards, and granted AEO status and certain benefits.

Features:

- It aligns with WTO Trade Facilitation Agreement: India's AEO Programme aligns with the commitments outlined in WTO Trade Facilitation Agreement.
- It bolsters and streamlines cargo security: The program empowers Indian Customs to bolster and streamline cargo security by closely collaborating with key stakeholders in the international supply chain, including importers, exporters, logistics providers, custodians or terminal operators, custom brokers, and warehouse operators, as stated by the Central Board of Indirect Taxes (CBIC).
- It contributes to enhance the business environment: It aimed at improving the business environment by simplifying export processes across various sectors, resulting in significant time and cost savings for exporters.

Prelims Point: Authorised Economic Operator (AEO) programme

18. CII brings out new corporate governance charter for startups

Context:

New corporate governance charter for startups

Recently, The Confederation of Indian Industry (CII) has launched a corporate governance charter for startups.

About corporate governance charter for startups

Corporate governance charter was launched for startups to provide suggestions on corporate governance tailored for startups and offer guidelines suitable for different stages of a startup.

Launched by:

It was launched by Confederation of Indian Industry (CII)

Aim:

It will aim to enhance governance practices.

Role of the charter:

- The CII Charter is crafted to assist startups in addressing governance requirements throughout their journey, spanning from establishment to public listing.
- The tool allows startups to measure their governance progress, with score changes indicating improvements in governance practices as assessed against the scorecard from time to time.
- The guidance provided to startups will be structured across four key stages: inception, progression, growth and going public.
Each stage emphasises particular governance principles that may need extra focus during that phase of the startup journey.

About Corporate governance:

- Corporate governance in India is a set of rules, practices and processes by which a company is guided and controlled.
- It ensures that the company is run in a fair manner to achieve the best interests of everyone associated with it.

Prelims Point: New corporate governance

19. Towards a green growth: On the RBI and a green taxonomy

Context:

Green taxonomy

The latest RBI's Monetary Policy Report gives primacy to the impact of climate shocks on the economy's financial stability. This reflects RBI's step towards the adoption of the system of green taxonomy, being used by the ASEAN countries.

About green taxonomy



About green taxonomy:

Green taxonomy is a framework that is used to determine environmentally sustainable investment in the economy. It helps in classification of whether the economic activities as green and environmentally sustainable.

Aim:

It aims to increase investment in green activities and assets and facilitate the detection of greenwashing practices.

Necessity of incorporation of green taxonomies:

- It helps the financial markets to align their investments with the goal of net-zero emissions.
- It also helps in the cultivation of an environmentally sustainable economy. It also helps to reorient capital towards environmentally sustainable economic activities.

How RBI and Finance Ministry can utilise green taxonomy:

- The RBI and Finance Ministry can draw lessons from the ASEAN region. The ASEAN countries have adopted a dynamic green taxonomy, which is continuously updated according to the evolving sustainable practices in different sectors.
- RBI has taken positive steps towards green taxonomy by issuing Sovereign Green Bonds and expanding participation in green government securities by Foreign Institutional Investors.

Prelims point: Green taxonomy

ENVIRONMENT

1. WILL SOLAR DREAMS CLIP THE BUSTARD'S WINGS?

Context:

Conflict between renewable energy development and the protection of the Great Indian Bustard in India

The article discusses the conflict between renewable energy development and the protection of the Great Indian Bustard in India. It covers court decisions on whether to place power lines underground to prevent the birds from dying due to collisions. It mentions different viewpoints from environmentalists, the government, and energy companies.

Issue with the Great Indian Bustard

Endangered Species Protection:

The Great Indian Bustard is critically endangered, listed by IUCN in 2013 and included in CMS COP13 as an endangered migratory species in 2020, emphasizing the need for strict protection.

Habitat Collision:

The Great Indian Bustard, a critically endangered bird, frequently collides with overhead power lines in its desert habitat, leading to fatal accidents.

Population Decline:

From over 1,500 individuals in the 1970s, the population dwindled to less than 150 by 2018 due to these collisions.

Energy Development vs. Conservation:

The bird's habitat overlaps with areas ideal for wind and solar energy, creating a conflict between renewable energy development and species conservation.

Indian Supreme Court has responded to the issue of the Great Indian Bustard

Initial Order:

In April 2021, the Supreme Court mandated the undergrounding of power lines in an 80,688 sq. km area to prevent bustard collisions.

Industry Challenges:

Faced with industry backlash over high costs and feasibility concerns, the court reconsidered the decision.

Revised Order:

In March, the area required for underground wires was reduced to 13,663 sq. km, focusing on the 'priority' bustard habitat.

Balancing Act:

The court aimed to balance conservation needs with India's renewable energy goals, reducing the scope of mandatory underground wiring while still addressing the threat to the bustards. The recent Supreme Court judgment acknowledges a fundamental right to be free from the adverse effects of climate change. While environmentalists have mainly focused on its impact on protecting the Great Indian Bustard

Significance of the court's decision beyond the protection of the Great Indian Bustard

Space for discussion

Since the court has not enunciated the content of right, it has allowed time and space for a productive discourse on the content of the rights. This approach of the court could enable a more informed articulation of the right in the future.

Just Transition Framework

It allows the opportunity to utilize the just transition framework. This

framework can facilitate equitable climate action.

Counter allegations of judicial overreach

The Courts have been appreciated for their environmental pro-activism because they have contributed to development of India's majority environmental laws. However, this practice has been criticized for judicial overreach and the creation of imprecise rights. So, the restraint exercised by the court in this judgement will help in countering this criticism.

Issues with this judgement

Conflict between two important issues

It projects biodiversity protection and climate action as adversarial choices.

Lack of inclusive approach

The right that is being recognized by the court gives importance to only protecting humans' interests against climate change. It does not include non-humans.

About just transition framework

This framework makes transitions to a low carbon economy more equitable and inclusive without endangering the interests of those communities which are the most affected by such transitions. For ex-workers, vulnerable communities etc.

Significance of just transition framework

Ending Conflict

It will prevent climate action and biodiversity protection from being seen as conflicting choices. Instead, it can promote inclusive climate action that recognizes diverse rights and interests.

Ecological justice

It can be utilized in climate litigations to highlight the significance of being sensitive to the interests of non-human nature and advance the principle of ecological justice.

Inclusive decision

If the framework is applied in the Court's final decision, it would become one of the earliest instances where a

legal process about transitioning considers the interests of non-human beings.

It's important to involve activists, litigants, and others, not just the government, in defining, explaining, and enforcing these rights.

Challenges of Undergrounding power lines

High Costs:

The cost of undergrounding is estimated to be over 150,000 crore, which could increase power tariffs in the states involved. For future projects, underground wires could push costs up by approximately 80%, making them unviable.

Technical Feasibility:

Industry representatives mentioned that undergrounding is feasible in urban areas for shorter distances, but in vast desert areas, it presents significant technical challenges.

Slow Implementation:

Three years post the initial Supreme Court order, minimal undergrounding has been achieved. A 10-km segment of a 66 KV line in Gujarat is one of the few that has been laid underground.

Financial Impact:

The potential financial impact on consumers and the viability of renewable energy projects due to increased costs was a significant concern raised by the energy industry and noted in court discussions.

Future of Great Indian Bustard

- The future of the Great Indian Bustard remains uncertain. With continued habitat encroachment and the challenges of implementing protective measures, the species faces a high risk of extinction.
- The outcomes of ongoing legal and environmental management efforts will play a critical role in determining the survival of this endangered bird.

Mains Point: Development vs protection of species

Prelims Point: Just Transition Framework**2. What's behind heavy rainfall in Dubai****Context:**

Reasons for heavy rains in the UAE

The article describes a record-breaking rainstorm in the UAE that caused severe flooding and disruptions

Situation UAE due to the rainstorm**Historic Weather Event:**

- The UAE experienced the heaviest rainfall on record since 1949, with Dubai receiving over 142 millimeters of rain in just one night. Typically, Dubai sees about 94.7 millimeters of rain in an average year.
- Al Ain recorded 254 millimeters, and Fujairah saw 145 millimeters.

Rain Affecting Daily Life:

- The downpour caused widespread flooding in homes, major roads, and shopping centers like Dubai Mall and Mall of the Emirates.
- Air travel was severely disrupted, leading to temporary suspension of flights and significant delays at Dubai International Airport.

Other Impacts:

- Schools across the UAE were closed.
- The government mandated work-from-home directives to cope with the situation.
- In nearby Oman, the rains resulted in the deaths of 18 people, including school children.

Reasons for heavy rains in the UAE**Storm System:**

A significant storm system moved across the Arabian Peninsula, bringing unusually high rainfall to the region.

Cloud Seeding:

The UAE utilized cloud seeding technology, which involves spraying salt mixtures into clouds to induce rain. Meteorologists at the National Center for Meteorology conducted six or seven cloud-seeding flights before the storm.

Climate Change:

Global warming may have contributed, as higher temperatures lead to increased water evaporation, allowing the atmosphere to hold more moisture. The UAE has seen a temperature rise of almost 1.5 degrees Celsius over the last 60 years.

Natural Climate Variability:

It's challenging to link this specific event directly to climate change due to the influence of natural climate patterns such as El Niño and La Niña, which also affect weather extremes.

Prelims Point: Reasons for heavy rains in the UAE**3. Centre tweaks Green Credit Programme norms, to focus on restoration of ecosystem****Context:**

Centre's Green Credit Programme Recently the Central government has tweaked the Green Credit Programme norms with the Environment Ministry emphasizing that primacy must be accorded to restoring ecosystems over tree planting.

About the Green Credit Program**Trading green**

The programme will cover 8 types of activities, including tree plantation, water management and sustainable agriculture



- Applicant shall register activity via web site

- Activity will then be verified by a designated agency

- Based on its report, administrator shall grant credit certificate

It was initiated by the Prime Minister of India during the COP 28 event, which took place in 2023 at Expo City, Dubai, UAE

This program is a part of the government's Lifestyle for Environment (LiFE) movement.

- It is an innovative market-based mechanism designed to incentivize voluntary environmental actions across diverse sectors, by various stakeholders like individuals, communities, private sector industries, and companies.
- The GCP's governance framework is supported by an inter-ministerial Steering Committee and The Indian Council of Forestry Research and Education (ICFRE) serves as the GCP Administrator which is responsible for program implementation, management, monitoring, and operation.

The GCP focuses on two key activities:

Water conservation and afforestation.

- Draft methodologies for awarding Green Credits have been developed and will be notified for stakeholder consultation.
- These methodologies set benchmarks for each activity/process, to ensure environmental impact and fungibility across sectors.
- The Green Credit Registry and trading platform would facilitate the registration and thereafter, the buying and selling of Green Credits. Unlike the carbon markets, which are more focused at industry and corporations, green credit programme can benefit individuals and communities as well.

Significance of the Green Credit Programme

Environmental Conservation

Green Credit Programme aims to incentivize sustainable actions and engage various stakeholders, including individuals and corporations, in environmental conservation efforts.

Incentivizes various sectors

This program offers incentives through markets and covers six or seven sectors, like forests and waste management. In

polycymaking, incentives play a crucial role. Green credits serve as incentives to encourage individuals and companies to participate in these activities.

Concerns regarding the Green Credit Programme

Bypassing laws

It may be utilized to bypass existing environmental laws, particularly those related to forest conservation.

Ground level challenges

There is a lack of proper understanding of ground level challenges and expertise to address those challenges.

Threat to biodiversity

It may promote monocultures and planting vegetation unsuitable for certain ecosystems. This could adversely impact biodiversity and soil health.

Measurement Problems

There are challenges of measuring biodiversity impact accurately. For ex- How does one measure the impact on biodiversity when they are 200 meters apart?

Lack of Fungibility

Fungibility is the ability to exchange one unit of a commodity for another. However, this is lacking in green credits due to the diverse nature of environmental credits like biodiversity and water conservation. This poses a challenge in equating different types of credits on the same platform. For ex- How does one equate a credit of one unit of water conservation with one unit of ecosystem restoration on the same platform?

Clashes with Forest Conservation Act

The program's rules imply that earning green credits can negatively influence mandatory compliances, such as forest clearances. For ex-it may bypass the whole forest clearance process just to help the industries get green credits.

About compensatory afforestation

Compensatory afforestation requires any industry or institution authorized to clear forest land for non-forestry uses to:

- a) allocate an equivalent area of non-forest land to forest authorities,
- b) fund the reforestation of this newly provided land.

This land should ideally be located as close as possible to the original deforested area.

- If suitable non-forest land is not available nearby, the entity must then provide twice the area in 'degraded' forest land which is land recognized as forest but characterized by very low tree density for afforestation purposes.
- These entities are obligated to compensate for the ecological value lost due to the land diversion, a cost referred to as the 'net present value' of the forest ecosystem.

Prelims Point: Green Credit Programme norms

Mains Point: Green Credit Programme

4. Ashwagandha is great, but not for everybody

Context:

Ashwagandha

Ashwagandha is growing in popularity, both in India and abroad.

About Ashwagandha

- Ashwagandha is an evergreen shrub found in parts of India, Africa, and the Middle East. It is also known as Indian ginseng or Indian winter cherry.
- The shrub known as Ashwagandha, a name derived from the Sanskrit words 'ashwa' meaning horse and 'gandha' meaning smell, which refers to the horse-like odour of its roots.
- It belongs to the Solanaceae, or nightshade, family which is the same family as tomatoes and potatoes.

Health Benefits:

- a) Ashwagandha, scientifically known as *Withania somnifera*, has been used as a medicinal herb in Ayurvedic medicine for thousands of years.
- b) This plant is classified as an adaptogen, which means it helps the body manage stress and can restore physiological balance.
- c) Its benefits include reducing inflammation, boosting energy levels, easing anxiety and pain, and enhancing sleep quality.
- d) Various parts of the plant including the roots, leaves, and berries, contain differing levels of bioactive compounds.
- e) Among the most significant of these compounds are withanolides, natural steroids that are known for their antioxidant and anti-inflammatory properties.

