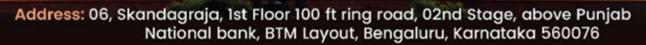


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PENNAIYAAR RIVER TRIBUNAL

Context:

• Inter-State River Water Disputes have become one of the most contentious challenges to Indian federalism.

- The latest Supreme Court case between Karnataka and Tamil Nadu over Pennaiyar river water sharing
- The Pennaiyar River is a river in southern India that flows through the regions of Karnataka and Tamil Nadu.

Constitutional Provisions

Water, that is water supplies, irrigation and canals, drainage and embankments, water storage, and water power subject to the rules of List I of the Seventh Schedule, is defined in Entry 17 of the Seventh Schedule.
The Interstate River Water Disputes Act, of 1956 was passed under Article 262 of the Indian Constitution. To resolve water conflicts arising from the use, control, and distribution of an interstate river or river valley. There were numerous amendments enacted to make necessary alterations to the outdated act. The most recent amendment was in 2019, and it streamlined the adjudication of inter-state river water conflicts.



Recent Developments:

• After a dispute over water sharing, the Supreme Court allowed the Tamil Nadu government to exercise the powers of the Central government under the provisions of the Inter-State Water Disputes Act and seek the constitution in November 2019.

• The Centre established the negotiations committee to settle the water dispute on January 20, 2020.

• According to the State, the executive action of Karnataka by its various works has prejudicially affected the State rights and interests in the river Pennaiyar and its tributaries, an inter-state river, in violation of the 1892 and 1933 agreements.

• Tamil Nadu complained that Karnataka has begun construction of a reservoir across Markandeyanadhi, a tributary of Pennaiyar, diverting surplus waters from Varathur tank, implementing a lift irrigation scheme at Yellamallappa Chetty tank, pumping water at Belahalli, and a scheme to pump Pennariyar waters from Thattanur village to distribute to 160 tanks.

• Since the Supreme Court deadline for establishing the Pennaiyar tribunal has passed, the Tamil Nadu government is awaiting the government next course of action.

Way to move forward

• To find a solution, the states must look outside of the box. Rather than procrastinating, the states should consider a solution at the basin level that is both sustainable and ecologically feasible.

• The multiple levels of resolving interstate water disputes are eliminated in a single step by setting up clear guidelines on river water sharing without making it Political.

SC directs to set up Online RTI Portals

Context: SC Instructs the states, UTs, and HCs to set up online RTI portals within 3 months



Points to ponder:

• To guarantee openness in government, the Supreme Court has ordered states and union territories to establish and operationalize online Right to Information (RTI) portals within three months.

- An information seeker has a statutory right to make an application through computerized methods, according to Section 6(1) of the RTI Act of 2005. However, the majority of district judges and some High judges only consider physical RTI petitions.
- An online RTI portal is a platform that allows citizens to file and track RTI applications electronically.
- It is an initiative taken by the Government of India to make the process of filing and tracking RTI applications more convenient for citizens.
- The portal can be accessed through the website https://rtionline.gov.in.
- Citizens can file RTI applications to any public authority under the Central Government, State Governments, and other public bodies through the portal.
- The portal allows citizens to make payments of RTI application fees online.
- The portal provides a facility to check the status of the application and get updates on its progress.
- Citizens can file first appeals and second appeals online through the portal.
- The portal also allows citizens to view the responses received from public authorities.
- The online RTI portal has made the process of filing and tracking RTI applications more efficient and transparent.
- It has also helped to reduce the time and effort required to file an RTI application.

Benefits of Online RTI Portal

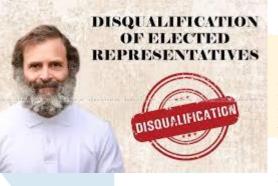
- Increased accessibility: Online RTI portals make information more accessible to everyone regardless of their location or physical ability. As a result, more people will be able to exercise their right to information and hold governments and organizations accountable.
- Convenience: With online RTI portals, users may file information requests without leaving their homes or workplaces, eliminating the need to travel to government offices or other physical sites.
- Time-saving: Because they eliminate the need for physical paperwork and manual processing, online RTI portals enable faster and more efficient processing of requests.
- Transparency: Because all requests and responses are recorded and documented electronically, online RTI portals provide a transparent and responsible method for information release.
- Cost-effective: Online RTI portals can help you save money on physical paperwork, employee time, and storage space for paper data.

- speedier response time: If there is a delay in processing a request, online RTI portals provide facilities for the automated escalation of cases, which can contribute to speedier response times.
- Reduced corruption: Online RTI portals can help to reduce the prevalence of corruption and bribery connected with the manual processing of information requests.
- Online RTI portals enable citizens to exercise their right to information, which can lead to better government and more accountability.

The Disqualification conundrum

Context:

The disqualification of Rahul Gandhi from his membership of the Lok Sabha has set off a debate on whether criminal conviction should entail an immediate loss of a serving legislator's membership. A petition has already been filed questioning the relevant provision in the Representation of the People Act, 1951, that prescribes disqualification on conviction for crimes that attract a prison term of two years and more.



Points to ponder:

• The disqualification of Rahul Gandhi from his membership of the Lok Sabha has sparked a debate on whether a criminal conviction should result in immediate loss of a

serving legislator's membership.

- Section 8(4) of the Representation of the People Act, 1951, which protected sitting legislators from immediate disqualification, was struck down by the Supreme Court in 2013.
- The government argued that the protection clause was necessary for practical and legal reasons, but the Supreme Court rejected these arguments.
- The Supreme Court clarified that the remedy for someone suffering immediate disqualification was to file an appeal and seek a stay on conviction, but this raises questions about whether membership can be restored or resituated with retrospective effect from the date of conviction.

- The issue of disqualification on conviction has been a contentious one in India for several years, and it has been the subject of debate and litigation.
- Some argue that the current provision of immediate disqualification on conviction for crimes attracting a prison term of two years or more is too harsh and should be revised.
- Others argue that the provision is necessary to uphold the integrity of the legislative body and to prevent convicted criminals from holding public office.
- The debate over the provision was reignited by the recent disqualification of Rahul Gandhi from the Lok Sabha, which has led to renewed calls for reform.
- Some have suggested that a middle ground could be found by allowing for a period of temporary disqualification, during which the convicted legislator would be suspended from office but could seek to appeal their conviction.
- Others have suggested that more stringent rules could be put in place to ensure that convicted criminals are not allowed to hold public office at all.
- The issue of disqualification on conviction is likely to remain a contentious one in India, as different groups have differing opinions on how best to balance the need to uphold the integrity of the legislative body with the rights of convicted criminals.
- Possible solutions include amending the Representation of the People Act to provide for a stay on disqualification pending appeal, or allowing the restoration of membership with retrospective effect from the date of conviction if a stay is subsequently granted.

The need for sector-specific safeguards in the 'techie'

Context:

The digital economy of India is expected to hit \$1 trillion by 2026. We are also creating massive amounts of confidential data, which must be managed and secured properly. In this respect, the Digital Personal Data Protection (DPDP) Bill 2022 still requires improvement.

Points to ponder:

- The Digital Personal Data Protection (DPDP) Bill 2022 is an important step towards protecting citizens' data in India.
- However, there are concerns about its interaction with existing sectoral regulations, as data protection and privacy are context-dependent, and sectoral expertise is crucial to regulate effectively.
- The global community has adopted two major approaches to regulate privacy and protect data: comprehensive legislation (such as the GDPR in the European Union) and sector-specific regulations (such as HIPAA for health care and GLBA for financial institutions in the United States).
- In India, there are already sectoral regulations regarding data protection, such as the Reserve Bank of India's directive on the storage of payment data and the National Health Authority's Health Data Management Policy.
- The DPDP Bill should serve as the minimum layer of protection, with sectoral regulators having the ability to build on these protections. This framework will be especially useful in India, where not all regulators may have the same capacity.
- Data protection is a complex subject, and we must create room for sectoral experts to weigh in to safeguard the interests of citizens more effectively.
- Overall, finding the right balance between the DPDP Bill and existing sectoral regulations will ensure a safer, more secure, and more dynamic digital landscape in the years to come.



Key features of the bill:

- The term "data principal" refers to the person whose data is being collected." Data Fiduciary" refers to the entity that determines the "purpose and means of processing an individual's data."
- Personal data, according to the law, is "any data by which or in relation to which an individual can be identified."
- Important Information Fiduciaries work with a large amount of confidential info. The Central Government will decide who falls into this group based on a variety of criteria.
- Such organisations will be required to designate a "Data Protection Officer" as well as an impartial Data Auditor.
- The holders of data will have the right to request that data gathered by the data fiduciary be erased and corrected. They will also be able to appoint someone to execute these rights in the event of the data principal's death or incapacity.

What does Muslim personal law say on inheritance?

Context:

A Muslim couple from Kerala recently decided to get their marriage registered under the Special Marriage Act. This is to ensure that the principles of the secular Act could apply to matters of inheritance in their family.



Points to ponder:

- The Koran plainly explains the principles of succession for both direct and secondary descendants in Surah Nisa. According to the mutually agreed-upon principles of property split in Islam, a daughter receives half of the portion of the boy.
- According to Islam, after marriage, the male is responsible for all household expenses, including the maintenance of his wife, the education of his children, and the care of his parents. If the spouse dies before the wife, she receives one-eighth of his possessions; if the pair has children, she receives one-fourth.
- When a couple only has a girl or daughters, an issue arises. The girls can only receive two-thirds of their father's estate. Aside from that, the portions are reserved for maternal and paternal blood relations.

Solutions:

- Make a will or vasiyat in which a person declares that a specific successor will receive no more than one-third of the property. This is frequently done if one of the offspring is monetarily disadvantaged. During the partition, when many families were separated, many Muslim households used this provision. While some children went to Pakistan, others stayed with their parents.
- There is also an option of Hiba which will allow unrestricted transfer of wealth or property to a person during the lifetime of the donor as a symbol of good deeds

Other similar laws in India:

- Hindu Succession Act 1956
- Parsi Marriage and divorce Act 1936
- Special Marriage Act 1954

Special Marriage Act 1954

- The Special Marriage Act applies to all citizens of India regardless of religion, race, or nationality.
- The act allows for marriages to be registered without religious rites or ceremonies.
- The couple must give notice of their intention to marry to the Marriage Officer in the district where at least one of them has resided for at least 30 days prior to the notice.

- The Marriage Officer must publish the notice and make it available for public inspection for 30 days.
- If no objections are received during the 30-day notice period, the Marriage Officer will register the marriage and issue a certificate.
- The couple must sign a declaration stating that they are not related to each other within the prohibited degree of relationship, as specified in the act.
- The minimum age for marriage under the act is 21 for males and 18 for females.
- The act allows for the solemnization of marriages by any person who is authorized by the parties to do so, including a Marriage Officer, a Registrar, or a person who has been appointed by the government.
- The act provides for the dissolution of marriages through the process of divorce or annulment.

CERT-in may be exempted from giving information under RTI Act, says the Centre

Context:

- The Indian Computer Emergency Response Team (CERT-in) may soon be exempt from responding to queries under the Right to Information Act, the government informed Parliament on Friday.
- The Department of Personnel and Training has reviewed a proposal from the Ministry of Electronics and Information Technology to include CERT-in in the Second Schedule to the RTI Act, which deals with exempted organizations like the Central Bureau of Investigation (CBI) and the Border Security Force.



Points to ponder:

• The Indian Computer Emergency Response Team (CERT-in) may soon be exempted from responding to queries under the Right to Information Act.

• The proposal to include CERT-in in the Second Schedule to the RTI

Act, which deals with exempted organizations like the CBI and the Border Security Force, is under review.