Prelims Point: Ashwagandha

5. Empower the guardians of the earth, do not rob them

Context:

Issues associated with the establishment of new wildlife sanctuaries in the Andaman and Nicobar Islands

The article discusses how the Andaman and Nicobar administration plans to establish wildlife sanctuaries on islands traditionally managed and inhabited by the indigenous southern Nicobarese people. This decision ignores their rights and disregards the ecological and social impacts.

Proposed sanctuaries and their implications

Coral Sanctuary on Meroë Island:

The government plans to establish a coral sanctuary here. However, there are concerns about the real diversity and abundance of corals on the island, which makes the basis for such a sanctuary questionable.

Megapode Sanctuary on Menchal Island:

This proposed sanctuary is meant to protect the endemic Megapode birds. But the island reportedly only supports a pair or two of these birds, casting doubt on the effectiveness of this conservation effort.

Leatherback Turtle Sanctuary on Little Nicobar Island:

The administration wants to create a sanctuary for leatherback turtles. Yet, they did not consult the indigenous Nicobarese people, who traditionally use the island, thereby ignoring their rights and cultural practices.

Issues associated with the establishment of new wildlife sanctuaries in the Andaman and Nicobar Islands

Lack of Consultation:

The Andaman and Nicobar administration did not consult the indigenous southern Nicobarese people before announcing the wildlife sanctuaries, despite these communities traditionally managing the islands.

Misrepresentation of Biodiversity:

The administration claims conservation needs for coral reefs and Megapode birds on Meroë and Menchal Islands, but local biodiversity data shows limited presence of these species.

Contradictory Actions:

While establishing sanctuaries for conservation, another significant nearby area, the Galathea Bay Wildlife Sanctuary, was denotified for a ₹72,000-crore development project, threatening extensive environmental damage.

Displacement of Indigenous People:

The establishment of these sanctuaries' risks displacing indigenous communities, disregarding their ancestral ties and sustainable practices on these lands.

Important to support indigenous stewardship

Cultural Guardians:

Indigenous peoples, like the southern Nicobarese, have traditionally managed

their islands sustainably. They protect natural resources through spiritual and community-based practices.

Biodiversity Preservation:

Globally, indigenous territories cover about 22% of the Earth's surface and contain 80% of its biodiversity. Supporting indigenous stewardship like that of the Nicobarese is crucial for maintaining this biodiversity.

Avoiding Ecological Damage:

The disregard for indigenous rights in conservation efforts can lead to severe ecological disruptions. For example, arbitrary sanctuary decisions threaten existing biodiversity and undermine the traditional ecological knowledge of the indigenous people.

Mains Point: new wildlife sanctuaries in the Andaman

6. Asia worst hit by disasters in 2023, 79 extreme weather events killed over 2,000: WMO report

Context:

State of the Climate in Asia 2023 report
The World Meteorological Organization has recently published the 'State of the Climate in Asia 2023' report.

Highlights of the report

- Asia has faced the most number of disasters in the world in 2023. There have been recorded instances of 79 events associated with extreme weather, climate, and water-related hazards. These events have affected over nine million people in the region and directly resulted in the loss of over 2,000 lives.
- The majority of disasters which have occurred in Asia are related to flooding and storms. Over 60% of the 2,000 deaths have been associated with flooding and more than 15% of the deaths were linked to storms.
- Asia has warmed faster than the global average. This warming trend has nearly doubled since the 1961-1990 period.

- Deterioration of climate change indicators, such as rise in surface temperatures, glacier retreat, and sea level rise, will have significant consequences for Asia's economy, ecosystems, and human lives.

Prelims Point: State of the Climate in Asia 2023 report

7. On the National Clean Air Programme

Context:

Challenges faced the NCAP

The article discusses India's National Clean Air Programme (NCAP), which aims to reduce air pollution by setting targets for cities to lower particulate matter levels.

About National Clean Air Programme (NCAP)

- The National Clean Air Programme (NCAP) was initiated by the Indian government in 2019 with the goal of reducing atmospheric particulate matter (PM) concentration by 20-30% by 2024, compared to 2017 levels. This target was later revised to 40% by 2026.
- Under NCAP, cities that continuously exceed annual PM limits must develop and implement Clean Air Action Plans (CAAPs). The Ministry of Environment, Forest, and Climate Change has allocated ¹ 10,422.73 crore for these efforts.

Challenges Does the NCAP Face

Funding Utilization Issues:

Despite substantial funding, implementation is uneven. On average, only 60% of allocated funds have been used, with cities like Visakhapatnam and Bengaluru spending 0% and 1%, respectively.

Approval Delays:

The program faces significant delays in receiving necessary approvals, impacting the timely execution of planned initiatives such as procurement of mechanical sweepers and electric buses.

Lack of Standard Procedures:

There is no standardized procedure for implementing measures under NCAP, leading to inconsistencies and delays in executing the plans.

Bureaucratic Challenges:

Bureaucratic red tape complicates the implementation process, slowing down effective action against pollution.

Doubts About Efficacy:

Skepticism about the effectiveness of certain measures like outdoor smog towers, especially after findings questioning their efficacy, causes hesitance in decision-making.

Incomplete Data:

Only 37% of cities have completed Emissions Inventory (EI) and Source Apportionment (SA) studies, crucial for identifying and targeting specific pollution sources effectively. Without this data, cities struggle to design effective Clean Air Action Plans (CAAPs).

Should be done

- For NCAP to be successful, cities need to use EI and SA data effectively to pinpoint pollutants and plan accordingly. Currently, only 37% of cities have completed these studies.
- Moreover, comprehensive strategies that address both primary and secondary pollutants are necessary.
- Cities like Delhi, Pune, Mumbai, and Ahmedabad have started using decision-support systems to forecast air quality, which other cities need to adopt.
- Implementation should be faster, and technical and financial planning needs to be part of the initial strategies.

Mains Point: challenges faced the NCAP

8. Pivotal fourth session of negotiations on a global plastics treaty opens in Ottawa

Context:

Fourth session of the Intergovernmental Negotiating Committee

The fourth session of the Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution opened in Canada's capital, Ottawa.

About Intergovernmental Negotiating Committee



About:

- a) In March 2022, during the fifth session of the UN Environment Assembly, a landmark resolution was adopted to establish an international legally binding instrument (ILBI) addressing plastic pollution, particularly in marine environments.
- b) The INC has been scheduled to convene five times by the end of 2024 to formulate the specific content of the ILBI.

Aim:

This instrument aims to encompass the entire life cycle of plastic, covering aspects such as production, design, and disposal.

Goal of the global plastics treaty:

The goal of the global plastics treaty is to establish a framework of global standards concerning accountability, responsibilities, financing, material/chemical standards, and import/export restrictions, along with setting targets.

Implementing Agency:

Countries will be responsible for implementing policies aligned with these global standards to achieve the set targets.

Focus

Their focus is on reducing unnecessary plastic usage while still employing it for critical purposes such as renewable energy

A Global Plastics Treaty

The provisions of the treaty

- 1) The treaty could provide guidelines on how wealthy nations can assist poorer ones in achieving their plastic reduction goals
- 2) It could prohibit specific types of plastic, plastic items, and chemical additives, as well as establish legally binding targets for recycling and the use of recycled materials in consumer products.
- 3) It could include provisions for a smooth transition for waste pickers and workers in developing countries who rely on the plastic industry for their livelihoods.

A legally binding global plastic treaty is required, due to

Increase in plastic production

Since the 1950s, global plastic production has increased a lot. It rose from 2 million tonnes in 1950 to over 450 million tonnes in 2019. If left unchecked, it's set to double by 2050 and triple by 2060.

Slow decomposition rate

In a study published by The Lancet in 2023, it was found that nearly 6 billion tonnes of plastic currently pollute the planet. Only a small fraction of plastic has been recycled so far, and because it takes anywhere from 20 to 500 years to decompose, it poses a significant environmental challenge.

Impact of Plastic Pollution on Ecosystems and Health

A lot of plastic waste ends up in rivers and oceans, breaking down into tiny particles called microplastics or nano plastics. These particles carry over 16,000 chemicals that can harm ecosystems and living things, including humans. These chemicals disrupt the body's hormones, leading to issues like cancer, diabetes, and reproductive disorders.

A Major Contributor to Climate Change

Plastic production and disposal are adding to climate change. As per OECD report, in 2019, plastics produced 1.8 billion tonnes of greenhouse gas emissions, which is about 3.4% of global emissions. Around 90% of these emissions come from making plastic, which relies on fossil fuels.

Challenges before the adoption of a legally binding treaty

Resistance from oil producing countries

Since the first talks in Uruguay in November 2022, oil-producing countries such as Saudi Arabia, Russia, and Iran have resisted putting caps on plastic production. They're using various delay tactics, like arguing over procedures, to disrupt productive discussions. They have also asked for narrowing the scope of the treaty.

Polarizing negotiations

There's a coalition of about 65 nations, called the "High-Ambition Coalition," aiming to address plastic production. This coalition, comprising African nations and most of the European

Union, aims to eliminate plastic pollution by 2040 whereas certain oil producing countries do not endorse restrictions on plastic production. This leads to a lack of consensus on legally binding treaties.

Opposition by Fossil fuel and chemical corporations

The fossil fuel industry, which provides 99% of the materials for plastics, considers plastics crucial. They, along with the chemical industry, resist cutting plastic production, claiming that the problem lies in waste, not plastic itself. These corporations are trying to weaken the treaty and have sent many lobbyists to the Ottawa negotiations.

Prelims Point: A Global Plastics Treaty, Intergovernmental Negotiating Committee

Mains Point: A Global Plastics Treaty

9. Antarctica's France-Sized Ice Shelf Makes Daily Jumps, Raising Icequake Concerns

Context:

Ross Ice Shelf

Researchers have uncovered a surprising phenomenon in Antarctica where the massive Ross Ice Shelf which is roughly the size of France, lurches forward several centimetres once or twice a day.

About Ross Ice Shelf

- a) The Ross Ice Shelf is Antarctica's largest ice shelf, found in the Ross Sea extending from the continent's coast into the ocean.
- b) It is like a giant sheet of floating ice covering about 487,000 square kilometers, about the size of France.
- c) Around 90%, is hidden beneath the surface, buried under hundreds of meters of ice. There is a lot of variation in their thickness. It's thickness ranges from about 100 meters to several hundred meters.

Its Formation

Over time, snow compacts into ice, forming the shelf. It constantly receives new ice from glaciers draining from both the East and West Antarctic Ice Sheets. As new ice comes in, some of the existing ice melts from below and breaks off at the front.

It's importance

- a) The Ross Ice Shelf helps stabilize the Antarctic ice sheet by supporting the constantly moving ice on the land surface. It acts like a buttress, holding back the flow of ice into the ocean.
- b) Ice shelves function as barriers, slowing the movement of glaciers and ice streams into the ocean. If the Ross Ice Shelf weakens and disintegrates, it has the potential to hasten ice melt rates and contribute to rising sea levels.

Prelims Point: Ross Ice Shelf**10. SC stays construction of 4 dams inside Kalesar Wildlife Sanctuary****Context:**

Kalesar Wildlife Sanctuary
The Supreme Court stayed the construction of four proposed dams inside Kalesar Wildlife Sanctuary in Haryana.

About Kalesar Wildlife Sanctuary**Location**

1. It is situated within the Yamunanagar District of Haryana, nestled in the foothills of the Shiwalik ranges of the Himalayas.
3. Rajaji National Park, situated in Uttarakhand, is located to the northeast of this park.
3. Simbalbara National Park located in the Shivalik Hills, lies to the north, sharing a border with Himachal Pradesh. Morni Hills can be found to the west.

Unique features

1. The terrain ranges from plains to hills, reaching elevations of up to 700 meters,

with narrow valleys known as "khols" scattered between the hills.

2. These valleys contain seasonal rivulets, referred to as "soats," which typically remain dry for the majority of the year.
3. Within the sanctuary stands the Kalesar Fort, believed to have been constructed during the reign of the Mughal emperor Aurangzeb.
4. The park is renowned for its Dak bungalows, colonial-era administrative architectural structures.

Status

It was declared as a national Park in 2003.

River flowing through
River Yamuna lies to its east.

Flora

1. The majority of the forest is densely populated with tall sal trees.
2. Other trees that are found in the forest are Semul, Bahera, Amaltas, Shisham, Khair, Sain, Chhal and Jhingan.

Fauna

It is home to many threatened animals like leopards, Ghoral, Barking deer, Sambar, Chital, Python, King Cobra, Monitor lizard etc.

Prelims Point: Kalesar Wildlife Sanctuary**11. IUCN representative to be an observer in Nilgiri Tahr survey****Context:**

Nilgiri Tahr census
The International Union for Conservation of Nature (IUCN) will be joining the three-day synchronised Nilgiri Tahr census as a third-party observer.

About the Nilgiri Tahr census**About the census:**

This census is first ever synchronised census of Nilgiri tahr. It will commence on 29th April 24.

Purpose of conducting survey:

The census aims to estimate the population of Nilgiri tahr.

Participatory organisation:

The forest department has collaborated with Worldwide Fund for Nature – India (WWF-India), Wildlife Institute of India (WII), and Advanced Institute of Wildlife Sciences (AIWC). International Union for Conservation of Nature (IUCN) will be third-party observer.

Protected area involved in the census:

The Eravikulam National Park which shares a continuous boundary with Grass Hills in the Anamalai Tiger Reserve will be part of the census.

About Project Nilgiri Tahr

It is an initiative launched by the Tamil Nadu government. It is a five-year program, spanning from 2022 to 2027.

Objective:

The primary goal of Project Nilgiri Tahr is to safeguard the Nilgiri Tahr population and ensure its survival.

Components of the project:

Project Nilgiri Tahr has nine components including biennial synchronised survey across divisions, reintroduction of Nilgiri Tahr in the historic habitats, identifying disease and diagnosis of lump affected individuals, radio collaring of Nilgiri Tahr, ecotourism etc.

About Nilgiri Tahr

Nilgiri Tahr, also known as Nilgiri Ibex, are stocky goats with short, coarse fur, bristly mane and curved horns.

Habitat:

These species predominantly inhabit open montane grasslands.

The tahr primarily resides in limited habitat areas within Tamil Nadu and Kerala. Specifically in a narrow stretch of the Western Ghats extending from the Nilgiri hills in the north to the Asambu hills in the south.

Population status:

There are 3,122 Nilgiri Tahr in the wild in Tamil Nadu and neighboring landscapes of Kerala. (Last assessment done in 2015 by WWF-India)

Conservation Status:

The species is categorized as Endangered in the IUCN Red List and is also included under Schedule 1 of the Wildlife (Protection) Act, 1972.

**Prelims Point: Nilgiri Tahr census****12. To ensure a hunger-free nation, protect soil****Context:**

Need of Climate Friendly Agriculture
Earth Day was first observed on 22 April 1970 to demonstrate support for environmental protection. Since then, many conferences of Parties (COPs) meetings have been held, with the latest being COP 28 in Dubai, UAE, in November-December 2023. This is significant because agriculture was included in the agreement for the first time.

However, India, unlike many G20 countries such as the US and China, did not sign the agreement. The government believed that signing it would require substantial changes in agricultural policies and farming practices.

Reasons for the biodiversity loss in India

The increasing human population is a major cause of biodiversity loss on Earth. Humans took over 200,000 years to reach one billion by 1804. The next billion was added in only 123 years by 1927. And now, in less than 100 years, the population has surged from two billion to over eight billion.

- This rapid growth has led to the clearing of forests for farming to prevent mass famines and starvation deaths. However, this has resulted in the loss of several species and genetic diversity.

Some Inappropriate policies adopted in agriculture that have harmed the planet

Depleting organic carbon content of the soil

The heavy subsidization of chemical fertilizers, especially urea, has caused imbalanced use of nitrogen (N), phosphate (P), and potash (K) leading to depletion of soil's organic carbon.

As per the expert, the ideal level of soil organic carbon (SOC) should be between 1.5 to 2 percent. However, more than 60 percent of Indian soils have SOC levels of less than 0.5 percent.

Groundwater depletion & emission of carbon

The ground water level in Punjab, Haryana, and Rajasthan is depleting rapidly. This is due to free power for irrigation, fixed prices for crops, and unrestricted purchase of rice, which have encouraged excessive use of groundwater.

This has caused an environmental crisis in these areas, with the water level dropping each year and rice fields releasing carbon at a high rate of nearly 5 tons per hectare.

Loss of crop diversity

Faulty agricultural policies are leading to the loss of crop diversity. For ex- in 1960, only 4.8 % of Punjab's farmland was used for growing rice. Today, it's over 40 % displacing crops like maize, millets, pulses, and various oilseeds.

Way forward

Direct Income Transfer

There should be a shift from heavily subsidizing the prices of nitrogen, phosphorus, and potassium to directly giving income to farmers and allowing the market to determine the prices of these nutrients.

However, this requires early preparations such as updating farmers' land records, knowing the crops they grow, their irrigation methods, and so on.

Planet positive policies

There is a need to make food systems resilient to climate change, improve soil health, stop groundwater depletion, significantly lower greenhouse gas emissions, and reward biodiversity with green credits.

Mains Point: Need of Climate Friendly Agriculture

13. Warming of Indian Ocean to accelerate: IITM study

Context:

Indian ocean is increasingly getting Warmer

As per the study, from 1950-2020, the Indian Ocean had become warmer by 1.2°C and climate models expect it to heat up a further 1.7°C–3.8°C from 2020–2100.

Findings of the study

- Study predicts accelerated warming of Indian ocean with catastrophic consequences
- Increase in the Overall heat content of the Indian Ocean: There has been elevation in the overall heat content of the Indian Ocean, as the heat penetrates beyond the surface and heats deeper layers. Currently, the heat content is rising at 4.5 zetta-joules per decade. The future projections suggest an increase in the heat content to 16–22 zetta-joules per decade.

Impact of the Increased Heating of the Indian Ocean

Rising sea levels:

In the Indian Ocean, thermal expansion alone accounts for more than half of the sea-level rise. This surpasses the effects of glacier and sea-ice melting combined.

Disruption of Indian monsoon:

Projections suggest a 66% rise in extreme dipole events which can lead to deficient Indian Monsoon.

Induce marine heatwaves

This heating of the Indian ocean can give rise to near-permanent marine heatwaves.

Marine Heatwaves

A marine heat wave is a coherent area of extreme warm sea surface temperature that persists for days to months. Marine heatwaves are caused by an increase in the heat content of oceans.

Prelims Point: Marine Heatwaves**14. Chunk of India's forests 'missing' after 27-year-delay to file reports****Context:**

Unclassed Forests in India

In response to a Supreme Court order, the MoEFCC has uploaded State Expert Committee reports on its website in April. It was done following a PIL challenging the Forest (Conservation) Act Amendment 2023 which raised concerns over the identification of unclassified forests.

About unclassified forests

A view of wild gaurs grazing in a grassland in a forest area under Munnar wildlife division in Idukki, March 13, 2024.

About unclassified forests:

- The term "unclassified forests" refers to forest areas that fall outside the categories of reserved and protected forests.
- Unclassified forests are not officially notified: These unclassified forests include both government-owned and privately held lands, as well as community forests. Unlike reserved and protected forests, unclassified forests are not officially notified.

Unclassed forests have been a point of concern for**Legal Safeguard:**

Traditionally, unclassified forests benefited from legal protection, as per the T.N. Godavarman Thirumalpad case of 1996. This safeguard prevented their use for non-forest purposes.

Forest (Conservation) Act Amendment (FCA) 2023:

The FCAA's amendment in 2023 endangered the legal shield of unclassified forests and making them vulnerable to diversion for non-forest activities.

Delayed State Expert Committee (SEC) Reports:

The SECs were assigned the task of identifying unclassified forests across India. However, a significant delay of 27 years in submitting these reports left the status of unclassified forests ambiguous.

Ministry of Environment, Forests, and Climate Change (MoEFCC) Assurances:

The MoEFCC assured that the amended FCAA would apply to SEC-identified unclassified forests, aligning with the Godavarman judgment. However, an RTI inquiry uncovered the lack of necessary reports.

Missed Conservation Goals:

The failure to identify and protect unclassified forests represents a lost opportunity to fulfil the objectives outlined in the Indian Forest Policy, which aims for 33.3% forest cover in plains and 66.6% in hills

Prelims Point: Unclassed forests

SCIENCE AND TECHNOLOGY

1. Hydrocarbon extraction

Context:

Hydrocarbons have been the foundational elements of crucial energy resources around the globe.

Hydrocarbons and their Location:

- A hydrocarbon is an organic compound made solely of carbon and hydrogen atoms.
- These naturally occurring substances are the foundational elements of crucial energy resources such as crude oil, natural gas, coal, and others.
- Hydrocarbons are primarily located in subterranean rock formations. Hydrocarbons are also found in plants, animals, and their fossils.
- They exist in various forms such as natural gas, coal, crude oil, and petroleum.
- These hydrocarbons accumulate in reservoirs underground when a more resistant rock type overlays a less resistant one, creating a lid that causes hydrocarbons to accumulate below it.
- The primary source of hydrocarbons in this rocky underground is called kerogen, which are lumps of organic matter.

Note: The type of kerogen determines the type of hydrocarbon that is produced.

Hydrocarbons extraction:



Source: The hindu

- **Location Determination:** Petroleum geologists evaluate rock porosity and permeability to locate hydrocarbon reservoirs.
- They identify source rocks rich in kerogen, the main hydrocarbon source, and use data-driven modeling and exploratory drilling to estimate hydrocarbon volumes.
- **Drilling:** Drilling and reservoir engineers aim to maximize extraction without harming the reservoir. They drill a production well, the main channel through which hydrocarbons are brought to the surface.
- **Preparation:** The plant material is prepared by grinding or breaking it down into smaller pieces for increased surface area.
- **Extraction:** The prepared material is placed in the extraction vessel, and the hydrocarbon solvent is passed over it to dissolve the desired compounds.

UPSC Prelims point: Hydrocarbons

2. Exo-Atmospheric Interception

Context:

As tensions between Iran and Israel intensified, a video went viral on social media depicting an Exo-atmospheric interception by Israel.

About Exo-Atmospheric Interception or anti-ballistic missiles



Source: Reuters

- **About:** Exo-atmospheric missiles are surface-to-air missiles designed to counter incoming ballistic missiles. They are also known as anti-ballistic missiles (ABMs).
- They are designed to intercept and destroy any type of ballistic threat during the mid-course or terminal phase of their trajectory.
- They are specifically designed to counter intercontinental ballistic missiles (ICBMs). It operates beyond the Earth's atmosphere.
- **Features:**
 - a) It is equipped with advanced technology including infrared sensors and radar systems to detect and track incoming ballistic missiles and terminate them.
 - b) It travels at a hypersonic speed.
 - c) These missiles are guided by an inertial navigation system that is updated during flight using contour maps stored in the system's computerized memory.
 - d) It uses a three-stage solid rocket booster to propel itself out of Earth's atmosphere at near-hypersonic speed.
 - e) After reaching into space, it activates its sophisticated sensors to identify and track the incoming target.

They have an inbuilt rocket motor to navigate towards the target with exceptional accuracy.

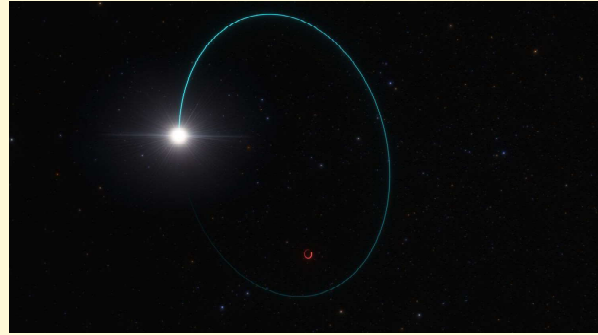
UPSC Prelims point: Exo-Atmospheric Interception

3. Gaia BH3

Context:

Recently, Astronomers have discovered a massive black hole named Gaia BH3.

About Gaia BH3



Source: CNN

- BH3 is a dormant black hole formed from the collapse of an exploding star. It has a mass 33 times greater than our sun.
- It is located only 2,000 light years away from Earth in the Aquila constellation.
- Astronomers discovered the black hole while combing through observations taken by the European Space Agency's Gaia space telescope for an upcoming data release to the scientific community.
- A wobbling star orbits Gaia BH3 every 11.6 years.
- The most massive black hole in our galaxy is Sagittarius A* which is the supermassive black hole located at the center of the Milky Way.
- It has about 4 million times the mass of the sun, but that is because it's a supermassive black hole, rather than a stellar black hole.

About supermassive black hole and stellar black hole

- Stellar-mass black holes originate from the gravitational collapse of a single star or the combination of two neutron stars.

- These black holes typically have masses that range from approximately three to fifty times that of sun.
- Supermassive black holes are immensely larger, with masses starting at around 50,000 times the mass of sun and can reach up to millions or even billions of times greater.
- They are invariably located at the centers of galaxies and present in nearly all galaxies.
- The formation of supermassive black holes remains a mystery to scientists, as they are too vast to have been formed from the collapse of individual stars.

UPSC Prelims point: Gaia BH3 and supermassive black hole

4. Trachyons:

Context:

Physicists have recently proposed the radical idea that our universe is dominated by tachyons, a hypothetical kind of particle that always moves faster than light.

About Tachyons



Source: Space.com

- They are hypothetical kind of particles that move faster than light.
- The term “tachyon” was introduced by physicist Gerald Feinberg in 1967 to describe hypothetical particles that could travel faster than light.
- It is different from “bradyons” like protons, electrons, and neutrons, which move slower than light.
- Unlike bradyons, they have not been observed and are theorized to possess

imaginary mass, meaning their mass squared would be negative.

- According to special relativity, particles with mass cannot attain or exceed the speed of light in a vacuum because their energy would become infinite.
- This intriguing property implies that tachyons could potentially travel faster than light without violating current understanding of the laws of physics.
- Tachyons would slow down if they gained energy and accelerate if they lost energy.
- Scientists have conducted a few experiments in search of tachyons using a detector called a Cherenkov detector.
- In this setup, particles move through a medium, and if their speed exceeds the speed of light for that medium, Cherenkov radiation occurs.
- It is to be noted that while nothing can travel faster than light in a vacuum, certain mediums allow particles to potentially exceed the cosmic speed limit.

UPSC Prelims point: Tachyons

5. Fossils of huge prehistoric snake found in Kutch mine

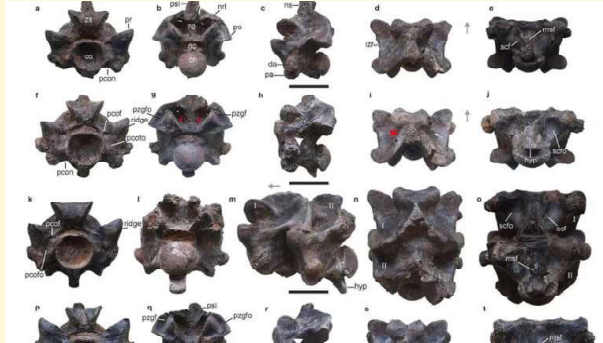
Context:

Researchers at the Indian Institute of Technology (IIT), Roorkee have reported the discovery of fossils of one of the largest snakes that ever existed and likely lived 47 million years ago during a period called the Middle Eocene.

About Fossils of Prehistoric Snake:

- The fossil was found is located in Panandhro, in the western state of Gujarat. It has been named as vasuki after the mythical snake king Vasuki, who is seen in coil around the neck of the Hindu deity Lord Shiva.
- The reptile could have been anywhere between 10 metres and 15 metres long and weighed up to 2,200 pounds (1,000 kilogrammes).