- Inter-departmental consultations are ongoing to examine the proposal, with the Ministry of Law and Justice participating.
- If the exemption is granted, CERT-in will be able to reject any application for information, including policy-related matters.
- CERT-in coordinates with public and private organizations in India to address cyber incidents like data breaches and ransomware attacks, and issues advisories for software vulnerabilities as guidance for organizations.
- In April 2022, CERT-in issued directions that required VPN providers and cryptocurrency firms to preserve data on all users. These directions are being challenged in the Delhi High Court.
- Several VPN providers have pulled their servers out of India in protest of the directions, arguing that they compromise users' privacy on the internet.
- When deliberations on exempting CERT-in from the RTI Act were first reported in May 2022, the Delhi-based Internet Freedom Foundation expressed concerns about the lack of transparency this would create. The Foundation noted that CERT-In requires logs from users but does not want to be transparent in return.

CERT-IN

- CERT-In is the national coordination point for reacting to computer security incidents as they arise. The Indian Cyber Community is CERT-In's community. Cert-In was founded in 2004 as a Ministry of Electronics and Information Technology specialized organization.
- The IT Act of 2008 designated CERT-In as the national organization in charge of the following cyber security duties:
 - 1. Collection, analysis, and dissemination of data on cyber incidents.
 - 2. Forecasting emergencies relating to cyber security incidents.
 - 3. Emergency solutions for handling cyber security incidents
 - 4. Coordination of cyber incident response activities.
 - 5. Issue protocols and advisories on vulnerabilities.
 - 6. Security drills, procedures, and prevention of cyber activities.

Directing AI for better and smarter legislation

Context:

Artificial intelligence (AI) is capturing the interest of business owners, political leaders, and legislators all around the world. The majority of developed democracies are now utilizing AI tools to improve legislation and parliamentary procedures.

Points to Ponder:

- Artificial intelligence (AI) is intelligence displayed by machines, as opposed to human and other animal intelligence. Speech recognition, computer vision, translation across (natural) languages, and other input mappings are examples of tasks where this is done.
- Advanced web search engines (e.g., Google Search), recommendation systems (used by YouTube, Amazon, and Netflix), understanding human speech (e.g., Siri and Alexa), self-driving cars (e.g., Waymo), generative or creative tools (ChatGPT and AI art), automated decision-making, and competing at the highest level in strategic game systems are examples of AI applications. (Such as chess and go).
- Artificial intelligence (AI) is capturing the interest of business owners, political leaders, and legislators all around the world. The majority of developed democracies are now utilizing AI tools to improve legislation and parliamentary procedures.
- AI tools can help MPs prepare responses for lawmakers, improve research quality, gather information about any Bill, prepare papers, and provide information on specific House rules, legislative drafting, amendments, interventions, and so on.

Obstacles Faced in India

- Opaque and complex laws: Current laws in India are opaque and complex, making it difficult for citizens and even legal specialists to understand them. This intricacy stems from various revisions made to the original statute throughout time, making it difficult to read and apply them correctly. The lack of clarity in legislation also leads to variations in their interpretation and application, producing uncertainty among residents and enterprises.
- The translation gap between law-making, law enforcement, and lawinterpreting organizations: India has 22 official languages. Because of this variability, it is difficult to effectively translate legislation from one

language to another. As a result, there is frequently a translation gap between the organizations that make laws, implement laws, and interpret laws. This chasm might lead to law misinterpretation and inappropriate application.

- Lack of a comprehensive chain of laws and regulations: The Indian government's India Code webpage gives access to Acts and subordinate legislation passed by the national government. It does not, however, give an entire chain of laws and regulations, from the Parent Act to subordinate legislation and amendment notices. Because there is no entire chain of laws and regulations, citizens and companies find it difficult to understand the full ramifications of a specific legislation or rule.
- AI's use in law, policy-making, and parliamentary activities is limited: Although AI is a formidable tool, its use in law, policy-making, and parliamentary activities in India are limited. There is a need to investigate the possibilities of AI in various domains and utilize its skills to improve the efficiency and effectiveness of governance.
- Need for open, transparent, and citizen-friendly AI use: It is critical to guarantee that AI is used in law, policymaking, and legislative activities in an open, transparent, and citizen-friendly manner. Artificial intelligence should be used to empower citizens and businesses rather than to create a schism between the government and its citizens. It should be utilized to improve governance rather than to completely replace human decision-making.

AI can assist legislators:

- Analysing citizens' grievances and social media responses: AI can analyse large volumes of data from citizens' grievances and social media platforms to identify common issues and priorities that need immediate attention. This can help legislators to understand their constituents' concerns and take proactive steps to address them.
- Seeking citizen input for public consultation of laws: Artificial intelligence can aid in the process of seeking citizen input and feedback on proposed laws using online platforms and surveys. This can assist in guaranteeing that public opinion is taken into account when writing legislation and that the perspectives of many stakeholders are represented.
- The process of automating the analysis of discrepancies between bills, amendments, and current laws: AI can assist legislative personnel in comparing and contrasting different versions of bills and amendments, as well as determining their possible influence on current legislation. This can help to streamline the legislative process and increase legislation quality.

- Simulating the potential consequences of laws: AI can assist in the modelling of diverse datasets, such as census data, household consumption, and public infrastructure, to simulate the potential implications of various policy options. This can assist legislators in assessing the potential impact of proposed legislation and making more informed judgments.
- Overall, AI can assist legislators in making better decisions by providing them with timely and reliable information, identifying critical concerns and priorities, and simulating the probable repercussions of various policy options.

Will platforms have to take down 'fake news'?

Context:

The Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 were revised on Thursday by the Ministry of Electronics and Information Technology. The amendment gives the Union Government the authority to appoint an official fact checker for misinformation and "fake news," as well as to oversee the online real money gambling business, which includes apps such as fantasy sports sites, rummy, and poker.



Points to Ponder:

- The Ministry of Electronics and Information Technology modified the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021.
- The amendment gives the Union Government the authority to appoint an official fact checker for misinformation and fake news.
- The Press Information Bureau's (PIB) fact-checking unit will be designated as the Union Government's official fact-checker.
- When fake news is reported, social media businesses lose their "safe harbour" for such content, making them vulnerable to lawsuits or other legal action.
- According to the IT Rules, social media businesses lose their intermediary status if they do not have a grievance officer for India or do not respond to customer concerns on time. Furthermore, they will now lose their safe harbour immunity for posts that the government has identified as misleading.
- Organizations such as the Editors Guild of India and the Internet Freedom Foundation (IFF) have expressed worry over the revision, calling it "akin to censorship" and "legally contentious."
- According to the IFF, the fact check unit could effectively issue a takedown order to social media platforms and even other intermediaries across the internet stack, potentially bypassing the process mandated by Section 69A of the IT Act, 2000.
- Rajeev Chandrasekhar, Union Minister of State for Electronics and Information Technology, has maintained that the amendment would not involve censorship and would merely remove social media companies' immunity when they chose to leave fake material that has been declared as such.

Why has the amendment caused concerns in points?

- The Editors Guild of India and the Internet Freedom Foundation (IFF) have both dubbed the change "censorial" and "legally contentious."
- According to the IFF, the fact check unit could effectively issue a takedown order to social media platforms and even other intermediaries across the internet stack, potentially bypassing the process mandated by Section 69A of the IT Act, 2000.
- It is unclear whether stakeholders were contacted before notifying this specific aspect of the revision.
- The sole change from the draught version is a technical one advised by the Department of Legal Affairs.

• The change could limit the fundamental right to free expression, notably for news publishers, journalists, activists, and others.

Will betting and gambling apps be banned in points?

- Real money gaming services must be approved as "permissible" by a Self-Regulatory Body (SRB) comprised of specialists and industry stakeholders, according to the amendment.
- According to constitutional doctrine, "permissible" real money games are those in which the outcome is not solely determined by chance.
- The real money gaming sector has applauded this reform and stated that it will be followed.
- Games that are not certified "permissible" would come under the category of "betting and gambling," subjecting them to limitations imposed by states where such activities are forbidden.
- The SRBs have been given the authority to evaluate if a real money game is one of skill or chance, which is a critical distinction in determining whether an app aids betting or gambling.
- Major fantasy sports applications and card games that have received court orders recognizing them as skill-based games may be unaffected.
- The Union Cabinet revised the Allocation of Business Rules to grant the Centre authority over "online gaming."
- This amendment may irritate state governments such as Tamil Nadu, which has tried unsuccessfully to restrict real money online games under the "betting and gambling" designation.

Building safeguards

Context:

The Supreme Court's comment that preventative detention statutes are a colonial relic and grant the state arbitrary powers is one more example of how such laws represent a perennial threat to personal liberty.

Points to Ponder:

• The Supreme Court and the High Courts have often chastised the government for failing to adhere to procedural procedures when dealing with inmates under preventative detention statutes.

- Although many detention orders are overturned on technical grounds, the relief achieved by detainees is generally insignificant because the orders are typically overturned after months of confinement.
- Most preventive detentions are eventually terminated, with the most prevalent reason being an unexplained delay in the disposition of detainees' representations against their detention.
- Other reasons for detention orders being invalidated include failure to present appropriate grounds for detention or a delay in providing them.
- Preventive detention rules have been abused, such as holding a guy as a 'goonda' for selling subpar chili seeds.
- Because of the 'Goondas Act,' which encompasses offenders ranging from bootleggers to cyber-criminals, Tamil Nadu has the greatest number of preventative detentions in the country.
- The law's reach is rarely limited to persistent offenders and frequently extends to suspects in important cases.
- Preventive detention is permitted under the Constitution, but it does not absolve the government of the responsibility to reduce crime through effective policing and fast trials, rather than depending on unrestricted power and discretion.

WHAT IS UP CONTROL OF GOONDAS ACT?

 The Act makes special provisions for control of Goondas to maintain public order

Under it, a district magistrate (DM) can empower an additional district magistrate to record statement of an accused person. The details are collated and sent to DM

The accused can be booked under the Act once the DM gives a go-ahead

Under the provisions of the Act, the administration can remove a person from a district or an area for not more than six months



When is it applied?

➤ If a person, a gang member or a leader of a gang habitually commits or attempts to commit, or abets the commission of an offence punishable under Section 153 or Section 153B or Section 294 of the IPC

If a person has been convicted of an offence punishable under the Suppression of Immoral Traffic in Women and Girls Act, 1956 ► If a person has been convicted not less than thrice for an offence punishable under the UP Excise Act, 1910, Public Gambling Act, 1867, or sections 25, 27 or 29 of the Arms Act, 1959

 If a person is deemed to be dangerous to the community

 If a person been habitually making indecent remarks or teasing women or girls

Goondas Act

- The Goondas Act is an Indian statute that allows for the incarceration of those who are called "goondas."
- The name "goonda" translates loosely as "hooligan" or "thug. "The law is most commonly applied in the state of Tamil Nadu.

- The Goondas Act covers a wide range of offences, such as bootlegging, slum grabbing, forest offences, film piracy, sex offences, and cybercrime.
- The law's scope is not usually limited to repeat offenders, and it is frequently utilized to imprison suspects in important instances.
- The statute is frequently chastised for being overbroad and enabling arbitrary detention of individuals.
- Because to the statute, Tamil Nadu has the greatest number of preventive detentions in the country.
- The Goondas Act's detentions are subject to the same procedural safeguards as other preventative detention legislation.

Ways to Prevent the Misuse

- Stricter adherence to procedural safeguards: This includes presenting timely grounds for detention, providing clear and readable copies of documents, and speeding the disposition of detainee representations.
- Tighter constraints on the scope of preventive detention laws: Preventive detention laws should be limited to persistent offenders and serious suspicions.
- Regular review and monitoring of preventive detentions: To prevent the arbitrary application of legislation, preventive detentions should be reviewed and monitored regularly.
- Transparency and accountability should be improved: The government should publish regular reports on the use of preventive detention laws and make information about detainees and their cases public.
- Strengthening the criminal justice system: Instead of depending on preventative detention laws, the criminal justice system should be improved to ensure that efficient policing and quick trials are employed to reduce crime.
- Judicial oversight: The courts should be actively involved in scrutinizing preventative detention decisions and ensuring that procedural safeguards are observed and that detention orders are not arbitrary or misused.