- It belonged to the now-extinct Madtsoiidae snake family but represents a unique lineage from India.
- 27 vertebrae has been found in which some of them are in their original position within the spine. They believe Vasuki resembled a large python and lacked venom.



Source: The WION

- 5. They also concluded that Vasuki was a slow-moving predator that would control its prey through constriction like anacondas and pythons.
- 6. This snake lived in a marshy swamp near the coast at a time when global temperatures were higher than today.
- 7. The diet of Vasuki given its large size, likely included crocodiles, as suggested by the presence of crocodile and turtle fossils found alongside Vasuki's remains.
- Fossils of fish and two early whales, Kutchicetus and Andrewsiphius, were also discovered in the same area, indicating a diverse potential prey range for Vasuki.

UPSC Prelims point: Eocene, Fossils.

6. GPS spoofing

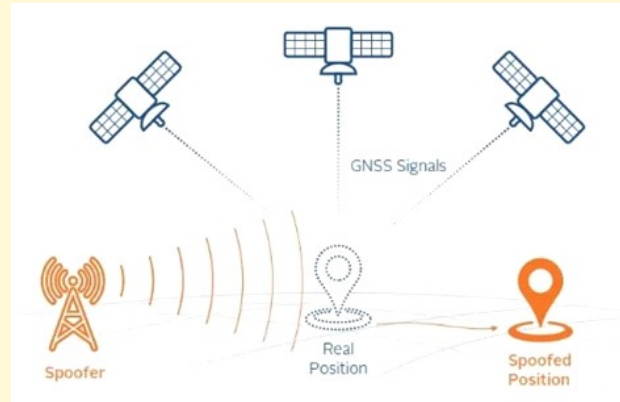
Context:

Israel reportedly used GPS spoofing against Iran's missile targeting teams by jamming Global Positioning System (GPS) navigation signals.

About GPS spoofing:

- **About:** GPS spoofing which is also known as GPS simulation, involves broadcasting false GPS signals to deceive a GPS receiver.

- By tricking the receiver, it believes it is located somewhere it is not, resulting in inaccurate location data.
- This cyberattack undermines the reliability of GPS data, affecting navigation, time synchronization, and other applications.



Source: Euromaidan press

How GPS Spoofing Works:

- GPS spoofing takes advantage of the weak signal strength of GPS satellites.
- GPS satellites send signals that Earth-based receivers analyze to determine their location by calculating the time it takes for these signals to arrive.
- Fake GPS signals, being stronger, can easily overpower the weak authentic signals, resulting in inaccurate location data on the receiving device.
- Attackers gain knowledge of a victim's GPS setup and transmit counterfeit GPS signals that mimic the authentic ones.

Real-World Implications:

- Misleading navigation systems can lead vehicles on incorrect routes to the wrong destinations.
- Deception in location-based apps can affect services like ridesharing and food delivery, causing delays and inefficiencies.

How to protect against GPS spoofing:

- Understand the risks and keep abreast of the latest GPS spoofing threats.

- Implement techniques to authenticate GPS signals.
- Combine GPS data with other sensor inputs (e.g., accelerometers, gyroscopes) to enhance accuracy.
- Detect and counteract attempts to jam signals.
- Advocate for legal measures to tackle GPS spoofing.

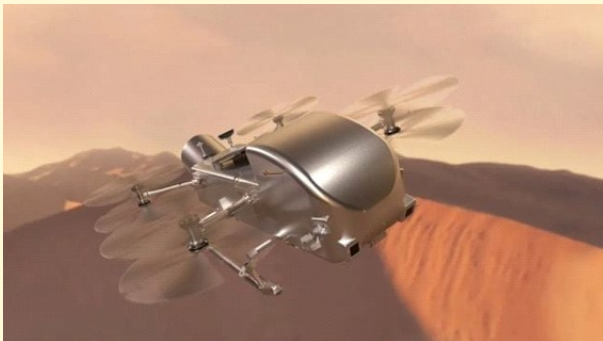
UPSC Prelims point: GPS spoofing and GPS

7. Dragonfly Rotorcraft mission

Context:

NASA has confirmed its Dragonfly rotorcraft mission to Saturn's organic-rich moon Titan.

About Dragonfly Rotorcraft mission



Source: Indian express

- It is a “dual quadcopter” designed to fly across the surface of Titan, Saturn's largest moon. It is scheduled to reach Titan in 2034.
- This mission will be NASA's first to employ a flying vehicle for scientific exploration on another planetary body.
- The rotorcraft will visit numerous intriguing sites on the moon to study prebiotic chemical processes that are key to understanding both Titan and the early Earth before life began.
- It is equipped with eight rotors and the rotorcraft operates similarly to a large drone.
- It will be powered by a radioisotope power system, similar to the one used by the Curiosity rover on Mars.

- It will spend most of its time on the moon's surface making science measurements.
- All flights, data transmissions, and the majority of scientific operations will occur during Titan's daytime, which will allow ample time for recharging during the moon's nighttime periods.

UPSC Prelims point: Dragonfly Rotorcraft mission

8. Llama 3

Context:

Meta Platforms, the parent company of Facebook, Instagram, and WhatsApp, has introduced its most capable Large Language Model (LLM), the Meta Llama 3.

About Llama 3



Source-The Indian Express

- **Description**-It stands for Large Language Model Meta AI. This is a family of LLMs introduced by Meta AI in February 2023. The first version of the model was released in four sizes – 7B, 13B, 33B, and 65 billion parameters. According to reports, the 13B model of Llama performed better than OpenAI's GPT-3, despite GPT-3 having 135 billion parameters.
- **Meaning of parameter**-It is a measure of the size and complexity of an AI model. Generally, a larger number of

parameters implies that an AI model is more complex and powerful.

- **Features:**

- It's said to be the most advanced model, showing big improvements in performance and AI abilities.
- It is based on the Llama 2 architecture which has been released in two sizes, 8B and 70B parameters. Both sizes include a base model and a fine-tuned version that is specifically designed to improve performance on certain tasks.
- The instruction-tuned version is made for enhancing AI chatbots that are designed to engage in conversations with users.
- All Llama 3 models handle context lengths of up to 8,000 tokens. Having more tokens means users can input more content or prompts, and the model can respond with more content. This enables more interactions and better handling of complex inputs compared to Llama 2 or 1.

Languages-At present, Meta AI is available in English across the US on WhatsApp.

Some of its applications:

- It can be used on Facebook, Instagram, WhatsApp, Messenger, and the web. It's easily accessible for developers since Meta has integrated the LLM into the Hugging Face ecosystem.
- It has the ability to engage in conversations and respond to posts directly on the Facebook feed.

UPSC Prelims point: Large Language Model (LLM) and the Meta Llama 3

9. Vasuki Indicus

Context:

Researchers have discovered the fossils of one of the largest snakes that ever existed, which has been named Vasuki Indicus.

About Vasuki Indicus



Source-The Hindu

- **Location-**The fossils of Vasuki indicus were found in Kutch, Gujarat.
- **Description-**Vasuki is the name of the mythical snake often seen around the neck of the Hindu god **Shiva**.
- **Time period-**It lived in the Middle Eocene period (roughly 47 million years ago) in India. The organism lived at a time when temperatures were relatively warm, at roughly 28 °C.
- **Family-**It belonged to the now-extinct Madtsoiidae snake family. However, it represents a unique lineage from India. Madtsoiidae are Gondwanan terrestrial snakes that lived between the Upper Cretaceous (100.5 million to 66 million years ago) and the Late Pleistocene (0.126 million years ago to 0.012 million years ago).
- **Habitat-**These snakes moved from India across southern Eurasia and into North Africa after the Indian subcontinent collided into Eurasia around 50 million years ago.
- **Features**
- It reached lengths between 10 and 15 metres long and 1 tonne in weight.
- It probably had a broad and cylindrical body, hinting at a robust and powerful build. It was as large as Titanoboa, a huge snake that lived on Earth and is said to be the longest ever discovered.

- It was a slow-moving predator that would catch its prey by squeezing, similar to anacondas and pythons.

UPSC Prelims point: Vasuki Indicus and Fossils

10. Rampage Missile

Context:

Israel has recently used the Rampage missile to attack an Iranian military base. Rampage missile is a powerful air-to-surface missile.

About Rampage Missile



Source-Army Recognition

Aspect	Details
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Description

It is a long-range, supersonic, air-to-ground, seekerless, precision strike missile.

Developed by

It was developed by Israel Aerospace Industries and Israeli Military Industries Systems.

Objective

To destroy high-quality, well-protected targets, such as communication and command centres, air force bases, maintenance centres, and infrastructure.

Features

- Length**-It is 4.7m (15.4ft) long and has a total weight of 570kg.
- Speed**-It may travel at supersonic speeds, making it difficult to identify and intercept with air defence systems.

- Range**-It has a range of over 190 miles.
- Delivery**-It can be fired from an aircraft or as a stand-alone system and uses GPS/INS guidance navigation and anti-jamming capabilities.
- It can adjust its path mid-flight, to precisely hit the target it was programmed to hit.
- It can operate in any weather conditions, day or night.

UPSC Prelims point: Rampage missile

11. BFI Biome Virtual Network Program

Context:

Centre for Cellular and Molecular Platforms (C-CAMP) has joined the Blockchain for Impact (BFI) Biome Virtual Network Program to speed up healthcare advancements through biomedical innovation.

About BFI Biome Virtual Network Program

- Objective**-To support advanced biomedical science and innovation and speed up the impact of significant scientific breakthroughs to tackle healthcare issues in India
- Features:**
- It's working on many important biomedical innovations, including infectious disease tests, fighting drug resistance, cell therapy for cancer, regenerative tissues, and digital health technology, among others.
- It brings together incubators and research institutes to encourage collaboration in transforming research into real-world solutions.
- Funding**-BFI will allocate more than \$200,000 over three years. It will leverage C-CAMP's knowledge to create important programs for healthcare startups.

C-CAMP:

- Description**-It is an initiative supported by the Department of Biotechnology under the Ministry of Science.

Since 2009, it has been a driving force behind advanced research and innovation in life sciences.

- **Mandate**-It is mandated to promote entrepreneurship and innovation.
- **Significance**-It has encouraged an entrepreneur-friendly atmosphere in academic and research settings by supporting startups through seed funding programs.

UPSC Prelims point: Centre for Cellular and Molecular Platforms

12. Biomarkers

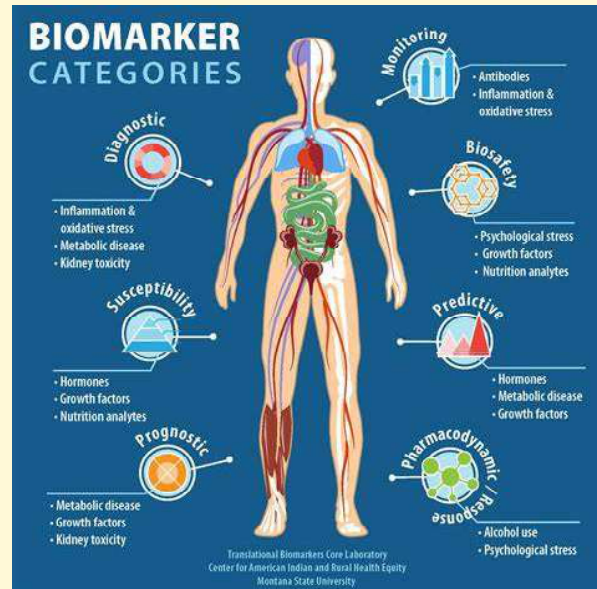
Context:

- For the potential detection of cancer in its earlier stages, screening of blood biomarkers is being suggested as a possible method by researchers.
- According to the researchers, a new AI-powered test can be used to accurately and quickly detect three major types of cancer, by using only a single spot of dried blood. This dried blood spot can serve as a biomarker for cancer detection.

About Biomarkers:

- According to WHO, Biomarker is defined as any measurement which reflects an interaction between a biological system and a potential hazard. This potential hazard may be chemical, physical, or biological. The measured response is measured in functional, physiological or biochemical terms.
- It is an objective measurement that captures what is happening in a cell or an organism at a given moment. It is often referred to as molecular markers or signature molecules.
- Biomarkers consist of biomolecules like carbohydrates, proteins, lipids, genes, DNA, RNA, platelets, enzymes, and hormones.

Biomarkers play a crucial role in disease diagnosis, appropriate drug prescription, dosage determination, and drug development.



Source: montana.edu

UPSC Prelims point: Biomarkers

13. Voyager 1 and 2 spacecraft

Context:

Recently, NASA has announced that its Voyager 1 probe has resumed transmitting valuable data to ground control.

About Voyager 1 spacecraft:

- **About the mission and its objective-** Voyager 1 is a space probe launched by NASA in 1977. Its primary objective is to explore the outer Solar System and beyond. Voyager 1's mission involved flybys of Jupiter and Saturn, focusing on studying their moons, rings, and magnetic fields.
- **Special Features-** In August 2012, Voyager-1 entered interstellar space, becoming the first human-made object to exit the solar system.
- **Significant Discoveries-** Significant discoveries by Voyager 1 include identifying a thin ring around Jupiter and two previously unknown Jovian moons, Thebe and Metis. At Saturn, it

found five new moons and a newly designated ring, the G-ring.



[Brownspace.com](https://www.brownspace.com)

About Voyager 2 Spacecraft



[Precsscitrn.com](https://www.precsscitrn.com)

- **About the mission and its objective-** Voyager 2 is a space probe launched by NASA on August 20, 1977, as part of the Voyager program, alongside Voyager 1. Its primary mission was to explore the outer planets of the solar system and their moons, followed by an interstellar mission.
- **Special achievements-** It is the only spacecraft to conduct close-range studies of all four giant planets in the solar system. It was the first human-made object to fly by Neptune, where it discovered five moons, four rings, and a feature known as the "Great Dark Spot"

About Interstellar space

- It is the area between the stars.

· It contains vast quantities of neutrinos, charged particles, atoms, molecules, dark matter and photons.

UPSC Prelims point: Voyager spacecraft

14. Crystal Maze 2

Context:

The Indian Air Force (IAF) has successfully carried out a test firing of a new version of an air-launched medium-range ballistic missile, Crystal Maze 2 that is capable of hitting targets at a distance exceeding 250 km.

About Crystal Maze 2



Source: India today

- The Crystal Maze 2 is an air-launched ballistic missile. It is also known as ROCKS. It has originated from Israel and boasts a striking range of 250 kilometers.
- It was fired from a Su-30 MKI fighter jet stationed in the Andaman and Nicobar Islands.
- Crystal Maze 2 targets both stationary and relocatable assets of significant value, and is capable of neutralizing enemy long-range radar and air defense systems.
- The missile can effectively eliminate above-ground or heavily fortified underground targets, even within heavily defended surface-to-air areas.

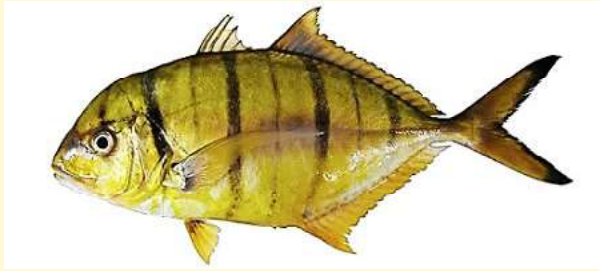
UPSC Prelims point: Crystal Maze 2

15. Golden Trevally Fish

Context:

The researchers of the ICAR-Central Marine Fisheries Research Institute (CMFRI) have succeeded in captive breeding of golden trevally fish. Golden Trevally (*Gnathanodon speciosus*) which is a high value marine fish.

About Golden Trevally Fish



Source: ICAR

- **Characteristics-** Golden trevally is also known as golden kingfish. It has yellowish belly, scattered black patches, yellow fins, and black tail.
- **Location-** These fishes are found in the reef areas. The golden trevally is primarily found in reef area fishing grounds in Tamil Nadu, Puducherry, Kerala, Karnataka, and Gujarat.
- **High Commercial Value-** It is a promising marine aquaculture species due to its rapid growth rates, high meat quality, and high market demand for consumption and ornamental purposes. It is a popular choice for aquariums due to its attractive appearance.

UPSC Prelims point: Golden Trevally Fish

16. Antihistamines

Context:

There has been an increase in the intake of antihistamines to treat health concerns.

About Antihistamines



Source: healthjade

- **About Antihistamines:** They are common drugs that can be purchased without a prescription. They are used to treat short-lived allergic reactions, like a sneezing fit or an itch.
- **How it functions:** An antihistamine drug functions by targeting histamine receptors, which are proteins that bind to a compound called histamine in the body.
- **Its Composition:** This compound is composed of ethylamine and imidazole, with the latter forming a ring structure.
- **Functions of Histamine:** Histamine performs various roles in the body through four types of receptors: H1, H2, H3, and H4.
 - The H1 receptor is predominantly found in blood vessels, neurons, and smooth muscle cells, and its blockade helps alleviate minor allergies.
 - H2 receptors are present in gastric gland cells. They stimulate the release of gastric acid for digestion.
 - H3 receptors are located in the central nervous system. This regulates the release of neurotransmitters, including dopamine and serotonin.
 - H4 receptors control the body's inflammatory response, including allergic reactions.
 - Research is currently focused on H3 and H4 receptors to develop specialized

drugs for treating neurological and immunological disorders.

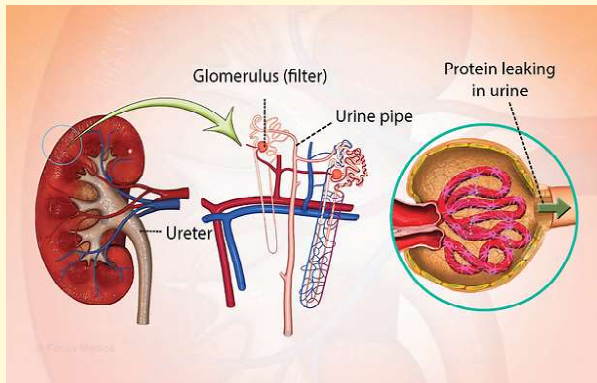
UPSC Prelims point: Antihistamines

17. Nephrotic Syndrome

Context:

Researchers from Kerala have reported a series of cases from Malappuram district where the regular use of fairness creams has been linked to nephrotic syndrome.

About Nephrotic Syndrome



Source: Focus Medica

- **About Nephrotic syndrome:** It is a kidney disorder characterized by excessive protein loss in urine due to issues with the kidneys' filtration system, specifically the glomeruli.
- **Function of glomeruli:** In healthy kidneys, glomeruli filter waste and excess fluids while retaining essential cells and proteins.
- **What happens in nephrotic syndrome:** In nephrotic syndrome, inflamed glomeruli allow too much protein leakage. This condition can result from various kidney diseases or systemic disorders like diabetes or lupus.
- **Symptoms:** Symptoms include severe swelling, foamy urine, high blood fat levels, weight gain, fatigue, and loss of appetite.
- Complications may include blood clots, increased infection risk, high blood pressure, and potential kidney issues,

such as chronic kidney disease or kidney failure.

- **Treatment:** Treatment involves managing the underlying cause and addressing related concerns, including blood pressure control, cholesterol reduction, swelling mitigation, and infection prevention through medication and dietary adjustments.

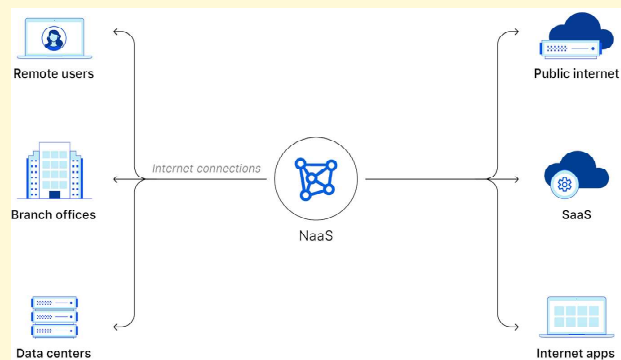
UPSC Prelims point: Nephrotic syndrome

18. Network as a service (NaaS)

Context:

India's internet economy is rapidly advancing as more and more people connect through the digital bandwagon. Network-as-a-service (NaaS) offers the potential to enhance the everyday user experience.

About Network-as-a-service (NaaS)



Source: Cloudflare.com

- **About NaaS:** Network-as-a-service (NaaS) is a cloud service model where customers lease networking services from cloud providers.
- **Features:**
 - With NaaS, customers can manage their own networks without the need for maintaining physical networking infrastructure.
 - By utilising software-based networking functions, NaaS vendors enable companies to establish fully virtualized networks without hardware which are solely relying on internet connectivity.

- It serves as a modern alternative to traditional networking configurations like VPNs, MPLS connections, and on-premise hardware such as firewall appliances and load balancers which is significantly impacting enterprise networking architecture.

Advantages of NaaS:

NaaS provides several advantages:

- **Greater customization and flexibility:** Cloud-based networks offer greater customization and flexibility. This allows IT teams to reconfigure networks on demand through software.
- **Easy capacity expansion:** NaaS provides scalability advantages over traditional hardware-based services. It enables easy capacity expansion through vendor subscriptions.
- **Access from anywhere:** Cloud-based networks offer remote access from any device with an internet connection which potentially eliminating the need for VPNs.
- **Low maintenance:** Cloud providers handle network maintenance, including software and hardware upgrades, reducing the burden on enterprises.
- **Enhanced security:** NaaS bundles networking and security services and this leads to tighter integration and enhanced network security.
- **Economical:** Utilizing cloud services often results in cost savings by eliminating the need for purchasing and maintaining hardware, leveraging the vendor's existing infrastructure.

Challenges of NaaS:

- Compatibility issues may arise due to the NaaS vendor's infrastructure not being compatible with legacy systems like older hardware or on-premise applications.
- Migration complexities exist in enterprises with on-premise data centers, where transitioning to a NaaS model may be challenging.

- Vendor lock-in risk is a concern as reliance on a specific service provider can lead to significant repercussions if their infrastructure fails or prices increase.

UPSC Prelims point: Network-as-a-service (NaaS)

19. Biohacking

Context:

The latest trend in biohacking has garnered widespread attention online, particularly after Bryan Johnson, the founder of KernelCo and Blueprint, announced his annual investment of \$2 million to reduce his biological age.

About biohacking

- **About Biohacking:** It involves altering one's biology, often through self-experimentation and technology.
- **Aim:** It aims at improving physical and cognitive functions, optimizing health, and reaching individual objectives.
- **Categories of Biohacking:** There are various categories and mechanism for biohacking:
- **Age biohacking:** Age biohacking particularly focuses on cellular senescence. It is gaining popularity among individuals aged 35 to 50 who start experiencing signs of aging. Many people are interested in maintaining cellular health and regeneration to mitigate aesthetic and bodily changes associated with aging.
- **Energy biohacking:** This method focuses on conserving energy by prioritizing proper rest and sleep. Stress relief practices also fit within this category.
- **Intertwining food and biohacking:** Intertwining food and biohacking synergizes to enhance aspects like digestion, weight loss, and metabolic efficiency. This approach capitalizes on individuals' understanding of managing what, how, and when to eat,

- facilitating optimization of dietary habits for better health outcomes.
- **Diet and nutrition biohacking:** It include the consumption of supplements for blood sugar, continuous glucose monitors, use of metabolism monitoring devices, intermittent fasting practices etc.
- Biohacking is popular among sports enthusiasts seeking a performance edge. A recent study suggests that even a single high-intensity interval training (HIIT) session can enhance brain neuroplasticity, facilitating the rewiring or alteration of neural connections.
- Although certain biohacking methods may seem radical, others such as meditation and intermittent fasting are well-established practices that have proven to be effective over time.
- **Regulations status associated with biohacking in India:** Currently, India lacks specific regulations directly addressing biohacking.
- While the FSSAI introduced regulations for nutraceuticals in 2016 however their enforcement is uncertain.
- The CDSCO has guidelines concerning the production and distribution of biological products like vaccines and gene therapies but these do not comprehensively address all biohacking practices.

UPSC Prelims point: Biohacking

20. Liquid Nitrogen For Preserving Food

Context:

The Food Safety department has issued an order on the use of liquid nitrogen used for preserving food.

About liquid nitrogen:

- **About Liquid nitrogen:** It is the liquefied form of the element nitrogen, which is produced commercially by compressing and cooling nitrogen gas to a point below its evaporation point of about " 196 °C [" 320 °F].

- **Its uses:** Liquid nitrogen can be used for the following purposes:
 - It is used for freezing, chilling and packing food. It helps to keep the food fresh for several months.
 - It is used to freeze tumors, causing the cells to freeze and subsequently perish. It is also being used for cryopreservation of biological samples (sperm, eggs, animal genetic samples).
 - Furthermore, it has also been used as a method for cooling concrete.



Source: India Today

- **Threats associated with it:** Experts have raised few concerns regarding the use of liquid nitrogen for consumption.
 - Exposure to it can cause organ or body part scorching, which resembles to frostbite.
 - It leads to damage in areas such as the lips, tongue, throat, lungs, and stomach which may potentially results in lesions or tissue burns.
 - If ingested, it may cause stomach perforation, and inhalation can produce CO₂ which could potentially lead to unconsciousness and even fatality.

Measures undertaken:

- The Food Safety Department directed Designated Officers and Food Safety Officers to enforce the Food Safety and Standards Act 2006 against any Food Business Operator using liquid nitrogen directly with food items such as biscuits, ice creams, and wafer biscuits.
- It must be completely evaporated from food or drinks before they are served.

UPSC Prelims point: Liquid nitrogen

SOCIAL ISSUES

1. Priority for human development.

Context:

The article discusses the need for significant changes in education, health, and technology policies for India to become a developed country by 2047. It highlights the bidirectional relationship between economic growth and human development, emphasizing the importance of government spending in these areas.

The government spend on education and health:

- In 2021, the Indian government allocated 14.7% of its total government expenditure to education.
- Despite this allocation, education contributed only 4% to the gross value added by the economy in 2021-22.
- Health spending was much lower, with only 3.5% of government expenditure going to health in 2018, significantly less than the 5.1% average in lower middle-income countries.
- Health's contribution to the gross value added in the economy was even smaller, at 1.6% in 2021-22.
- Additionally, the inadequacy in public health provisions led to out-of-pocket expenses accounting for 52% of current health expenditure, placing significant financial strain on households.

The relationship between human development and economic growth:

- **Bidirectional Relationship:** Research by Janak Raj, Vrinda Gupta, and Akanksha Shraavan identifies a bidirectional relationship between the Human Development Index (HDI) and economic growth in India, highlighting that improvements in human

development can drive economic growth and vice versa.

Specific Impacts of Education: The same study notes that improvements in primary education do not significantly impact inter-state growth variations, whereas enhanced secondary education positively influences growth in agriculture and manufacturing, and better higher education boosts the services sector.

Public Spending and HDI: The analysis did not find a clear impact of increased public spending on education and health on the HDI, suggesting that simply increasing funding without strategic improvements may not effectively enhance human development.

Way forward:

- Significantly enhance government expenditure on education and health to match or exceed averages seen in other middle-income countries.
- Develop comprehensive performance assessment systems for educational institutions to ensure better teaching quality from primary to higher education levels.
- It is important to focus on improving people's lives through better healthcare, rather than solely on economic impacts.
- In education, enhancing teaching quality and implementing rigorous performance assessments are key priorities.
- Encourage technological innovation, which is essential for human development.

Mains point: The relationship between government spending on education and health in India and their contributions to

both human development and economic growth.

2. Navigating life as a consumer with disability.

Context:

15 March is celebrated as World Consumer Rights Day to create awareness about the rights of consumers. However, there is a one section of consumers, namely disabled consumers, who remain invisible in these celebrations or even in the discourse around consumer rights.