The rules for recognition as a national party

Context:

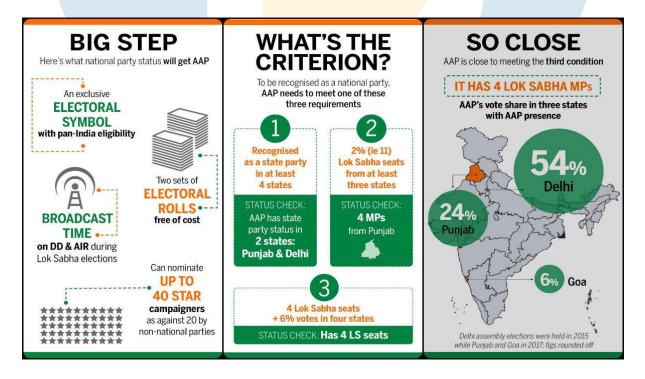
The Arvind Kejriwal-led Aam Aadmi Party (AAP) received a shot in the arm from the Election Commission of India on April 10, when the poll authority granted it the status of a national party. Meanwhile, the Trinamool Congress (TMC), the Communist Party of India (CPI), and the Nationalist Congress Party (NCP) all lost their status as national parties. The EC also removed certain parties' recognition as State parties.

How a party can get recognized as a national party

- According to the Indian Election Commission, a political party is eligible for recognition as a national party if it meets one of the following criteria.
- During a general election for the Lok Sabha or Legislative Assembly, the party receives 6% of the vote in any four or more states, and it also receives four Lok Sabha seats.
- In the Lok Sabha election, the party should gain 2% of the seats from at least three different states.
- In four states, the party was recognized as a state party.

Benefits of being recognized as a state party

- Reservation of the party symbol: Once a party is recognized as a state party, it receives exclusive rights to use a specific electoral symbol in state assembly elections.
- Access to a state's electoral rolls: A recognized state party gets access to a state's electoral rolls, which can be used to identify potential voters and plan election campaigns.
- Party money: The Election Commission of India (ECI) provides funds to state parties for administrative and election-related expenses.
- Representation on the state election commission: A recognized state party may appoint one of its members to the State Election Commission.



Benefits of being recognized as a national party:

- Reservation of the party symbol: A national party is entitled to a reserved symbol that can be used to fight parliamentary and assembly elections in all Indian states and union territories.
- Access to electoral rolls: A national party, like a state party, has access to the electoral rolls of all Indian states and union territories.
- Party finances: A national party is entitled to more cash from the ECI than a state party. This includes administrative as well as election-related costs.
- Representation in the ECI: A national party may appoint one of its members to the Election Commission of India.
- Eligibility for state party recognition: A national party is immediately eligible for state party recognition in each state or union territory where it contests elections.

Pending Bill: Gubernatorial Inaction

Context:

- The Governor of Tamil Nadu was recently in the headlines again after the Tamil Nadu Assembly issued a resolution urging the President of India, among other things, to set a timeframe for assent to bills passed by the Assembly.
- The Governor's public comments on April 6, hinting that if the Bill passed by the assembly violates constitutional restrictions, it is the Governor's responsibility not to provide assent, was the immediate impetus for the resolution. Several Assembly-passed bills are still waiting

because the Governor has not decided.

CONST	ONSTITUTIONAL POSITION OF THE GOVERNOR		
Article 154	He is the executive head of the state. All the executive functions will be performed by him or by the officers subordinate to him in accordance with the Constitution		
Article 163	He will be aided and advised by the Chief Minister and Council of Ministers unless he is performing a function at his discretion Note:		
	 The power to act at his own discretion is a power that is not given to the President. 42nd Amendment Act made the advice of the Council of Ministers' binding on the President but not on the Governor in state 		
Article 164	The Council of Ministers are collectively responsible to the state legislative assembly Note: This provision is the foundation of the state parliamentary system		

Points to ponder (From Newspaper):

- The Tamil Nadu Assembly passed a resolution encouraging the President of India to set a timetable for the assent of bills passed by the Assembly.
- The resolution was voted in reaction to the Governor's assertion that if a bill enacted by the legislature violates constitutional restrictions, he has a duty not to provide assent.
- Several Assembly-passed bills are still waiting because the Governor has not decided.
- According to Article 355 of the Constitution, it is the Union's responsibility to ensure that the government of each State is carried out in line with the requirements of the Constitution.
- The Governor's decision to sit on bills passed by the Assembly indefinitely creates a situation in which state government cannot be carried out following constitutional provisions.
- If the Governor fails to act following the Constitution, the State government has a constitutional duty to invoke Article 355 and notify the President, requesting that she issue appropriate instructions to the Governor to ensure that the government is carried out per the Constitution.
- Article 200 gives the Governor alternatives when a Bill is brought to him after it has been enacted by the legislature, and he is compelled to execute one of them. The options are:
 - to give assent
 - to withhold assent
 - to send it back to the Assembly to reconsider it
 - \circ or to send the Bill to the President for his consideration

- The Governor is acting against constitutional instruction by sitting on a Bill passed by the Assembly, and a judicial decision is required to clear the air.
- In the United Kingdom, the Governor has the authority to refuse assent, but this power has not been used since Queen Anne's reign.
- Refusing royal assent because the monarch vehemently opposed the Bill or that it was highly contentious would be unconstitutional.
- Because the Governor can only utilise his executive powers on the recommendation of the Council of Ministers, several experts question why the Council of Ministers should advise the Governor to withhold assent after the Assembly has passed the Bill.

Governor and His Powers

- The Governor of a state is selected by the President for a five-year term and serves at the discretion of the President.
- The Governor has executive power in the state, and he is assisted and advised by the Council of Ministers, which is led by the Chief Minister.
- Under Articles 371A and 371H of the Constitution, the Governor has specific responsibility for law and order in Nagaland and Arunachal Pradesh, respectively. After discussing with the Council of Ministers, the Governor may use independent judgement.
- The Sixth Schedule grants the Governor discretionary authority in subjects relating to royalty sharing between district councils and state governments in tribal territories of Assam, Meghalaya, Tripura, and Mizoram.
- The Governor is in charge of executive, legislative, financial, and judicial activities.
- The Council of Ministers executes the Governor's executive responsibilities in his name, and he has extensive administrative powers during a state of constitutional emergency.
- The Governor has legislative authority to approve, deny, or return bills for reconsideration. He has the authority to call, prorogue, and dissolve the legislative assembly.
- The Governor has financial authority, including the authority to deliver annual financial accounts to the legislature, recommend grants, and spend contingency reserve monies for unanticipated needs.
- When nominating judges to the State High Court, the Governor meets with the President.

Ecological Threat in Great Nicobar

Context:

The Ministry of Environment, Forests, and Climate Change approved the ambitious Rs.72000-crore development project on Great Nicobar Island.



Proposal of the Project:

- The Indian government has proposed a 72,000-crore mega project for the "holistic development" of Great Nicobar Island (GNI), including the construction of a transhipment port at Galathea Bay, a dual-use military-civil international airport, a power plant, and a city.
- A greenfield metropolis with an International Container Trans-shipment Terminal (ICTT), a greenfield international airport, and a power plant are all part of the proposal.
- The Indian Navy will control the port, while the airport would serve dual military-civilian purposes as well as tourism.
- The project will be performed in three parts over the next 30 years, covering 166.1 square kilometres along the island's south-eastern and southern shores.
- The island's strategic location along the East-West international shipping route, as well as its potential to become a cargo ship centre, are both economic motivations for development.
- Strategic grounds include the island's significance for national security and the consolidation of the Indian Ocean Region in the face of growing Chinese assertiveness in the Bay of Bengal and the Indo-Pacific.

The purpose behind this Initiative

• Economic benefits include the construction of an International Container Trans-shipment Terminal (ICTT), a greenfield international airport, and a power plant. These developments are projected to have a substantial economic impact on the region and the country as a whole.

- Great Nicobar Island is strategically placed along the East-West international maritime corridor, which carries a substantial portion of the world's shipping commerce. Its growth can assist India in consolidating its position in the Indian Ocean Region and countering China's growing influence in the Bay of Bengal and the Indo-Pacific.
- Job creation: The development project is intended to generate numerous job possibilities for the local population as well as those from other regions of the country, both directly and indirectly.
- Tourism promotion: Because the proposed airport will cater to tourism, it will help boost tourism in the region and produce more cash.
- Infrastructure development: The construction of a greenfield city, port, airport, and power plant will greatly improve the region's infrastructure and provide better facilities to the local population.

Related concerns:

- Many environmentalists are concerned about the anticipated enormous infrastructure expansion in an ecologically important and vulnerable region.
- The loss of tree cover and mangroves will have an impact on the island's flora and wildlife as well as increased runoff and sediment deposits in the ocean, affecting the coral reefs in the region.
- The Zoological Survey of India is currently determining how much of the reef will have to be relocated for the project, and a leatherback turtle protection strategy is being implemented.
- The project site, according to the authorities, is outside the eco-sensitive zones of Campbell Bay and Galathea National Park.

Way forward

- The Indian Zoological Survey is currently determining how much of the reef will need to be relocated for the project.
- A leatherback turtle conservation plan is being implemented.
- According to the authorities, the project site is outside the eco-sensitive zones of Campbell Bay and Galathea National Park.
- The Ministry of Environment, Forests, and Climate Change set limitations on the project, including the requirement for compensatory afforestation and the formation of a monitoring committee to oversee the project's environmental impact.
- The government has also indicated that it will take steps to reduce the project's environmental impact, such as protecting mangroves and preventing silt build up in the ocean.

Biotransformation Technology

Context:

- A Uk based start-up claims that it has developed a technology that could alter the state of plastics and make them biodegradable.
- The company calls it biotransformation. It claims the technology would digest the plastic packaging waste naturally with the help of microbes and biodegrade the waste without leaving behind any microplastics.





Major problem:

- India generates 3.5 billion kgs of plastic garbage per year, and per capita, plastic waste production has more than doubled in the last five years. A third of this originates from packaging.
- Amazon alone produced an estimated 321 million kg of plastic from wrapping materials in 2021.
- As a result, the estimated accumulation of plastic garbage in the world is so high that an instant reaction is required to recoup from this event.

Solution:

- The technology was created in collaboration with the Imperial College in London, UK, and Polymateria, a British company.
- Plastics produced with this technology are given a pre-programmed period during which the manufactured material appears and feels like traditional plastics without sacrificing quality.
- When a product reaches the end of its useful life and is exposed to the external world, it self-destructs and bio transforms into Bio available wax. Microorganisms devour this wax, transforming refuse into water, CO2, and biomass.
- This is one of the world's first biotransformation technology that ensures polyolefins fully biodegrade in an open environment causing microplastics

• This technology is highly beneficial in the fields of Food packaging and Health Care Industries where it can reduce the waste of plastic.

Government Initiatives:

- Plastic Waste Management Rules (2016): The government has formulated the Plastic Waste Management Rules, 2016, which aim to promote the environmentally sound management of plastic waste in the country. The rules prescribe the responsibilities of waste generators, local bodies, and other stakeholders in the plastic waste management process.
- Swachh Bharat Abhiyan: The Swachh Bharat Abhiyan (Clean India Mission) launched in 2014, aims to make India clean and free from open defecation, litter, and garbage. One of the key components of this mission is the management of plastic waste.
- Extended Producer Responsibility (EPR): The government has introduced the concept of Extended Producer Responsibility (EPR) in the Plastic Waste Management Rules, 2016. Under this concept, manufacturers, importers, and brand owners of plastic products are responsible for the collection and disposal of the plastic waste generated from their products.
- Ban on Single-use Plastic: The government has banned single-use plastic in several states and cities across the country. The ban covers plastic bags, cups, plates, and straws, among others.
- Swachh Survekshan: The Swachh Survekshan is an annual survey conducted by the government to evaluate the cleanliness and sanitation of cities and towns in India. One of the parameters of the survey is the management of plastic waste.
- National Clean Energy Fund (NCEF): The NCEF provides financial support for research and development in clean energy technologies, including waste-to-energy technologies. The fund has supported several projects on plastic waste management.

Time to put a price on carbon emissions

Points to ponder:

A carbon tax is a tool that captures the external costs of Green House Gas (GHG) emissions—costs of emissions that the general public bears—and links them to their sources through a price, typically in the form of a CO2 price



emitted.