The challenges faced by disabled consumers in accessing the marketplace:

- **Inaccessibility of goods and services-** Many goods and services are not accessible to disabled consumers. For ex-at the supermarket, there are no tactile pavements in the building for the disabled, mobile apps of companies are not accessible etc.
- **Inaccessibility of customer support options-** There are many companies who accept only written complaints via postal mail. This compels the disabled consumers to seek external help to send a complaint to the company.

The impact of this inaccessibility on disabled consumers:

- The dependence of disabled consumers on others to perform most basic human activities leads to the loss of dignity, independence, and privacy.
- It undermines their right to lead an independent life and also prevents

them from equally participating in society like others.

The existing legal measures for protection of rights of disabled consumers:

Rights of Persons with Disabilities Act (RPWDA):

- It bestows many rights to disabled persons such as rights to equality, accessibility, and reasonable accommodation.
- **Section 43 and 46 of the Act** provides for universally designed consumer goods and accessible services. It also requires all Information and Communications Technology (ICT) goods and services to be accessible in accordance with the BIS standards laid down by the government.
- A consumer with disability can file a complaint with the Disability Commissions established under the Act in case of violation of his rights. For ex-Practo, a famous healthcare service provider, was ordered to make its website and app more accessible.

Consumer Protection Act (CPA), 2019:

- It empowers Consumer Commissions to impose penalties and award compensation against consumer complaints. For example, in **S. Suresh v. The Manager i/c, Gokulam Cinemas**, a person with locomotor disability who encountered inaccessibility at a cinema hall was awarded a compensation of ₹ 1,00,000.
- The CPA has strong enforcement and compliance mechanisms. However, it does not have a dedicated right for disabled consumers. This may prevent them from filing complaints with Consumer Commissions.

The steps can be taken to enhance the consumer experience of persons with disabilities:

Business-

- Businesses usually don't see people with disabilities as their main customers. This is demonstrated by the

fact the most of their products are not disabled friendly. In India, people with disabilities make up about 5-8% of the total population. This section can enhance the economic profitability of business if their products are made more accessible to disabled consumers.

Governments:

- The governments can play a constructive role by plugging the gap in sensitisation among businesses through effective policy measures. For ex-In October 2023, FSSAI advised all food businesses to incorporate QR codes with product details on their food items. This will allow visually impaired people to ascertain crucial product information on their own.
- The government should take steps to align the **Consumer Protection Act (CPA)** with the **Rights of Persons with Disabilities Act**.
- The government should bring comprehensive accessibility guidelines for all goods and services. India can learn from the best practices of other countries like Australia and the U.S.

Mains point: The challenges faced by disabled consumers in accessing the marketplace.

3. Impact of Silicon Valley's growth on local urban areas: Concrete jungles and Silicon Valleys

Context:

The article discusses the impact of Silicon Valley's growth on local urban areas. It highlights the challenges of high living costs, homelessness, and resource strains caused by rapid startup expansion. It also emphasizes the need for sustainable urban planning and collaboration between startups and urban planners.

The allure of Silicon Valley:

- Innovation and Technology Hub:** Silicon Valley is celebrated for its

dynamic culture of innovation and creativity, attracting global entrepreneurs.

- Economic Powerhouse:** It significantly contributes to the economy with a 12.1% GDP share from just San Mateo and Santa Clara counties, underscoring its financial influence in California.

- Opportunity Center:** It symbolizes the pursuit of excellence in technology and human advancement, drawing professionals and companies worldwide.

The impacts of Silicon Valley:

Economic Impact:

- GDP Contribution:** Silicon Valley's GDP share stands at 12.1% for San Mateo and Santa Clara counties, highlighting its significant role in California's economy.
- Wealth Concentration:** The top 10% of households hold 70% of the area's wealth, indicating major economic disparities.

Urban Growth:

- Housing Crisis:** Skyrocketing housing prices and high rents exacerbate homelessness, making it tough for low-income families to afford housing.
- Startup Exodus:** In 2021, a New York Times headline discussed the departure of tech workers from the Bay Area due to unsustainable living costs.

Social Impact:

- Homelessness:** The severe cost of living and lack of affordable housing has led to a growing homeless population, which includes diverse groups from long-term residents to new arrivals struggling in the harsh economic environment.

The startups contribute to India's urban solutions:

- Collaborative Urban Planning:** Startups in cities like Bengaluru can collaborate with urban planners to integrate innovative technologies in

managing traffic, waste, and water resources efficiently.

- **Sustainability Initiatives:** They can lead sustainability efforts by investing in renewable energy projects and sustainable housing developments, helping reduce urban environmental impacts.
- **Data-Driven Solutions:** Utilizing big data and AI, startups can optimize public transportation and infrastructure management, improving service delivery and reducing congestion.
- **Regulatory Engagement:** By working closely with government bodies, startups can ensure their growth aligns with the city's capacity and sustainability goals, mitigating adverse impacts on infrastructure.

Mains point: The impact of Silicon Valley's growth on local urban areas, and how startups can contribute to India's urban solutions.

4. Express View on Centre's panel of queer rights: Better late than never.

Context:

The article discusses a new committee formed by the Indian government to address issues faced by the LGBTQIA+ community. The Supreme Court has asked the legislature to recognize certain rights for same-sex couples. Progress on queer rights has been slow and uneven in India.



The Indian government created a committee related to the queer community:

- **Address Discrimination and Violence:** The Indian government formed a committee to combat the systemic discrimination and violence that the LGBTQIA+ community faces, especially in accessing social welfare programs.
- **Supreme Court's Directive:** The creation of the committee follows a directive from the Supreme Court, which, in a landmark judgment, emphasized the need for legislative action to recognize and protect the rights of same-sex couples.
- **Public Support for LGBTQIA+ Rights:** A Pew Research survey showed that 53% of Indian adults favor legalizing same-sex marriages, indicating a shift in public opinion that supports the committee's objectives.

The view of the Supreme Court regarding the queer community:

- **The Supreme Court** did not grant constitutional validity to same-sex marriage but instead shifted the responsibility to the legislature.
- **Specific Rights Mentioned:** The court listed specific rights for same-sex couples, including being treated as family for banking, medical needs, jail visitations, and last rites.
- **Legal Consequences:** The Court also outlined legal consequences like succession rights, maintenance, financial benefits under laws like the Income Tax Act, and rights related to employment such as gratuity, family pension, and insurance.

The progress on queer rights been in India:

- **Inconsistent Progress:** The progress on queer rights in India has been described as "chequered at the best of times," indicating a slow and uneven advancement.

- **Judicial Landmarks:** A significant judicial action includes the Supreme Court's decision to read down the provisions of Article 377, which was a pivotal moment for queer rights but not a complete resolution.
- **Public Opinion:** A Pew Research survey conducted between June 2022 and September 2023 showed that 53% of Indian adults support the legalization of same-sex marriages, reflecting growing public acceptance.
- **Political Manifestos:** Only a few political parties, like Congress and CPI(M), address LGBTQIA+ rights in their election manifestos, highlighting the lack of widespread political support for queer rights.

Mains point: The Indian government's response to LGBTQIA+ issues, considering the formation of the committee, the Supreme Court's stance, and the overall progress on queer rights in the country.

5. How India has achieved success in national programmes"

Context:

The article discusses how India's approach to improving sanitation and public health, known as the Swachh Bharat Mission, has successfully used four key strategies: **political leadership, public financing, partnerships, and people's participation.**



The Swachh Bharat Mission (SBM):

- **The Swachh Bharat Mission (SBM)** is a significant public health initiative launched by the Indian government, aimed at eliminating open defecation

and improving sanitation across the nation:

- **Massive Scope:** Targeted to enhance the lives of over 550 million Indians through the construction of over 100 million toilets.
- **Behavioral Change:** Encouraged a nationwide behavioral shift and public participation in sanitation practices.

The 4Ps of India's Development Strategy:

- India's development strategy, particularly exemplified by the **Swachh Bharat Mission (SBM)**, is structured around four key principles known as the 4Ps:

- **Political Leadership:** Prime Minister Narendra Modi's direct involvement and advocacy were pivotal. He announced the initiative during his first Independence Day speech in 2014, highlighting the urgency of addressing open defecation.

- **Public Financing:** The government invested approximately \$20 billion in sanitation. This investment shows a commitment to prioritizing sanitation alongside other national developmental goals.

- **Partnerships:** The SBM collaborated with international organizations like the World Bank, UNICEF, and the Bill and Melinda Gates Foundation, alongside local governments and NGOs, demonstrating a multi-stakeholder approach.

- **People's Participation:** Emphasizing community involvement, the initiative saw mass movements across rural India, with villages striving to become open defecation free through collective local efforts.

The India's 4Ps relevant globally:

- The principles of the SBM are now being applied to other critical global challenges, including climate change and pandemics, by the World Bank and other international agencies.

The approach emphasizes the importance of leadership, funding, cooperation, and community involvement in tackling large-scale public issues.

Mains point: India's Swachh Bharat Mission (SBM) exemplifies the principles of political leadership, public financing, partnerships, and people's participation.

6. National Curriculum for Early Childhood Care and Education 2024.

Context:

The Ministry of Women and Child Development (MWCD) has released the National Curriculum for Early Childhood Care and Education 2024 titled 'Aadharshila,' on the lines of the National Education Policy 2020 and the National Curriculum Framework.

It is expected to bridge foundational literacy and numeracy gaps which may arise in later school years.

About National Curriculum for Early Childhood Care and Education 2024:



Source: The Hindu

MWCD has released the National Curriculum for Early Childhood Care and Education 2024 titled 'Aadharshila.'

Aadharshila (translated as foundation stone) is a detailed 48-week curriculum meant for learning in the age group of three to six-year-olds in anganwadis.

The curriculum aiming to develop key skills such as listening, vocabulary, imagination, narration, instruction

following, creativity, social skills, self-expression, and self-esteem.

These competencies prepare children for a smooth transition into Grade 1.

The program is tailored for different ages, detailing required materials, age-appropriate specifications, variations, and teacher guidelines, including targeted educational objectives and competencies.

Activities are designed to observe and respond to the children's interests.

The curriculum is structured around a weekly play calendar. Children aged three to six years participate in this mixed-age group setting at the anganwadi.

It starts with four weeks of initiation involving academic activities to ease children's transition from home to the anganwadi center through engaging and playful interactions.

This is followed by **36 weeks including varied activities** such as exploration, free play, conversations, creative arts, and reflection.

It also includes storytelling focused on themes like conflict resolution and cooperation, along with singing and crafting.

Children are introduced to various concepts such as colors, shapes, numbers, sensory uses, body parts, and personal relationships.

They also engage in activities that develop listening, basic numerical skills, sound recognition and imitation, and knowledge about seasons, festivals, and food.

The last eight weeks focus on reviewing and reinforcing previous learning through worksheets and performance assessments.

Prelims point: About National Curriculum for Early Childhood Care and Education 2024.

7. Need of gender-neutral Childcare leave.

Context:

The Supreme Court has recently held that denial of childcare leave to women is violation of Constitution. This was in context of a case of a state government women employee who was denied childcare leave to look after her ailing son who was suffering from rare genetic disorder.



- The court observed that participation of women in the workforce is a constitutional entitlement protected by **Article 15**. It is incumbent upon the state to pay attention to the special concerns of working women.

The present status regarding Women Participation in the Labour Force:

- As per the PLFS report 2022-23, the female labor force participation rate jumped to 37% in 2022-23, which is 4.2% higher compared to the previous year. However, women are still facing several challenges.

The impediments in the path of women to join workforce:

- Care responsibilities-** There is a disproportionate burden of care work on women at home and even outside of it, irrespective of their employment status. This includes childcare, housekeeping, and elderly care.
- Women are also not recognized for their care work.** As per some estimates, women in India perform over 8 times the amount of unpaid work, valued at 15 % to 17 % of GDP notionally. All

these factors restrict their participation in labour force.

- Embracing Motherhood-** Motherhood is challenging. This requires a woman to either leave their jobs during their career or experience a slowdown in their professional advancement.

The way forward:

- Investing in Infrastructure for Child and Elder Care in India** -By 2050, the proportion of senior citizens in India is projected to reach 20.8% of the population. It's important to invest in infrastructure that provides easy access to affordable and specialized child and elder care so that disproportionate burden on women to discharge care functions can be minimized.
- Gender-neutral approach-** There is a need to foster a gender-neutral approach to care work to demolish stereotypes about gender-based work allocation by considering the changing nature of families.
- Extending Childcare Leave (CCL)** to all employees, regardless of gender, would be a positive step forward.

Mains point: The women under-represented in workforce in India? What steps can be taken to address this issue.

8. Income and Wealth Inequality in India.

Context:

The World Inequality Lab, a global research center studying inequality and public policies, has recently released a paper called "Income and Wealth Inequality in India, 1922-2023: The Rise of the Billionaire Raj."

The status of wealth and income inequality in India:

- Income inequality** - In 2022-23, the report reveals that 22.6% of India's national income went to the top 1% of the population, the highest share in the last century. Further, the top 0.1%

earned almost 10% of the national income in India. India's top 1% share of national income is one of the highest globally.

Wealth inequality - In 2022-23, the wealthiest 1% owned 40.1% of the wealth, the highest since 1961. Meanwhile, the top 10% saw their share rise from 45% in 1961 to 65%. This implies that the rich got richer, and the poor got poorer in wealth.

Comparison with other countries- Brazil and South Africa have more wealth inequality than India. In Brazil and South Africa, top 10% hold 85.6% and 79.7% of national wealth respectively.

Whereas in China, in 2022, the share of the top 1% in income in India was nearly 50% higher than that of China

Moreover, as India's income inequality is among the highest globally, even surpassing South Africa, Brazil, and the U.S., it may enhance wealth inequality further.

The significance of prioritizing human development over economic growth for reducing income inequality and wealth inequality:

Precedents from other countries - China and Vietnam have given precedence to human development to sustain their economic growth for a longer run.

Examples from other Indian states - States that have been able to maintain high growth rates over 3 decades (over 7% GSDP per year) were more developed in terms of human development at the national level. For ex- Kerala, Tamil Nadu, Delhi, Punjab etc.

However, states that fared low in Human Development Index were only able to register a growth rate of less than 5% per annum post-liberalization. For ex-MP, Bihar etc.

The Human Development Report- In the Human Development Report (HDR) 2023-2024, India was ranked 134th out of 193 countries. Despite being the fifth largest economy, India ranks lower than Sri Lanka, Bhutan, and Bangladesh in human development. Thus, in case of India, economic growth hasn't led to similar growth in human development for India.

The way forward:

Inclusive Growth-There should be more emphasis on human development and capacity building to promote inclusive growth.

Policy Reforms-Economic growth should not become the ultimate objective of policy makers. Without progress in human development, capability enhancement, functioning, and poverty reduction, economic growth won't be inclusive and will only increase inequality.

Mains point:The importance of human development for reducing income inequality and wealth inequality.

9. A weak food chain:Recent controversy points to poor regulation.

Context:

Hong Kong and Singapore have recently banned MDH and Everest spice brands due to presence of carcinogenic pesticide ethylene oxide in some MDH and Everest spice mixes during routine checks.

It's not the first time Indian food brands faced issues abroad. Last year, the US FDA recalled MDH products due to salmonella contamination. These bans highlight the poor standards of India's food and drug regulation.

The issues with Indian food and medicine products:

Agencies in other countries sometimes find problems in Indian food and medicine products that were approved

by Indian regulators. For ex-Public Eye revealed Nestle added extra sugar to baby foods in Asia, Africa, and Latin America; an influencer exposed Bournvita's high sugar levels leading to FSSAI action etc.

The impact of this failure of domestic regulation:

- . This situation raises public health concerns and negatively impacts India's food processing industry because of issues like high sugar content and unhealthy ingredients.
- . The presence of carcinogens and other unhealthy ingredients in Indian food exports can hamper overseas sales prospects due to rise in increase in non-tariff barriers in key markets.

The actions have been taken by the Indian authorities to address this issue:

- . The commerce ministry has asked for further details from Singapore and Hong Kong about their investigation in Indian products.
- . The Spices Board has started to implement mandatory ethylene oxide residue testing for spice consignments to these countries.

The way forward:

- . India's rising cases of juvenile diabetes should push FSSAI to make processed foods and snacks with less sugar.
- . There is a need for a strong standard and regulation in the processed food industry due to its tremendous growth since 2018.
- . The government should follow the Supreme Courts observation about taking strong action against consumer goods companies that indulge in misleading advertisements for products related to children and babies.

Mains point: The impact of weak regulatory systems on the prospects of India's food and medicine export.

10. Global Report on Food Crises 2024 (GRFC).

Context:

According to the 2024 Global Report on Food Crisis (GRFC), nearly 282 million people faced high levels of acute food insecurity in 59 countries in 2023.

About Global Report on Food Crisis (GRFC):



Source: FAO

- . **About:** The Global Report on Food Crises (GRFC) 2024 is published annually by the Food Security Information Network (FSIN).

- . **Launched by:** It is launched by the Global Network Against Food Crises which is a collaboration involving United Nations agencies, the European Union, the United States Agency for International Development, and non-governmental organizations working to address food crises.

Key findings from GRFC 2024: The report examined a population of 1.3 billion across 59 countries in 2023:

- . For the fifth consecutive year, the number of people experiencing acute food insecurity increased. This means they faced severe food shortages that threatened their lives or livelihoods, regardless of the causes or duration.
- . Nearly 282 million people in 59 countries suffered from high levels of acute food insecurity in 2023.
- . Conflicts, extreme weather events, and economic shocks were identified as the

main drivers worsening food crises worldwide.

- **Conflict and insecurity** were the primary causes in 20 countries which is directly impacting 135 million people, notably in places like the Gaza Strip and Sudan.
- **The Gaza Strip** faced the most severe food crisis in the past eight years while Sudan also experienced a significant crisis, with almost a third of its population requiring emergency food assistance.
- Extreme weather events affected 18 countries, with over 72 million people experiencing high levels of acute food insecurity.
- The ten countries with the most severe food crises in 2023 were the Democratic Republic of the Congo, Nigeria, Sudan, Afghanistan, Ethiopia, Yemen, the Syrian Arab Republic, Bangladesh, Pakistan, and Myanmar.
- There were positive developments in 17 countries in 2023, including the Democratic Republic of Congo and Ukraine, where the food situation improved.

Prelims point: About Global Report on Food Crisis (GRFC)

11. Making space for migrants in manifestos.

Context:

The article discusses the promises made by political parties in their election manifestos concerning migrant workers in India. It highlights their plans to address the needs and challenges faced by migrants, such as employment, social security, and legal rights, while noting some overlooked issues.

The challenges faced by migrants:

- Migrants often lack proper documentation, making them invisible

and unable to access government services.

- Migrants are misunderstood about the benefits of registration on platforms like e-Shram.
- Migrant workers, typically daily wagers, face exploitative work conditions.
- Critical needs such as healthcare, housing, and education for migrant children are often overlooked in policy planning.
- The specific challenges faced by women and young migrants, such as safety and sanitation, are not adequately addressed.

The promises have political parties made for migrants in India:

BJP's Promises:

- **Utilization of the e-Shram portal to better connect with and support migrant workers.** This comes after the establishment of a national database of unorganized workers as directed by the Supreme Court.
- **Enhancement of Special Train Services for migrants,** aiming to maintain these services throughout the year to facilitate easier movement across states.
- **Implementation of digital technologies** in post office savings, and social security measures, although there are concerns about digital literacy and infrastructure.

Congress' Promises:

- Introduction of a law to regulate **migrant employment and ensure fundamental legal and social security rights.**
- Proposal to increase the wage under **MGNREGA to ₹ 400 per day,** with plans to maintain it as the national minimum wage.
- **Launch of an urban employment scheme** that could benefit urban migrants and enforcement of 'Same

Work, Same Wages' to prevent gender-based wage discrimination.

The shared challenges noted in both manifestos:

- . **Overlooked Critical Areas:** Both manifestos fail to address essential services such as healthcare, housing, water, sanitation, and legal aid for migrants.
- . **Education for Migrant Children:** The need for educational support for children of migrants is not specifically tackled in either manifesto.
- . **Public Health Inclusion:** Neither party has detailed plans for integrating migrants into public health schemes, which is crucial for their well-being.
- . **Inadequate Specificity for Women and Youth:** There is a lack of focused initiatives addressing the unique challenges faced by women and young migrants in both manifestos.

Mains point: The challenges faced by migrant workers in India.

MISCELLANEOUS ISSUES

1. DUSTLIK Military Exercise

Context:

The Indian Army contingent has departed for the 5th edition of India-Uzbekistan joint military Exercise Dustlik.

About Exercise Dustlik:



Source: The Financial Express

Aspects

Description

About

1. Exercise DUSTLIK is a yearly event conducted alternatively in India and Uzbekistan.
2. The Exercise is scheduled to be conducted from 15th to 28th April 2024 at Termez, the Republic of Uzbekistan.
3. The last edition was conducted at Pithoragarh (India) in February 2023.

Participating Nations

India and Uzbekistan

Objectives

The aim of Exercise Dustlik is: a) to foster military cooperation and enhance combined capabilities to execute joint operations in mountainous as well as semi-urban terrain. b) to enhance tactical, technical, and procedural interoperability and strengthen defense

cooperation and bilateral relations between the two participating nations.

Focus

The exercise will emphasize high physical fitness, joint planning, tactical drills, and the basics of special arms skills.

2. Combined Maritime Forces.

Context:

INS Talwar of the Indian Navy seized 940 kg of drugs in the Arabian Sea as part of an operation led by Combined Maritime Forces.

About Combined Maritime Forces:



Source: Combined Maritime Forces (CMF)

- **Combined Maritime Forces (CMF)** is a multinational maritime partnership that upholds the Rules-Based International Order (RBIO) by countering illicit non-state actors on the high seas.
- **It covers approximately 3.2 million square miles** of international waters, including some of the world's most crucial shipping lanes.

- **Headquarter:** It is co-located with US Naval Central Command and US Navy Fifth Fleet at Naval Support Activity (NSA) Bahrain.
- **Purpose:** CMF aims to promote security, stability, and prosperity across its vast maritime domain.
- **Members:** CMF has 42 member and partner nations. Member Nations: Australia, Bahrain, Belgium, Brazil, Canada, Colombia, Denmark, Ecuador, Egypt, France, Germany, Greece, India, Iraq, Italy, Japan, Jordan, Kenya, Republic of Korea, Kuwait, Malaysia, the Netherlands, New Zealand, Norway, Pakistan, the Philippines, Poland, Portugal, Qatar, Saudi Arabia, Seychelles, Singapore, Spain, Thailand, Türkiye, UAE, United Kingdom, United States, and Yemen.
- **Partner Nations:** Djibouti, Oman and Sri Lanka.
- Participation is **voluntary** with no compulsory duties imposed on any member nation. Furthermore, countries are not obligated by any political or military commitments.
- **It is comprised of five task forces:** Maritime Security Operations outside the Arabian Gulf, Counter-Piracy, Maritime Security Operations inside the Arabian Gulf, Red Sea Maritime Security, Maritime Security Training

Focus Areas: It has following focus areas:

- **Counter-Narcotics:** CMF actively combats drug trafficking at sea.
- **Counter-Smuggling:** It works to prevent illicit smuggling activities.
- **Piracy Suppression:** CMF contributes to anti-piracy efforts.
- **Regional Cooperation:** The partnership engages with regional and other stakeholders to enhance overall security and stability.
- **Environmental and Humanitarian Response:** When needed, CMF assets

respond to environmental and humanitarian incidents.

- **CMF is Commanded by a U.S. Navy Vice Admiral**, who also serves as Commander US Naval Forces Central Command (NAVCENT) and US Navy Fifth Fleet.

- CMF's Deputy Commander is a United Kingdom Royal Navy Commodore.

Prelims point: About Combined Maritime Forces

3. Athletics Federation of India

Context:

Recently, the Athletics Federation of India has disaffiliated 16 district associations across the country for failing to send teams for the National inter-district junior athletics meet held in Ahmedabad.

About Athletics Federation of India:



Source: indianathletics.in

- It is the apex body for running and managing athletics in India.
- It came into existence in 1946 and was formerly known as **the Amateur Athletic Federation of India (AAFI)**.
- It is a non-governmental and non-profitable autonomous body.
- It is affiliated with the World Athletics, AAA and Indian Olympic Association.
- The AFI has as many as 32 affiliated state units and institutional units.

Functions:

- The federation organises the National Championships, and trains the Indian Athletics National Campers.
- It also selects the Indian Athletics Teams for various international competitions, including the Olympics, Asian Games, CWG, World Championships, Asian Championships and other international meets, conducts the National Championships for various age categories.
- The AFI also conducts international and national championships and various meets to promote the sport and popularise it amongst the masses and make athletics commercially attractive for the further growth of the athlete and the sport.
- The federation supervises and assists its state units in their activities, plans and sets up special coaching camps, coaches training and takes initiatives for development programme and grass root promotion of athletics in India.

Prelims point: About Athletics Federation of India**3. National Consumer Disputes Redressal Commission (NCDRC)****Context:**

The Supreme Court has issued notice to two members of the National Consumer Disputes Redressal Commission (NCDRC) seeking an explanation from them for issuing non-bailable warrants ignoring a previous interim order of the Supreme Court.

About National Consumer Disputes Redressal Commission (NCDRC):

- The National Consumer Disputes Redressal Commission (NCDRC) is a quasi-judicial commission which was set up in 1988 under the Consumer Protection Act of 1986.
- Its head office is in New Delhi.

- The Commission is headed by a sitting or a retired Judge of the Hon'ble Supreme Court of India or a sitting or a retired Chief Justice of an Hon'ble High Court.

- The Commission is presently headed by Hon'ble Mr. Justice Amreshwar Pratap Sahi, former Chief Justice of Patna and Madras High Courts.

Mandate:

- **Section 21 of Consumer Protection Act, 1986** posits that the National Commission shall have jurisdiction to entertain a complaint valued more than two crore and also have Appellate and Revisional jurisdiction from the orders of State Commissions or the District fora as the case may be.

- **Section 23 of Consumer Protection Act, 1986**, provides that any person aggrieved by an order of NCDRC, may prefer an Appeal against such order to Supreme Court of India within a period of 30 days.

About quasi-judicial commission:

- **A quasi-judicial body** is a body which has powers and procedures resembling those of a court of law or judge such as an arbitrator or tribunal board.
- It is obliged to objectively determine facts and draw conclusions from them so as to provide the basis of an official action.
- Their powers are usually limited to a very specific area of expertise and authority, such as land use and zoning, financial markets, public standards etc.
- **National Human Rights Commission, National Commission for Women, National Commission for Minorities, etc.** are examples of quasi-judicial bodies.

Prelims point: the National Consumer Disputes Redressal Commission (NCDRC)

4. Mount Ruang.

Context:

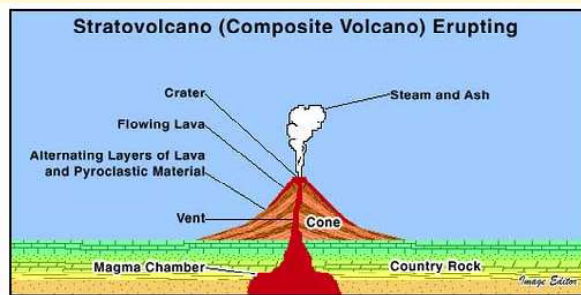
Recently, Mount Ruang began erupting, sending an ash cloud more than a mile high into the sky.



About Mount Ruang:

- Mount Ruang is a stratovolcano located on Ruang Island, North Sulawesi.
- Ruang Volcano towers at 725 meters (2,400 feet) high. Its summit reaches 10,932 feet above sea level and features a caldera approximately two miles wide.