• External costs of emissions include damage to crops, health care costs from heat waves and droughts, and loss of property from flooding and sea level rise.

• Environmental destruction caused by the lack of pricing of natural resources like air and forests has resulted in the emission of carbon causing

climate change.

- To address this issue, countries need to agree on valuing nature, including pricing carbon effluents, starting with the biggest economies of the G-20.
- The establishment of a local carbon tax, as in Korea and Singapore; the use of an emissions trading system (ETS), as in the European Union (EU) and China; and the imposition of an import tariff on the carbon content, as the EU is suggesting, are the three methods of pricing carbon.
- The average price of carbon is only \$6 per tonne across 46 nations, which is a tiny fraction of the expected damage from pollution. For the US, China, and India, respectively, the IMF has suggested price ceilings of \$75, \$50, and \$25 per tonne of carbon dioxide. It believes that by 2030, this could contribute to a 23% decrease in global pollution.

Impact on India

• A carbon tax may be the most attractive of the three pricing options for India because it can directly deter the use of fossil fuels while generating income that can be used to fund the development of cleaner energy sources or the protection of disadvantaged consumers. Policymakers must decide on the tax rate, which ranges greatly from Denmark's \$165 per tonne scheduled for 2030 to Japan's \$2.65 per tonne of CO2. • The manufacturing companies claim that importers from nations with low carbon prices are stealing market share from them is the primary barrier



for India.

• Allowing businesses to use premium foreign carbon allowances to make up a portion of their taxable pollution might also make sense. The EU does not include transportation because higher costs would have been transmitted directly to consumers. Singapore offers vouchers to consumers impacted by energy price increases. California uses money from the selling of carbon permits to

partially subsidize the purchase of electric vehicles.

Issues with the carbon tax

- Distributional effects: A carbon tax may have a large distributional effect, which means that low-income households and particular economic sectors or areas may be disproportionately affected.
- Complexity: The design and implementation of carbon tax systems can be challenging, necessitating careful evaluation of variables like the tax rate, exclusions, and the intended use of the collected funds.
- Global cooperation: Since carbon pollution are a global issue, carbon tax schemes may need global cooperation to be successful. The diverse economic and political goals of various nations have made it difficult to achieve international cooperation on carbon price policies.

Heatwave Days for Eastern India in May

Context:

May, the hottest month in most of India, is expected to be especially hot in eastern India, but Delhi, Punjab, Haryana, Rajasthan, and Gujarat, while still hot, are expected to see increased rain and limited heatwaves, according to the India Meteorological Department (IMD).



Points to Ponder:

- According to the India Meteorological Department (IMD), May is projected to be exceptionally hot in wide portions of eastern India, while Delhi, Punjab, Haryana, Rajasthan, and Gujarat are likely to have considerable rain and fewer heatwaves.
- According to the IMD's monthly forecast, normal to above-normal rainfall is expected over northwest India, parts of west-central India, and the northern part of peninsular India, while normal to below-normal rainfall is expected over most of northeast India, east-central India, and south peninsular India.
- Heatwaves are likely to be more common in Bihar, Jharkhand, Odisha, Gangetic West Bengal, East Uttar Pradesh, coastal Andhra Pradesh, Chhattisgarh, Madhya Pradesh, Telangana, and coastal Gujarat, where increased humidity levels mixed with heat pose a considerably higher health risk.

- Rainfall in May is predicted to be "normal," or within a 10% range of what is typical for the month, according to the statement.
- The IMD expects that due to rain, there may not be many days of heatwaves in northwest India.
- The IMD had previously predicted a 4% shortfall for the upcoming monsoon season in April, which is considered "normal," but at 96% of the Long Period Average (LPA), it is at the low end of what the agency considers "normal."
- The formation of an 'El Nino,' a cyclical phenomenon of warming in the Central Pacific connected to less rainfall in the west, northwest, and western areas of Central India, is thought to be causing havoc this year.

El Nino

- El Nino is a three to five-year-long abnormal warming of the water in the central and eastern tropical Pacific Ocean that can continue for up to 18 months. The El Nino Southern Oscillation (ENSO) phenomenon is in a warmer-than-normal phase.
- During an El Nino event, the equatorial Pacific Ocean along the northern coast of South America has sea surface temperatures (SST) that are at least 0.5 degrees Celsius higher than the long-term average.
- In a normal year, there is a high-pressure area in the eastern Pacific Ocean along the Peru Coast due to the existence of the chilly Peru Current (Humboldt Current) along the coast of Peru (South America). As a result, air moves from the eastern Pacific Ocean to the western Pacific Ocean, where pressure is lower.
- Because of the warmer oceans, this air absorbs a lot of moisture as it travels owing to evaporation. This warm wet air climbs to high levels of the atmosphere in the western Pacific Ocean, causing rain in Indonesia, eastern and northern Australia, and other places.
- The rising of warm air eventually causes it to cool in the upper atmosphere. A portion of this air goes into the upper atmosphere and descends over the eastern Pacific Ocean, helping to maintain the higher pressure there, before returning to the western Pacific Ocean. Walker Circulation is the name given to this type of circulation.
- During El Nino years, the high-pressure system in the eastern Pacific Ocean weakens due to excessive warming of water in the central and eastern tropical Pacific Ocean, and the wind moving east (called easterly wind) weakens or even reverses direction. As a result, there is less rain/drought in the western Pacific Ocean (Indonesia, eastern and northern Australia, and New Zealand).
- Tahiti is where the eastern Pacific Ocean's atmospheric pressure is monitored, while Darwin is where the western Pacific Ocean's

atmospheric pressure is measured. During normal years, Tahiti has high pressure and Darwin has low pressure. During El Nino years, this condition exactly flips, and this process is known as Southern Oscillation.

CSIR scientists find rare earth deposits in Anantapur

Context:

Scientists from the National Geophysical Research Institute (NGRI), a Council of Scientific and Industrial Research facility in Hyderabad, have discovered profitable rare-earth elements (REEs) in the Andhra Pradesh district of Anantapur.



Points to Ponder:

- Scientists from Hyderabad's National Geophysical Research Institute (NGRI) identified elevated levels of rare-earth elements (REEs) in the Anantapur area of Andhra Pradesh.
- Lanthanum, cerium, praseodymium, neodymium, yttrium, hafnium, tantalum, niobium, zirconium, and scandium are all REEs that are important components in a variety of industrial applications such as imaging, aerospace, and defence.

- According to NGRI lead scientist P.V. Sunder Raju, the most important application of REEs is in the production of permanent magnets, which are critical components of gadgets such as smartphones, computers, and jet planes.
- Deep drilling for at least one kilometre is required to prove the presence of the elements.
- Because rare earth elements are in high demand internationally, the finding of REEs in the Anantapur district might have substantial economic benefits for the region and the country.

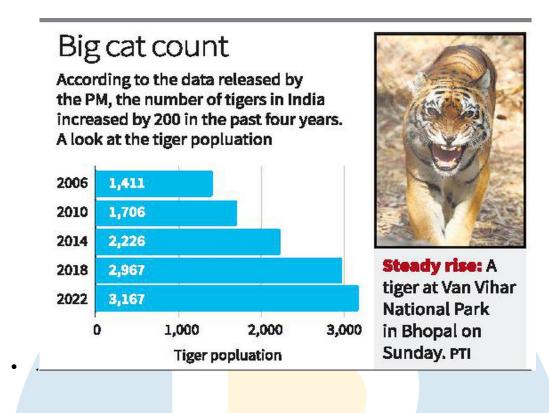
India's tiger population tops 3,000, shows census

Context:

The tiger population numbers were made public by Prime Minister Narendra Modi in Mysuru on Sunday, at an event to mark the International Big Cat Alliance conference and the 50th anniversary of Project Tiger.

Points to Ponder: International Big Cats Alliance (IBCA):

- The International Big Cats Alliance (IBCA) is a forum dedicated to disseminating knowledge about big cat protection and conservation. The IBCA is dedicated to the conservation of the seven principal big cats, which include tigers, lions, leopards, snow leopards, pumas, jaguars, and cheetahs.
- The IBCA is open to 97 range countries, as well as other interested governments and international organizations, that have these large cats' native habitat.
- The IBCA engages in a variety of initiatives such as advocacy, partnership, knowledge e-portal, capacity building, eco-tourism, expert group partnerships, and fund tapping .The IBCA is organized into three parts: a General Assembly comprised of all member countries, a Council comprised of at least seven but no more than fifteen member countries elected by the General Assembly, and a Secretariat. The IBCA has a fiveyear term.



Project tiger:

- The Government of India initiated Project Tiger in 1973 to safeguard the Bengal tiger population, which was in decline owing to killing and habitat destruction.
- The initiative began in nine tiger reserves spread across the country, totalling 16,339 square kilometres. Since then, the initiative has grown to include 53 tiger reserves spread over 18 states, totalling 75,796 square kilometres.
- Project Tiger's main goals are to safeguard and conserve the Bengal tiger population, maintain their habitat, and reduce human-tiger conflicts.
- The initiative includes habitat management, protection of the tiger's prey base, anti-poaching measures, and community participation in conservation activities.
- Project Tiger commemorated its 50th anniversary in 2022, with activities organized across the country to promote awareness about tiger conservation and recognize the project's accomplishments.

According to the most recent tiger census in India, while the overall tiger population has increased, tiger numbers in the Western Ghats region have decreased. Here are some major points concerning the decline:

• The Western Ghats region is a mountain range that extends parallel to India's western coast for around 1,600 kilometres.

- The tiger population in the Western Ghats region has fallen, even though "major populations" in the area are said to remain constant, according to the census data.
- The reasons for the reduction in tiger numbers in the Western Ghats are unclear based on the evidence available. However, the census report warns that nearly all of India's five major tiger zones face difficulties in tiger population expansion due to increasing infrastructure development needs.
- The reduction in tiger numbers in the Western Ghats is worrying because the region is known for its high levels of biodiversity and is a conservation hotspot. The Western Ghats are home to various indigenous flora and wildlife species, including tigers.
- The fall in tiger numbers in the Western Ghats emphasizes the importance of conservation efforts focusing on maintaining and restoring habitats in the region, as well as decreasing threats including poaching, habitat degradation, and fragmentation.

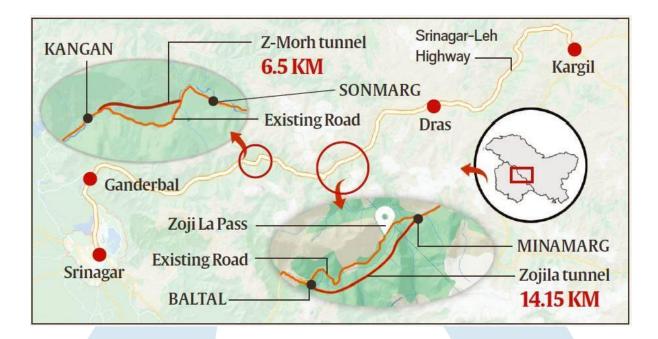
Efforts to open Zojil<mark>a Tunnel a</mark>head of deadline: Gadkari

Context:

Nitin Gadkari, Union Minister for Transport and Roadways, said during an inspection of the strategically vital Zojila Tunnel, which connects the Kashmir Valley with the Union Territory of Ladakh, that it will fulfil the ambition of having an all-weather route from Kashmir to Kanyakumari.

Points to Ponder:

- The tunnel is strategically significant since it would realize the ideal of an all-weather road connecting Kashmir and Kanyakumari.
- Attempts are being made to open the tunnel to traffic before the 2026 deadline.
- During the Kargil war between India and Pakistan, former Prime Minister Atal Bihari Vajpayee stressed the need of uniting Kashmir and Ladakh.



Zojila Tunnel

The tunnel will enable all-weather access between Srinagar Valley and Leh (Ladakh plateau) on NH-1 and will bring about an all-around economic and socio-cultural unification of Jammu & Kashmir (Now UTs of J&K and Ladakh). The term "responsibility" refers to the act of determining whether or not a person is responsible for the actions of another person. It is one of the most dangerous stretches of road in the world, and this project is also geo-strategically critical.

Significance of the tunnel:

- The development of the Zojila Tunnel would result in all-around economic and socio-cultural integration of these regions, which are cut off from the rest of the country during the winter due to severe snowfall for nearly six months.
- At the moment, the only plausible option for year-round road connectivity is a tunnel in Zojila. When completed, this tunnel will represent a watershed moment in modern Indian history. It will also be critical to the country's defence, given the significant military activity taking place along our borders in the Ladakh, Gilgit, and Baltistan regions.
- The Zojila Tunnel project will fulfil 30 years of tremendous popular demand in the Kargil, Drass, and Ladakh regions.
- The project would improve the safety of travellers traversing the Zojila Pass and cut travel time from more than 3 hours to 15 minutes.

Chinese dual-use facilities in Myanmar and Sri Lanka raise security concerns in India

Context:

The construction of a military facility on Coco Islands in Myanmar and a proposed remote satellite receiving ground station system in Sri Lanka, both coming up with Chinese help, have raised concerns in India about possible surveillance across the region.

Points to Ponder:

- Recent satellite photographs reveal that a military base is being built on the Coco Islands, which are near the Andaman and Nicobar Island chain. The station is being created with Chinese aid and is a source of concern for India because it could be used for regional monitoring.
- Chinese Assistance in Sri Lanka: Through a collaboration between the Aerospace Information Research Institute and the University of Ruhuna, China has suggested establishing a distant satellite reception ground station system in Sri Lanka. The proposed ground station might be utilized to spy on Indian assets and intercept critical data throughout the region.
- Dual-use Satellite tracking facilities are fundamental dual-use in nature, which means they can be utilized for both civil and military objectives. China's civil space program is known to collaborate closely with its military, and there are concerns that the proposed Sri Lanka base station could be utilized for surveillance purposes.
- Concerns over Indian Assets: The projected ground station in Sri Lanka and the Coco Islands military installation could be used to spy on Indian assets and intercept vital information. The ground station may monitor India's satellite launch facilities in Sriharikota and the integrated missile test range in Odisha, and launches from there might be tracked to obtain sensitive data.
- Coordination with Chinese Research and Survey Vessels: According to sources, the ground station in Sri Lanka might collect critical information in collaboration with Chinese research and survey vessels in the vicinity. Many of the same activities as ground stations can be performed by space tracking and surveillance spacecraft, with the added benefit of mobility.

Coco Islands:

- Coco Islands, also known as the Keeling Islands, are a group of 27 coral islands located in the eastern Indian Ocean.
- The Coco Islands are located in the Indian Ocean, about 2,750 kilometres northwest of Perth, Australia. They are located between the Christmas Islands and the Indonesian islands.
- Captain William Keeling of the British East India Company found the islands in 1609. Later, the islands were used for coconut plantations before becoming British territory in 1955.
- The islands have a population of about 600 people, the majority of whom are Malay.
- Language: Although English is the official language of the islands, the population also speaks Malay.
- The islands' economy is built on tourism, coconut plantations, and fishing.
- The islands have a tropical climate, with temperatures ranging from 24 to 32 degrees Celsius all year.
- Flora and fauna: The islands are home to a diverse range of flora and fauna, including several bird, crab, and sea turtle species.
- Malay traditions and practices have had a significant impact on the culture of the islands. The majority of the population is Muslim, and Islamic holidays are widely celebrated.

Army may build Bailey bridges in Kaziranga

Context:

The Army may assist in the construction of Bailey bridges in the Kaziranga National Park and Tiger Reserve to allow forest guards to move more quickly in strategic, vulnerable regions of the one-horned rhino realm.

Points to Ponder:

- The Indian Army has been asked to assist the Kaziranga National Park and Tiger Reserve in building three Bailey bridges within the park.
- The bridges would replace flood-prone timber structures in the park's most vulnerable locations and increase communication in inaccessible places.
- The bridges will be between 30 and 100 meters long and 4 meters broad.

- The request was submitted during the Eastern Command chief's recent visit to Kaziranga.
- The Army will assess the proposal's practicality and decide how to proceed.
- The bridges are expected to aid cooperation among forest rangers stationed at anti-poaching stations throughout the park.
- There are 223 anti-poaching camps in Kaziranga, many of which are swamped during floods.

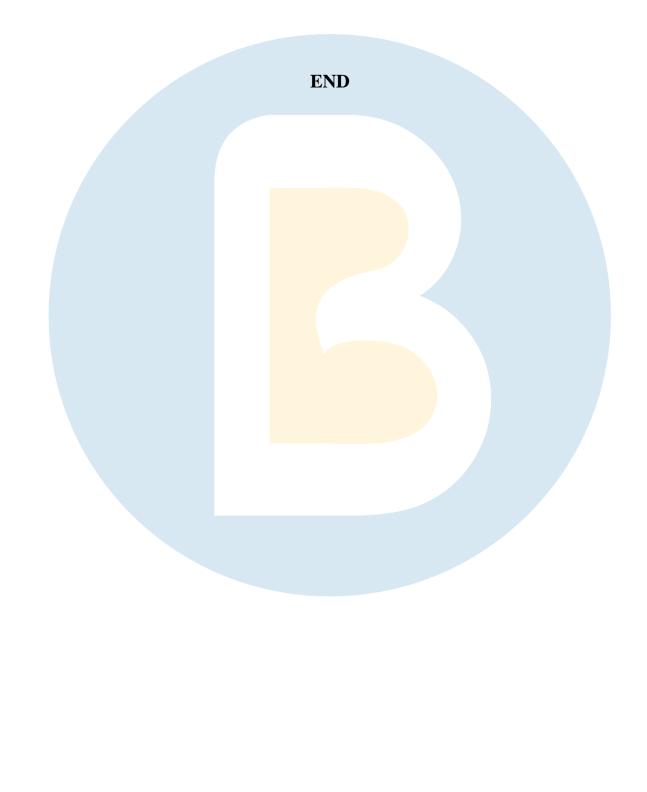
Kaziranga National Park

- Kaziranga National Park is a UNESCO World Heritage Site located in the Indian state of Assam.
- The park is 889.51 square kilometres in size and is home to the world's largest population of one-horned rhinoceroses.
- Other endangered species found there include tigers, elephants, wild water buffalo, and swamp deer.
- Kaziranga is located on the floodplains of the Brahmaputra River, which floods every year during the monsoon season.



- The park was founded in 1905 to conserve the one-horned rhinoceros, which at the time was on the verge of extinction.
- Kaziranga is notable for its extensive biodiversity, with over 450 species of birds documented in the park, in addition to its animals

- Kaziranga is open to visitors from November to April, with December and January being the busiest months.
- The park provides elephant and jeep safaris, as well as bird watching and cultural visits to the surrounding villages.
- Kaziranga is a popular tourist attraction in India and is regarded as one of the best-managed national parks in the country.



Jews In India

Jews have been present in India for over 2,000 years, with the first Jewish settlers believed to have arrived in the city of Cochin (now Kochi) in the southern state of Kerala in the 1st century CE. Over the centuries, Jews have settled in various parts of India and have contributed to the country's cultural and religious diversity.

Context:

Jews in Andhra Pradesh are still waiting to migrate to Israel even after these many years.

Historical Context:

- The earliest Jewish settlers in India were believed to be traders from the Middle East who arrived on the Malabar Coast in the 1st century CE. These Jews are known as the Cochin Jews, and their community flourished in Kerala for centuries. Other Jewish communities, such as the Bene Israel and the Baghdadi Jews, settled in other parts of India over the years.
- The Jews first came to Telangana and then to Amaravati around 300 years ago. Only Machilipatnam in the Krishna district and Kothareddypalem near Chebrolu in the Guntur district are home to the Telugu Jewish population.
- The residents of the village consider themselves to be "Bene Ephraim," one of Israel's lost tribes.

Cultural Contributions:

• Jews in India have made significant cultural and religious contributions over the centuries. The Cochin Jews, for instance, developed a unique Jewish tradition that incorporated Indian customs and practices.

The Bene Israel, who settled in the state of Maharashtra, developed a



distinct style of Jewish worship and music that was influenced by Indian culture. **Present-Day Community**:

Today, there are estimated to be around 5,000 Jews in India, most of whom live in Mumbai, the capital of Maharashtra. The Jewish community in India is small but active, with several synagogues, schools, and cultural organizations. Cochin Jews are India's oldest Jewish community, with roots that are said to

extend back to King Solomon's time. The Cochin Jews settled in South India's Kingdom of Cochin, which is today part of the state of Kerala. Benjamin of Tudela mentions Jews in southern India as early as the 12th century. They are credited with creating Judeo-Malayalam, a variant of the Malayalam language.

Challenges: Like other minority communities in India, Jews in India face some challenges, including discrimination and the threat of communal violence. However, the Indian government has been supportive of the Jewish community, and India has maintained diplomatic ties with Israel since 1992.

Jewish Tourism: India is also a popular destination for Jewish tourists, who come to visit historical Jewish sites such as the Paradesi Synagogue in Kochi, the Magen David Synagogue in Mumbai, and the Bene Israel Cemetery in Pune. The Indian government has encouraged Jewish tourism as a way to promote cultural exchange and tourism in the country.

Vaikom, a satyagraha, and the fight for social justice

Context:

The Vaikom temple street entry movement in Kerala, with a resonance in Tamil Nadu, is a struggle that set India on the path of equality and justice for all.



Points to ponder:

- The Vaikom temple street entry movement was a non-violent protest that aimed to end the prohibition imposed on backward communities from using the roads around the Vaikom Mahadeva temple.
- The movement was launched in 1924 and sustained by leaders such as T.K. Madhavan, K.P. Kesava Menon, and George Joseph, with the support of the Kerala Congress and on the advice of Mahatma Gandhi.
- The committee against untouchability, supported by the Kerala Congress, began the demonstration on March 30, 1924, with three people from different communities barred from accessing the temple streets to flag off the satyagraha. Police detained the leaders, resulting in a power vacuum.
- As a result, Periyar was asked to head the demonstration. As a token of gratitude, Periyar was bestowed with the title "Vaikom Veerar" by the writer and editor of the Tamil magazine Navashakti and scholar Thiru. vi.Kalayanasundaram.
- Some of the upper classes supported the Vaikom campaign. Mahatma Gandhi arrived as well to mediate between the government, protestors, and conservative Hindus.
- Tamil Nadu was crucial in the Vaikom Satyagraha, which represented a fight by the "untouchables. "However, they were met with oppressive measures.

Over 603 days

- The Sahara motion, which was put to a vote in the Assembly in February 1925, was rejected by one vote. Mahatma Gandhi met with the Queen of Travancore, Narayana Guru, a social reformist, and W.H Pitt, the police commissioner.
- Satyagrahis announced disengaging from the protests on November 17.
- The government of Travancore released a royal declaration that people could enter three of four streets around Vaikom temple thus bringing an end to the protest.

Other similar movements

• Ev Ramasamy, also known as Periyaar, was an Indian social worker and lawmaker who founded the Dravidar Kazhagam and the Self-Respect Movement. He is referred to as the "Father of the Dravidian Movement." In Tamil Nadu, he fought against Brahminical supremacy, as well as gender and cast inequality.

About EV Ramasamy

- Periyar was born in Erode, Tamil Nadu, in 1879. He was born into a wealthy family of landlords and received a good education.
- In the early part of his career, Periyar worked as a court clerk and later became involved in the Indian National Congress.
- However, he became disillusioned with the Congress's approach to social reform, particularly their focus on achieving independence from British rule rather than addressing social issues within Indian society.
- In the 1920s, Periyar began to focus on the rights and issues of the lower castes, who were often oppressed and discriminated against by the upper castes. He believed that the caste system was a major obstacle to social progress and worked to eradicate it.
- Periyar founded the Self-Respect Movement in 1925, which aimed to promote self-respect and self-esteem among the lower castes. He also advocated for the rights of women, who were often marginalized and oppressed in Indian society.
- In the 1930s, Periyar became increasingly focused on the idea of Dravidian identity, which emphasized the distinct culture and history of the Dravidian-speaking people of South India. He believed that the Tamil language and culture were under threat from the dominance of Hindi and Sanskrit, and worked to promote Tamil and Dravidian culture.