About stratovolcano:



- Stratovolcanoes are tall, steep, and cone-shaped, differ from the flatter shield volcanoes by having higher peaks.
- They are primarily located above subduction zones and are a major part of extensive volcanically active areas like the Pacific Ring of Fire.
- Stratovolcanoes account for about 60% of the Earth's individual volcanoes and are mostly known for erupting andesite and dacite lavas.

- These lavas are cooler and more viscous compared to basalt, allowing gas pressures to build significantly and often leading to explosive eruptions.
- These volcanoes typically consist of an equal mix of lava and pyroclastic material. The layering of these materials is why they are also commonly referred to as composite volcanoes.
- Stratovolcanoes usually feature a small crater, which may be filled with water or ice, or contain a volcanic dome when the volcano is not actively erupting.

Prelims point: About stratovolcano.

5. Ringwoodite

Context:

Scientists have recently discovered a hidden ocean which is 700 km below earth's Surface. The ocean is located within a mineral called ringwoodite.

About Ringwoodite:



Source-Agriculture World

- Description**-It is a fascinating mineral that exists in the Earth's transition zone.
- Formation**-It is a rare type of mineral that forms from olivine under very high pressures and temperatures. The heavy weight of rocks hundreds of kilometers thick and extremely high temperatures above 1,000 degrees Celsius (1,832 Fahrenheit) break down water into its components.

Properties-

- . This mineral has a special crystal structure that can soak up water and hydrogen, like a sponge. It can hold a lot of water.
- . When these water-containing minerals reach specific depths, they break down through dehydration, releasing the water to create magmas. Such “dehydration melting” is common in the shallow mantle and forms the source for magmas in many volcanoes.

The significance of this discovery:

- . This ocean is much larger than all the surface oceans combined. Its size raises questions about current theories on the source of earth’s water and suggests new inquiries into the planet’s formation and development.
- . This finding strongly suggests that Earth’s water might have come from deep within the planet. With the passage of time, it slowly leaked out from the core, explaining why earth has so much water.
- . This internal water source could also play a role in volcanic activity and the formation of new crust.

Prelims point:About Ringwoodite**6. Salas y Gómez****Context:**

Scientists have recently discovered 160 marine species while exploring the Salas y Gómez region.

About Salas y Gómez

Source-ResercgGate

- . **Introduction-**It is an underwater mountain chain.
- . **Location-**It is in the Southeastern Pacific Ocean. It stretches from west to east. Its west side meets the East Pacific Rise within Chilean waters, near Easter Island, and its east side connects to the western end of the Nazca Ridge.
- . **Ecosystems-**Ecosystems in this region are isolated by the Atacama Trench, the Humboldt Current System, and an extreme oxygen minimum zone.

The significance of this region:

- . It hosts unique biodiversity with some of the highest levels of marine endemism on Earth.
- . It is under consideration for being designated as a high seas marine protected area once the UN High Seas Treaty is approved.

About United Nations High Seas Treaty:

- . **Description-**It is known as the Paris Agreement for the Ocean. It deals with Biodiversity Beyond National Jurisdiction.
- . **Mandate-**The proposed treaty deals with the ocean beyond the Exclusive Economic Zones (EEZ), which extend from a country’s coast to about 200 nautical miles into the sea. (Countries have special rights for exploration up to 200 nautical miles.)
- . **India-**It has not signed the treaty.
- . **NOTE-**Exclusive Economic Zone
- . It is an area of the ocean that extends up to 200 nautical miles (370 km) immediately offshore from a country’s land coast. In this area, the country retains exclusive rights to the exploration and exploitation of natural resources.

Prelims point:About Salas y Gómez**7. Rampage Missile.****Context:**

Israel has recently used the Rampage missile to attack an Iranian military

base. Rampage missile is a powerful air-to-surface missile.

About Rampage Missile:



Source-Army Recognition

Aspect	Details
Description	It is a long-range, supersonic, air-to-ground, seekerless, precision strike missile.
Developed by	It was developed by Israel Aerospace Industries and Israeli Military Industries Systems.
Objective	To destroy high-quality, well-protected targets, such as communication and command centres, air force bases, maintenance centres, and infrastructure.
Features	<ol style="list-style-type: none"> 1) Length-It is 4.7m (15.4ft) long and has a total weight of 570kg. 2) Speed-It may travel at supersonic speeds, making it difficult to identify and intercept with air defence systems. 3) Range-It has a range of over 190 miles. 4) Delivery-It can be fired from an aircraft or as a stand-alone system and uses GPS/INS guidance navigation and anti-jamming capabilities. 5) It can adjust its path mid-flight, to precisely hit the target it was programmed to hit. 6) It can operate in any weather conditions, day or night.

Developed by

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- 6) It can operate in any weather conditions, day or night.

Prelims point:About Rampage Missile:

8. About Mount Erebus

Context:

Mount Erebus, an active volcano in Antarctica, has been in the news for emitting gold dust valued at \$6000 daily.

About Mount Erebus:



Source-Wikipedia

- **Description**-It is the most southerly active volcano on Earth. It was discovered in 1841 by the British explorer Sir James Clark Ross, who named it after his ship, the Erebus.
- **Location**-It is situated on Ross Island, Antarctica.
- **Type of volcano**-It's a stratovolcano that is characterized by a conical shape and layers of hardened lava, tephra, and volcanic ash.
- **Lava lake**-It is known for its persistent lava lake. The lake has been active since at least 1972 and is one of only a few long-lived lava lakes on Earth.
- **Frequency of eruption**-It constantly churns and occasionally spews bombs of molten rock in Strombolian eruptions. It is being monitored by satellites, primarily because of its remote location.

Stratovolcano:

- **Description**-It is a tall, steep, and cone-shaped type of volcano. Unlike flat shield volcanoes, they have higher peaks. At the top, stratovolcanoes usually have a small crater. It may hold water, ice, or even a volcanic dome when it's not very active.
- **Location**-They're usually found above subduction zones and are part of big,

volcanic areas like the Ring of Fire around much of the Pacific Ocean.

Type of lava-Strata Volcanoes make up about 60% of the Earth's volcanoes. They mostly erupt with andesite and dacite, which are cooler and viscous lavas compared to basalt.

These more viscous lavas allow gas pressures to build up to high levels. Therefore, these volcanoes often suffer explosive eruptions.

NOTE-Strombolian eruptions:

They are moderately explosive eruptions of basaltic magma with moderate gas content.

They consist of intermittent, discrete explosive bursts which eject pyroclasts as high as hundreds of feet into the air in firework-like incandescent rooster-tails. Strombolian eruptions are louder than Hawaiian eruptions, and generally are of more viscous magma.

Prelims point: Stratovolcano

9. Pradhan Mantri Awas Yojana scheme

Context:

The "Housing for All by 2022" program, targeting both urban and rural areas under the PMAY (Pradhan Mantri Awas Yojana) scheme has been a major scheme of the current government.

About the Pradhan Mantri Awas Yojana scheme:

Aspects	Description
About	It was initiated in the 2015 by Ministry of Housing and Urban Affairs.
Scheme type	PMAY is a centrally sponsored scheme (Both the Union and the State governments financially contribute to it)
Objective	<ol style="list-style-type: none"> Rehabilitation of slum dwellers with private developers' participation. Promotion of affordable housing for the weaker sections through

Credit Linked Subsidy Schemes (CLSS)c) Providing subsidy for Beneficiary-led Construction (BLC).

Components

- The scheme has two components: PMAY-Urban and PMAY-Rural, which cater to the urban and rural areas respectively
- The scheme is being implemented through four verticals
 - Beneficiary Linked Construction (BLC):** Subsidy for beneficiary-led individual house construction / enhancement.
 - Credit Linked Subsidy Scheme (CLSS):** Promotion of affordable housing for weaker sections through credit subsidy.
 - Affordable Housing in Partnership (AHP):** Creation of houses by both public and private sectors.
 - In-Situ Slum Redevelopment (ISSR):** Rehabilitation of slum dwellers with the participation of private developers using land as a resource.

Prelims point:The Pradhan Mantri Awas Yojana scheme.

10. Rashtriya Arogya Nidhi (RAN) scheme

Context:

Recently, the Delhi High Court has held that the new threshold income to claim benefit under the Rashtriya Arogya Nidhi (RAN) scheme is prima facie "extremely low".

Under the new umbrella scheme of RAN, the threshold of monthly income for obtaining benefit is Rs. 1,571 for rural areas and Rs 1,605 for urban areas. The court is of prima facie view that the threshold limit is extremely low.

About Rashtriya Arogya Nidhi (RAN) scheme:

Prelims point: Rashtriya Arogya Nidhi (RAN) scheme



yogyojna.com

Aspects

Description

About

1. It is provided by the Ministry of Health and Family Welfare.
2. It provides one-time financial assistance to poor patients living below State/UT wise threshold poverty line and suffering from life threatening diseases relating to heart, kidney, liver, cancer, etc. for treatment at any of Super Specialty Government hospitals/institutes.

Scheme type

Central sector scheme

Components

The Umbrella Scheme of RAN includes three key components as follows: 1. **Rashtriya Arogya Nidhi (RAN)**: It offers up to 15 lakhs in financial aid for treating critical illnesses related to the heart, kidney, liver etc, at government hospitals or institutions with super specialty services. 2. **Health Minister's Cancer Patient Fund (HMC PF)**: It provides financial assistance up to 15 lakhs for cancer treatment at Regional Cancer Centres (RCCs), Tertiary Care Cancer Centres (TCCCs), and State Cancer Institutes (SCIs). 3. **Financial Assistance for Patients with Rare Diseases**: It allocates up to 20 lakhs for treatment of specified rare diseases at government hospitals or institutes equipped with super specialty facilities.

11. ISRO's findings on the growth of glacial lakes in the Indian Himalayas

Context:

The article discusses ISRO's findings on the growth of glacial lakes in the Indian Himalayas, which pose flood risks. It explains how these lakes form, the use of satellites in monitoring them, and strategies to mitigate flood risks, including lowering water levels.

The ISRO discover about glacial lakes:

- ISRO analyzed satellite data from 1984 to 2023, observing the Indian Himalayan river basins.
- They found that out of 2,431 glacial lakes larger than 10 hectares, 676 had significantly expanded.
- **Specifically, 601** of these lakes more than doubled in size, showing substantial growth.
- **130 of the 676** lakes are situated in India, in the **Indus (65), Ganga (7), and Brahmaputra (58) river basins**, which have expanded as the glaciers retreated due to global warming.
- This data highlights the increased risk of glacial lake outburst floods (GLOFs), posing a threat to downstream communities.

The glacial lakes formed:

- Glacial lakes are formed by the movement and melting of glaciers, which create depressions in the landscape. These depressions fill with meltwater, forming lakes.

Types of glacial lakes:

- **Moraine-dammed lakes:** formed by debris such as rocks and soil left by moving glaciers.
- **Ice-dammed lakes:** formed when water is trapped by ice.
- **Erosion-based lakes:** created by depressions from erosion.

- Each type is categorized based on how the water is dammed or held in place.

The risks of glacial lakes:

- Glacial lakes pose significant risks due to potential glacial lake outburst floods (GLOFs). GLOFs can occur when natural dams, such as moraine or ice, fail to hold back lake water. This failure can be triggered by factors like avalanches of ice or rock. Such floods can cause severe and sudden flooding downstream, endangering communities.
- ISRO highlighted the risk with data showing 676 glacial lakes have grown, increasing the potential for dam failure.

The risks be mitigated:

- Lowering Lake Levels:** A study on Ghepan Gath lake suggested reducing water levels by 10 to 30 meters can significantly lessen impact on downstream areas like Sissu town, though not completely eliminate risks.
- Using HDPE Pipes:** In 2016, the Sikkim State Disaster Management Authority and others successfully used High Density Polyethylene (HDPE) pipes to lower water levels in South Lhonak Lake, reducing flood risks.
- Installing Early Warning Systems:** Fieldwork at critical lake sites can include setting up instrumentation like motion detection cameras, water level sensors, and discharge meters to monitor for signs of potential GLOFs.
- Satellite Monitoring:** Utilizing advanced satellite remote-sensing tools helps in continuous monitoring and assessment of glacial lake dynamics, crucial for timely interventions and planning.

Mains point: The effectiveness of satellite monitoring in assessing glacial lake dynamics and its role in mitigating the risks of glacial lake outburst floods (GLOFs) in the Indian Himalayas.

12. National Centre for Good Governance (NCGG)

Context:

Shri. V. Srinivas, Secretary of DARPG, will lead a 4-member delegation to Bangladesh from April 28-30, 2024. They will engage in bilateral discussions to renew the MOU between NCGG India and the Bangladesh Ministry of Public Administration for 2024-2029.

About National Centre for Good Governance (NCGG)



Source: LAWOF.IN

- About NCGG:** It is an apex-level autonomous institution under the Ministry of Personnel, Public Grievances and Pensions.
- Establishment:** It was set by the Government of India in 2014.
- Origin:** The Centre traces its origin to the National Institute of Administrative Research (NIAR), which was set up in 1995 by the Lal Bahadur Shastri National Academy of Administration (LBSNAA). NIAR was subsequently rechristened and subsumed into NCGG.
- Objectives: It has wide range of objectives:**
 - To function as a national repository on information on best practices, initiatives and methodologies that promote Good Governance, e-Governance etc.
 - To advise on key issues in governance and develop synergy across various Ministries/ Departments of GoI, and State Governments.
 - To engage in provision of consultancy services in and outside the country

Mandate: Its mandate includes governance, policy reforms, capacity building, and training for civil servants and technocrats in India and other developing nations. It also serves as a think tank.

Governing Body: The affairs of the NCGG are managed under the overall superintendence and direction of the Governing Body, which is headed by the Cabinet Secretary.

- . It has Secretaries of 9 ministries/ departments and 5 eminent persons viz. academicians, eminent administrators, specialists, eminent innovators, heads of reputed institutions as members.
- . The Director General, who is the Chief Executive of NCGG, acts as the Member-Secretary of the Governing Body.

Prelims point: National Centre for Good Governance (NCGG)