- Periyar founded the Dravidar Kazhagam political party in 1944, which became a major force in Tamil Nadu politics. He also launched several newspapers and magazines to promote his ideas.
- Periyar was a controversial figure and his ideas and actions sometimes drew criticism. However, he is widely regarded as a key figure in the Dravidian movement and a champion of social justice and equality. Today, he is remembered as a great social reformer and his legacy continues to inspire many people in Tamil Nadu and beyond.

Punjab — beware the Ides of March

Context:

Three decades after sectarian warfare decimated Punjab, the radicalise threat appears to be resurfacing. Eddies of this are already obvious in places of the world where the Sikh diaspora is concentrated. Sectarian violence is not uncommon in India, but it is unclear why Sikh radicalism has recently found a fresh lease on life. The appearance of a self-styled Sikh extreme preacher, Amritpal Singh, who models himself on Bhindranwale of old, could thus be viewed as a cover for something with deeper origins.

Points to Ponder:

- The author observes that, after three decades of relative calm, Sikh extremism appears to be returning in countries with a sizable Sikh diaspora.
- The author feels that the recent rise of Amritpal Singh, a self-styled Sikh extreme preacher, is a cover for something with deeper roots.
- The author contends that the current security regime in India has failed to learn from past failures, particularly the Bhindranwale phenomena, which might have been contained well before 1984 if managed effectively.
- The author emphasizes the need for competitive intelligence in dealing with the current scenario and says that intelligence agencies may have missed indicators of growing fear among parts of Sikh youth and discontent among the Sikh peasantry.
- The author contends that blaming the current violence on the drug mafia with ties to Pakistan is only a proximate explanation and that there may be deeper causes at work.
- The author urges introspection to evaluate whether there are early symptoms of a resurrection of the idea of Khalistan within the country

and cautions against viewing current events as evidence of a foreign conspiracy.

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Background on Khalistan Issue

- The Khalistan issue is a Sikh separatist movement that seeks to establish an independent state in the Punjab region called Khalistan.
- Its roots can be seen in India's independence and subsequent Partition, which resulted in communal violence and the relocation of millions of people, including Sikhs.
- The Punjabi Suba Movement and the Anandpur Sahib Resolution, which requested greater autonomy for Punjab, fuelled the movement.
- Under the leadership of Jarnail Singh Bhindranwale, who took up residence in the Golden Temple and founded the Dharam Yudh Morcha, the movement grew violent in the 1980s.
- In 1984, the Indian government began "Operation Blue Star" to clear out terrorists from the Golden Temple and bring Bhindranwale to justice. The raid caused significant damage to the Golden Temple and resulted in the deaths of several terrorists and bystanders.
- Following Operation Blue Star, there was communal violence and a longrunning insurgency in Punjab that lasted until 1995.
- The movement failed to achieve its goal for a variety of reasons, including harsh police crackdowns, factional infighting, and Sikh disillusionment.
- Today, the movement is fuelled by vote bank politics, socioeconomic issues including unemployment and drug misuse in Punjab, and non-state actors' backing.

• The movement continues to elicit sympathy and support from segments of the Sikh people, particularly the Sikh diaspora.



Operation Blue Star

- The Indian government began Operation Blue Star in 1984 to clear out extremists from the Golden Temple complex in Amritsar, Punjab.
- Jarnail Singh Bhindranwale's growing influence and violent activities, including attacks on government officials and battles with police, prompted the operation.
- The Indian Army organized and carried out the operation, which included a multi-day siege of the Golden Temple complex.
- The operation caused extensive damage to the Golden Temple complex, including the desecration of the Akal Takht, a sacred Sikh monument.
- Many terrorists and civilians were slain in the raid, including Bhindranwale, who was murdered in the crossfire.
- Following Operation Blue Star, Punjab and other parts of India saw major riots and rioting, as well as a wave of killings of government officials and Sikh leaders.

The aftermath of Operation Blue Star

- Following Operation Blue Star, there were significant riots and violence in Punjab and other parts of India. The destruction of the Golden Temple complex, which is regarded as the holiest landmark in Sikhism, enraged Sikhs all over the world.
- The death of Prime Minister Indira Gandhi on October 31, 1984, by two of her Sikh bodyguards sparked an anti-Sikh pogrom in which hundreds of Sikhs were killed in Delhi and other regions of India. The violence lasted several days and is regarded as one of the deadliest instances of communal violence in Indian history.
- The Indian government cracked down on Sikh separatists in Punjab, resulting in a protracted insurgency in the state. Thousands of individuals, including militants, civilians, and security officers, were killed during the conflict, which lasted until the mid-1990s.
- Human rights organizations chastised the Indian government for its handling of the crisis in Punjab. There have been allegations of human rights breaches by security personnel, including torture, extrajudicial killings, and disappearances.
- The fallout from Operation Blue Star and the Punjab insurgency has longterm consequences for the relationship between Sikhs and the Indian state. Many Sikhs are still upset over the government's conduct during this time.
- The Khalistan movement, which aspires to establish an independent Sikh country, is still active, though it has lost a lot of support and impetus in recent years. A variety of causes, including political and economic grievances among Sikhs in India and abroad, are fueling the movement.

Colonial Past

Even years after the empire's downfall, the commentary discusses the impact of colonialism. If we look at the world picture as a whole, then we can see a lot of remains of the colonial past that are still affecting us.

Context

- Colonial authority is no longer a topic of discussion in the public sphere, either at home or abroad.
- However, the effect of colonialism has been and continues to be felt by nations worldwide.

• In comprehending the problems and dangers it has left behind, colonialism remains a crucial element.

Impacts of colonialism



Improper departure by the colonial powers: These colonial powers occupied the countries for looting their wealth and exited the country without any proper backup to fill in the vacuum. These kinds of exits can be seen in Afghanistan, Africa,

India, etc. These countries plunged into chaos. For example, when India and Pakistan were divided, the partition cost more lives.

The lines drawn by the Britishers like the Mcmohan line and Radcliff still create struggles at the border.

- Arise in the conflicts between African nations: When the colonial powers ruled over Africa, these countries were promised the colonial powers more land and resources. And when they left these countries, these African countries started getting into civil wars.
- Social divide: One of the main weapons in the hands of the colonial powers is to divide the society so that they don't have to face a unified

group. To do that, they used to divide society based on sex, religion, caste, etc. For example, they divided the people based on the Belgian classification of Hutus and Tutsis in Rwanda Burundi. Similar situations were seen in Sri Lanka in the cases of Sinhalese resentment of Sri Lankan Tamils.

- Socio-Political: The colonial powers made sure that the old customs and rituals are destroyed so that the youths don't remember their history. The boundaries were drawn by them still create civil wars which lead to massacres.
- Governance: These countries were so rich in minerals and diamonds. When the colonial powers invaded and conquered these countries, they started depleting these countries of their resources. By the time they got independence, these countries were so underdeveloped.

The goal of building a popular Dalit agenda

Bhimrao Ramji Ambedkar

- Bhimrao Ramji Ambedkar (April 14, 1891, Mhow, India—December 6, 1956, New Delhi), was the leader of Dalit (Scheduled Castes; historically known as untouchables) and First law minister of the Indian government (1947-51).
- He developed his leadership among Dalits, started various publications on their behalf, and was successful in getting special representation for them in the government's legislative councils.
- He authored What Congress and Gandhi Have Done to the Untouchables (1945) in response to Mahatma Gandhi's claim to speak for Dalits (or Harijans, as Gandhi referred to them).
- Ambedkar was appointed as India's law minister in 1947. He played a key role in the creation of the Indian constitution, which prohibited discrimination against untouchables and effectively guided it through the legislature. He resigned in 1951, dissatisfied with his lack of power in the cabinet.

Ambedkar's vision for social justice



• Ambedkar thought that contemporary institutions and democratic processes could provide a channel for marginalised socioeconomic groups to effectively express their problems.

• He thought that policies like job reservations and Dalit participation in legislative bodies would help to democratise political power and establish Dalits as

powerful shareholders in modern institutions.

- Ambedkar thought that non-political public spaces, including educational institutions, media, culture, and the arts industries, should be democratized for Dalits to play an effective role as entitled citizens.
- He wanted the state to take effective steps to foster a sensitive public culture and to punish criminals who engaged in caste or community-based prejudice.
- Ambedkar also maintained that modernity should not be appreciated only for elevating untouchables to a separate category that requires ongoing assistance from the state.
- Instead, he desired that Dalits reject their burdened social identity (through Buddhism) and reduce their reliance on the state.
- Ambedkar saw Dalits as the natural leaders of historically disadvantaged populations.

Dalit assertion

- Dalit public engagement has centred on demands for social dignity, independent cultural rights, and political power.
- Affirmative action measures have enabled a sizable Dalit population to emerge as a critical element of the mainstream middle class, allowing them to reap the benefits of city life.
- The advent of the Bahujan Samaj Party (BSP) in the 1980s was made feasible by the Dalit middle class's unwavering support.
- Dalits have established themselves as proponents of alternative cultural ideals, democratizing the public realm.
- Ambedkar's life-size monuments are now obvious markers of Dalits' dignified presence in public settings in various cities.

- To demonstrate their higher sense of equality and dignity in public life, Dalits plan stunning public events like Constitution Day celebrations, birth anniversaries of revolutionary icons, and enormous rallies at historic places.
- Dalits have seen their marginalization grow in electoral struggles. With the BSP's recurrent collapse as a commendable major party in Uttar Pradesh, the option of governing the country under Dalit-Bahujan leadership has vanished.
- Dalit social and political mobilization is outstanding in states such as Maharashtra, Bihar, Telangana, and Tamil Nadu, but these have limited capacity to challenge the dominance of nationalist parties, particularly the BJP juggernaut at the Centre.

Way Forward for Upliftment

- Affirmative action policies and reservations should be strengthened and expanded to enable greater representation and access to opportunities for historically marginalized groups.
- Create powerful, inclusive social movements capable of effectively advocating for Dalit rights and interests and challenging prevailing power systems.
- Through comprehensive legal and social reforms, address the core causes of caste-based discrimination, violence, and atrocities, and ensure that perpetrators are held accountable for their acts.
- Encourage a culture of diversity, inclusiveness, and tolerance in all aspects of society, including education, the media, and public debate.
- Encourage Dalits and other marginalized communities to participate and lead at all levels of governance and decision-making, including political parties, civil society organizations, and governmental institutions.
- Encourage the creation of alternative economic models that support longterm, fair growth, particularly in rural areas where many Dalits live and work.
- Address the intersectional concerns affecting Dalit women, LGBTQ+ people, and other marginalized Dalit groups.
- Ensure that the values of social justice, equity, and inclusion are embedded in all government, civil society, and private-sector policies and programs and that they are properly implemented and monitored.

Global Buddhist Summit in Zemithang

Context:

Zemithang, the first stop of the 14th Dalai Lama during his flight from Chinaoccupied Tibet in 1959, hosted a major Buddhist conference on April 17.



Points to Ponder:

- On April 17, Zemithang served as the venue for a significant Buddhist conference put on by the Indian Himalayan Council of Nalanda Buddhist Tradition (IHCNBT).
- Zemithang is a settlement and the final circle's administrative centre that borders Tibet and Bhutan. It is situated in the Pangchen Valley, 96 km away from Tawang, the district's administrative centre.
- The 14th Dalai Lama made the town his first stop during his 1959 departure from Tibet, which was under Chinese occupation. Beijing disputes it as Tibet's boundary as well.
- Around 600 people from all around India, including Tibetan spiritual leaders, attended the summit.
- Pema Khandu, the chief minister of Arunachal Pradesh, emphasised the significance of convening the summit in Zemithang because of its association with the 14th Dalai Lama.

- At the same time as he acknowledged Buddhism's global spread and resurgence in some historic places, Khandu emphasised the need to make it livelier and more related to Nalanda Buddhism.
- The locals are known as Pangchenpa, which is Tibetan for "people who gave up sin."

Global Buddhist Summit

- The Global Buddhist Summit (GBS) will take place in New Delhi, India, on April 20-21, 2023.
- The International Buddhist Confederation (IBC), the Ministry of Culture's grantee organisation, is helping to organise the summit.
- The two-day summit will focus on "Responses to Contemporary Challenges: Philosophy to Praxis."
- The summit's objective is to bring together eminent Buddhist professors and monks from various nations to talk about how Buddhist theory and ideas may be used to address modern problems.
- Buddha Dhamma and Peace, Buddha Dhamma: Environmental Crisis, Health and Sustainability, Preservation of Nalanda Buddhist Tradition, and Buddha Dhamma Pilgrimage, Living Heritage, and Buddha Relics will be the summit's four key discussion topics.
- There will be 151 Indian delegates, including 46 Sangha members, 40 nuns, and 65 laity from outside of Delhi, among the 173 participants from other countries, including 84 Sangha members.
- More than 30 ambassadors from foreign embassies will be among the almost 200 participants from the NCR region at the meeting.
- His Holiness Thich Tri Quang, the Supreme Patriarch of the Vietnamese Buddhist Sangha, and Prof. Robert Thurman will each give a keynote address for the academic and sangha sessions, respectively.
- The summit's goal is to investigate how the core principles of the Buddha's Dhamma might offer inspiration and direction in modern contexts that struggle with problems like technological breakthroughs, consumerism, depleted earth, and the quick disenchantment of society.
- The summit intends to create a venue for Dharma Masters and lay Buddhist scholars to explore the Buddha's teachings on compassion, peace, and harmony to advance world peace and harmony.
- To re-establish cross-cultural ties and look for similarities between Buddhist art and antiquity in various museum collections of the SCO countries, the Ministry of Culture and IBC recently hosted an international meeting of experts from the Shanghai Cooperation Organisation (SCO) nations on Shared Buddhist Heritage.
- The GBS-2023 is a similar attempt to involve the leaders and scholars of the worldwide Buddhist Dhamma in discussions about Buddhist and



Windsor Frame Work tackles NI Tensions

The Windsor Framework is a proposed post-Brexit legal agreement announced by the European Union and the United Kingdom on February 27, 2023. It is intended to alleviate the current Northern Ireland Protocol's difficulty of goods mobility between the European Union and the United Kingdom.



The background that led to Windsor Framework

- The Irish Free State was founded by the Anglo-Irish Treaty of 1921, but Northern Ireland remained a member of the United Kingdom.
- Tensions in Northern Ireland between Unionists and Republicans erupted into violence in the 1960s, resulting in over 3,500 deaths and the era known as "The Troubles."
- The 1998 Good Friday Agreement established power-sharing between the Republic of Ireland and Northern Ireland while respecting Northern Ireland's position as part of the United Kingdom.
- Brexit in 2016 posed a threat to the border between Northern Ireland and the Republic of Ireland, potentially reigniting tensions and violence.
- The Northern Ireland Protocol, agreed as part of the Brexit agreement in 2019, allows EU customs rules to apply in Northern Ireland to avoid a hard border with the Republic of Ireland.
- The Protocol caused difficulties between Northern Ireland and the rest of the United Kingdom since it established a de facto customs border in the Irish Sea, thereby cutting Northern Ireland off from the rest of the United Kingdom in terms of trade.
- As a solution to these commercial issues, the Windsor framework was agreed upon in 2022, allowing free trade between the United Kingdom

and Northern Ireland via green and red lanes for products, with fewer inspections and regulations for agri-food goods.

Trade tensions between the UK and the EU

- Trade difficulties between the United Kingdom and the European Union are the outcome of the United Kingdom's vote to leave the EU, which took effect on January 1, 2021.
- To replace the old economic relationship, which was based on the UK's membership in the EU, the UK, and the EU had to negotiate a new trade deal.
- Negotiations for a new trade agreement between the United Kingdom and the European Union were challenging, and it took several rounds of talks to reach an agreement.
- The trade agreement reached between the UK and the EU included several new trade barriers, such as customs checks and rules of origin requirements.
- The Northern Ireland Protocol, which was included in the trade agreement, sought to avoid a hard border between Northern Ireland (part of the United Kingdom) and the Republic of Ireland (an EU member state) by keeping Northern Ireland in line with some EU rules.
- The Northern Ireland Protocol's adoption caused trade interruptions and tensions in Northern Ireland, with some Unionists claiming that it created a hard border between Northern Ireland and the rest of the UK.
- Since then, the United Kingdom has sought to renegotiate portions of the Northern Ireland Protocol and the broader trade agreement with the EU, particularly under the Windsor framework, to lower economic obstacles and restore sovereignty to Northern Ireland inside the United Kingdom.

Resolving the tension

The Windsor framework is a step towards easing trade issues between the United Kingdom and the European Union caused by the Northern Ireland Protocol, and it tries to restore Northern Ireland's place inside the United Kingdom. It remains to be seen, however, whether it will resolve all existing trade issues in the region. Consider the following points:

- The Windsor framework allows for free trade between the United Kingdom and Northern Ireland by establishing green and red lanes for products entering Northern Ireland, with fewer checks and controls for green lane goods and full checks and restrictions for red lane goods.
- The framework also allows food shops to transfer agri-food through the green lane and lifts the ban on some chilled meats from the United

Kingdom being sold in Northern Ireland, potentially increasing the availability of British goods in Northern Ireland markets.

- However, the new arrangement may face political backlash from hardline Tory Brexiteers who object to the continued application of some EU customs rules in Northern Ireland. Objections may also centre on the 'Stormont brake,' an emergency measure that allows Northern Ireland's devolved government to halt the implementation of new EU laws.
- To implement some sections of the framework, the UK and the EU will need to approve new laws, including suggested regulations on the control of pharmaceutical trade and animal and plant checks.
- Ultimately, which EU rules will be adopted in Northern Ireland and which will not be determined by the province's power balance between Unionists and Republicans.
- As a result, while the Windsor framework represents a realistic compromise with the EU, it may not fully resolve all existing trade difficulties and conflicts in the region.

India -Bangladesh Friendship Pipeline

Points to Ponder:

- It is a cross-border energy pipeline that transports high-speed diesel from the Numaligarh Refinery in Assam, India to the Bangladesh Petroleum Corporation's Parbatipur storage in northern Bangladesh.
- The pipeline can transport 1 million metric tonnes per year (MMTPA) of high-speed diesel. (HSD).
- It is India and Bangladesh's first cross-border energy pipeline.
- The pipeline was built at an estimated cost of Rs 377 crore, with the Bangladesh component of the pipeline costing around Rs 285 crore, which was financed by the Government of India through grant assistance.
- The project is being carried out in collaboration with India's Numaligarh Refinery Limited and Bangladesh's Meghna Petroleum Limited.
- The pipeline will initially bring High-Speed Diesel to seven districts in northern Bangladesh, eventually providing a consistent supply of diesel to all 16 northern districts in Rangpur and Rajshahi.
- It will ensure quick delivery of fuel at a low cost, lowering transportation costs from USD 8 per barrel to around USD 5 per barrel and reducing transportation time to just one hour, as opposed to the current situation of transporting diesel over several days via wagons and trawlers.

• The India-Bangladesh Friendship Pipeline is expected to strengthen bilateral energy security cooperation and accelerate Bangladesh's

PM MODI AND PM HASINA JOINTLY INAUGURATE THE INDIA-BANGLADESH FRIENDSHIP PIPELINE development. Benefits for India

• The pipeline will provide an alternative and dependable route for transferring diesel to Bangladesh, reducing reliance on congested and expensive road and canal transit.

• The pipeline will assist Numaligarh

Refinery Ltd in expanding its market in Bangladesh while also opening up a new market for Indian oil businesses.

- The pipeline will strengthen India's strategic position in South Asia and aid in the development of stronger commercial links with Bangladesh.
- The pipeline will increase India's energy security and provide a safe and steady market for Indian petroleum products.

Benefits for Bangladesh

- The pipeline will ensure a consistent supply of fuel to Bangladesh's northern area, which is now reliant on expensive and inefficient modes of transportation.
- The pipeline will minimize the time and expense of transporting diesel, making it more affordable for consumers and reducing the strain on the national exchequer.
- The pipeline will assist Bangladesh in diversifying its energy sources and reducing its reliance on a single supply.
- The pipeline will help to build infrastructure and industry in northern Bangladesh, boosting economic growth and creating job opportunities.

Sri Lanka's Key ambulance service, gifted by India, seeks adoption

Context:

"Will you adopt a 1990 Suwaseriya ambulance and help save lives?" — bold letters screamed in a half-page advertisement in Tuesday's edition of Sri Lanka's top business daily. The economic conditions in Sri Lanka have worsened and they are finding it difficult to maintain the ambulance services.

Points to ponder:



- The 1990 ambulance service was first launched in 2016 with 88 ambulances in Sri Lanka's Western and Southern Provinces, with an Indian grant of \$7.56 million.
- Within a couple of years, the service expanded island-wide with an additional Indian grant of \$15.09 million.
- After the initial training of some 700 technicians in India, the service has been run entirely by Sri Lanka as a semi-government, not-for-profit organization under the Ministry of Health.
- Currently, the service operates a fleet of 297 ambulances that provide a critical response to medical emergencies across all nine provinces of Sri Lanka.

- While India's grant played a crucial role in the initial launch and expansion of the 1990 ambulance service in Sri Lanka, the recent appeal for finances to keep the ambulance service afloat has been made entirely by Sri Lanka, as the service is now being run by the Sri Lankan government as a semi-government, not-for-profit organization.
- The Treasury is unable to completely finance its activities due to the present fiscal situation, which may lead to the service becoming untenable in 2023. The Sri Lankan government is asking businesses and people to "adopt an ambulance" for LKR 5 million each.

Operation Kaveri

Context:

- On 15 April 2023, an armed confrontation between competing groups of Sudan's military government erupted. Clashes erupted across Sudan, primarily in the west, as well as in the capital city of Khartoum and the Darfur area.
- Due to clashes between two military factions, over 3,000 Indians are stranded in various parts of Sudan.
- The Hakki Pikki clan is now distributed throughout Khartoum and the western Sudanese Darfur region.
- According to a few stranded members of the community, the whole population of the African country is estimated to be around 300 individuals, including women and children. Around 250 are in Khartoum, while 33 are in Darfur, where a civil war has raged for years.



Situation in Sudan

• Intense skirmishes erupted in mid-April 2023 between Sudan's military and the country's largest paramilitary group, the Rapid Support Forces (RSF).

• The riots were precipitated by a power struggle between the military regime's two main groups, with the

Sudanese armed forces supporting Gen Abdel Fattah al-Burhan and the

RSF supporting former warlord Gen Mohamed Hamdan Dagalo, known as Hemedti.

- The power struggle dates back to the years preceding the 2019 uprising that deposed autocratic ruler Omar al-Bashir, who amassed formidable security forces that he purposefully pitted against one another.
- Bashir established the RSF to defeat a Darfur insurgency that began more than 20 years ago as a result of Sudan's central government's political and economic marginalisation of the local population.
- Bashir converted the Janjaweed, which eventually became the RSF, into a semi-organized paramilitary force in 2013 and awarded their commanders military titles before dispatching them to quash a revolt in South Darfur and then shipping many to fight in Yemen, and later Libya, in the conflict.
- The RSF, led by Hemedti, and the regular military forces, led by Burhan, worked together to depose Bashir in 2019.
- The power-sharing agreement with the people who spearheaded the protests against Bashir, which was expected to usher in a transition to a democratic administration, was shattered by a coup in October 2021.
- Hemedti, who has amassed enormous money from the illicit mining of gold and commands tens of thousands of battle-hardened veterans, backed the new transition plan, bringing tensions with Burhan to the surface.
- The continuous violence has prompted concerns about Sudan's and the region's stability, as well as the human rights of people affected by the conflict.

Rapid Support Forces (RSF)

- Sudan's Rapid Support Forces (RSF) is a security unit that was established in 2013.
- The RSF grew from the Janjaweed, an infamous militia that began in the early 1980s as armed nomadic tribes in western Sudan.
- The Janjaweed began ravaging communities and creating havoc and gained international notice after being accused of genocide against the Fur, Masalit, and Zaghawa peoples in 2003.
- An estimated 2.5 million people were displaced, and 300,000 were killed.
- General Mohamed Hamdan Dagalo, better known as Hemedti, commands the RSF, which has a reputation for violence and human rights violations.
- The RSF was founded to combat insurgents in the Nuba Mountains, although it was later recognised as an autonomous security force in 2017.
- During pro-democracy rallies in 2019, the RSF played a key role in deposing President Omar al-Bashir, and it engaged in a power-sharing arrangement with the army to pave the way for democratic elections.

- However, the RSF and army conducted another coup in 2021, thereby halting the transition to a democratically elected government.
- The RSF's history of violence, combined with its current position of power in Sudan, is reason for alarm among human rights activists and the international community.

Operation Kaveri



- Operation Kaveri is India's evacuation mission to bring back its citizens stranded in Sudan amid severe fighting between the army and a rival paramilitary force.
- The Indian Navy's INS Sumedha, a stealth offshore patrol vessel, and two Indian Air Force C-130J special operations aircraft are on standby at Jeddah for the operation. INS Teg will also assist INS Sumedha in its rescue efforts.
- Under Operation Kaveri, the first wave of stranded Indians were evacuated from Sudan. In a tweet, Ministry spokesperson Arindam Bagchi announced that the INS Sumedha, carrying 278 people, had left Port Sudan for the Saudi Arabian city of Jeddah.
- Sri Lanka has also asked India for assistance in evacuating Srilankans from the conflict zone.

Other Similar Missions

Year	Operation	Purpose	No people saved
1990	Kuwait Airlift	Before the Persian Gulf War in 1990, the operation was carried out to evacuate Indian expats from Kuwait.	More than 170,000 Indian citizens evacuated.
2006 2015	Sukoon Maitri	During the 2006 Lebanon War, the Indian Navy launched the mission to evacuate Indian, Sri Lankan, and Nepalese people, as well as Lebanese nationals with Indian wives, from the fighting zone. In the aftermath of the	2,280 people were evacuated from Lebanon Over 43000 Indians
		April 2015 Nepal earthquake, the government of India and Indian armed forces launched Operation Maitri in Nepal.	were evacuated, and over 150 international tourists were evacuated, with 785 foreigners receiving transit visas.
2022	Ganga	The Indian government launched Operation Ganga to rescue its people who were stranded in neighbouring nations following Russia's invasion of Ukraine in 2022.	Approximately 25,000 Indian nationals were evacuated. 147 people from 18 different nations were evacuated.

Rebuilding Lives After War

• Safety and security: They are the top priorities for persons who have been evacuated from a combat zone. This could include providing them with temporary housing, food, and medical care.

- Psychological Support: Many persons who have been evacuated from a combat zone may be suffering from trauma, anxiety, or other mental health difficulties. They must have access to psychological care, counselling, and treatment.
- Rehabilitation: People who have been evacuated from a war zone may have had to leave behind their homes, families, and employment. As a result, it is critical to give them education and work possibilities for them to reconstruct their life.
- Integration and Inclusion: After being evacuated from a combat zone, people may feel alone and excluded in their new surroundings. It is critical to assist them in integrating into their new communities and feeling included.
- legal and administrative aid: Individuals who have been evacuated from a combat zone may have lost their documents, such as identification papers, birth certificates, and passports. They must receive legal and administrative aid to obtain the necessary paperwork to restore their lives.

A crucial six months for India-U.S. ties

Context:

The next six months will be critical for India-US relations. After a two-year wait, the United States officially named its next Ambassador to India, Eric Garcetti, in March. Prime Minister Narendra Modi is slated to visit the United States in June, and US Vice President Joe Biden is expected to visit India later this year for the G20 conference. In addition, the two countries will participate more actively in forums such as the G20, Quad, and I2U2.

Points to Ponder:



the United States' position on China.

Divergence and convergence:

• The US and India have disagreements on a variety of issues, including India's position on the Ukraine crisis and

- Despite opposition from the rest of the world, particularly the United States, India has not broken ties with Russia. Russia has portrayed India and China as partners in a recent foreign report provided by the Kremlin.
- Until September, India will hold the presidency of the Shanghai Cooperation Organization, which also comprises China and Russia.
- The North Atlantic Treaty Organization's overtures to India will be closely monitored as it seeks more participation from New Delhi.
- The India-US Initiative on Critical and Emerging Technological intends to extend the two countries' strategic technological alliance and defence industrial cooperation.
- The Indo-Pacific Partnership, aims to promote regional security and economic progress by increasing trade and investment and improving connectivity. The engagement includes a variety of efforts, such as joint military exercises, security information exchange, and collaboration on economic and infrastructure development projects.
- The growing desire to shift supply chains away from China and towards India.
- The United States-India Strategic Energy Partnership intends to improve collaboration in areas such as energy security and access, as well as climate change.
- The relevance of space technology and the two countries' collaboration in tackling climate change.

Ups And Downs

- The India-US relationship has seen its ups and downs throughout the years. The nuclear accord, market liberalisation, and the outsourcing of Indian techies to US firms are a few crucial points in the relationship. Indian Americans are among the most prosperous immigrants in the United States. To reclaim its global position, India requires the expertise, skills, and investment of its diaspora.
- Previously, the Green Revolution, sponsored by the United States, had changed India from a food-shortage economy to one with surplus food. The United States has also played a significant role in transforming India into an IT superpower. Today, a big number of people of Indian heritage work for Silicon Valley corporations.
- The United States and India are also partners in the fight against climate change. This includes a variety of efforts such as renewable energy promotion, joint research and development projects, and investment in renewable energy infrastructure. The importance of space technology is likewise shared by the two countries.
- There was once a trust gap between India and the United States. It is hoped that confidence between the two countries would grow in the

following months. Indians believe that the United States has shifted its support away from India and towards Pakistan. Furthermore, the American withdrawal from Afghanistan does not inspire trust in the United States as a reliable partner. The United States, on the other side, has raised concerns about terrorism, human rights, and democracy in India.

• The India-US relationship has had its ups and downs, but both countries are allies in addressing climate change and recognise the value of space technology. Despite differences and hurdles, the two countries can gradually strengthen their strategic alliance.

India to bridge the language gap with Neighbours

Context:

- India is looking to expand its cultural footprint in nations with which it has historical ties, including those in its immediate neighbourhood. To facilitate better people-to-people exchanges, India plans to create a pool of experts in languages spoken in countries such as Myanmar, Sri Lanka, Uzbekistan, and Indonesia.
- The Indian Council for Cultural Relations (ICCR) has planned a special project dubbed 'The Language Friendship Bridge,' which will train five to ten people in each of these countries' official languages.

Points to Ponder:

- Myanmar, Sri Lanka, Uzbekistan, and Indonesia have historical relations with India.
- The Indian Council for Cultural Relations (ICCR) is planning a project named "The Language Friendship Bridge" to build a pool of experts in these countries' official languages.
- The ICCR has designated ten languages to train individuals in, including Kazakh, Uzbek, Bhutanese, Ghoti, Burmese, Khmer, Thai, Sinhalese, and Bahasa.
- With only a handful of institutes teaching the languages on the ICCR list, India has focused on acquiring European and major Asian economies' languages.
- The ICCR is in contact with universities, institutes, and language experts to determine the best way to carry out the initiative.

- The project might be carried out by collaborations with instructors from these countries coming to teach courses in India or by providing scholarships to Indian students to study these languages in the countries where they are spoken.
- A good cultural setting is required to fully learn a language, and language experts should be properly exploited.
- There is an increasing need for a pool of translators and interpreters to help with medical tourism.
- Following the project's launch, the ICCR intends to discuss increasing the present list of languages.

Universities can help with the Language Friendship Bridge project:

- The ICCR is in discussions with universities and institutes to determine the best way to carry out the project.
- Jawaharlal Nehru University, Delhi University, the English and Foreign Languages University in Hyderabad, Banaras Hindu University, and the Mahatma Gandhi Antarrashtriya Hindi Vishwa Vidyalaya in Wardha are all being consulted on the project.
- Universities can provide language courses in the ten languages on the ICCR list to interested students.
- Universities can work with institutions in the countries where these languages are spoken to help students study the language through exchange programs or scholarships.
- Experts in these languages can use universities to teach courses, conduct research, and share their knowledge and skills with students and scholars.
- Universities can assist in promoting the project and raising awareness among students, scholars, and the general public about the necessity of learning these languages and increasing cultural exchange between India and other nations.

Growing demand for language experts:

- India is broadening its cultural footprint in nations with which it has historical relations and intends to establish a pool of language experts to promote greater people-to-people exchanges.
- As a result, the Indian Council for Cultural Relations (ICCR) has developed a special project dubbed 'The Language Friendship Bridge,' which aims to train people in 10 languages spoken in countries such as Myanmar, Sri Lanka, Uzbekistan, and Indonesia.
- The expansion of cultural and economic relations between India and its neighbouring nations is boosting the demand for language

experts who can enable communication between India and these countries.

- For example, India is seeing an increase in medical tourism, with patients travelling from Turkey, Bangladesh, Afghanistan, and the Maldives for treatment. As a result, there is an urgent need for a pool of translators and interpreters to assist with their trips.
- To fulfil this expanding need, colleges and institutions are being consulted on project implementation methods, and experts believe that the list of languages should be expanded beyond the existing ten to include other languages in demand.
- The project's launch this year will be followed by conversations about increasing the current list of languages, underlining the future need for more language experts.

Why have key oil producers vowed output cuts?

Context:

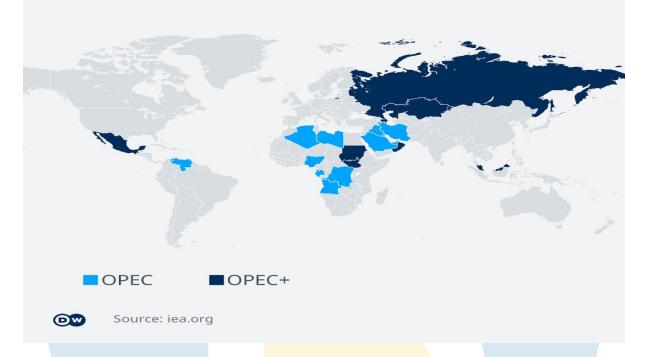
Saudi Arabia, Iraq, the United Arab Emirates, and Russia have all agreed on curbs on oil output that will begin in May and run through the end of 2023. Crude oil prices immediately rose in response to the announcement.

Points to Ponder:

OPEC+

- The Organization of Petroleum Exporting Countries (OPEC) is a permanent international organization founded on September 10, 1960, in Baghdad by Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela.
- The goal of OPEC is to coordinate and integrate petroleum policy among its member countries to provide fair and stable prices for petroleum producers, an efficient, economical, and consistent supply of petroleum to consuming nations, and a fair return on capital for those investing in the business.
- According to the Statute, "any country with a significant net export of crude petroleum and fundamentally similar interests to those of Member Countries may become a Full Member of the Organization if accepted by a majority of three-fourths of Full Members, including the concurring votes of all Founder Members."

• OPEC+ was founded in 2016 when OPEC joined forces with other oilproducing nations. Russia, Kazakhstan, Azerbaijan, Mexico, and Oman are among the ten new members of OPEC+. The decision to form OPEC+ was made in response to decreasing crude oil prices, which were exacerbated in part by a massive rise in US shale oil output since 2011.



OPEC+ members in 2022

OPEC+ countries cutting crude oil production

- The fundamental goal of OPEC+ production cutbacks is to support market stability by lowering global crude oil oversupply, which has resulted in low oil prices and income losses for oil-producing countries.
- The restrictions were made in reaction to several issues, including reduced oil demand owing to the COVID-19 epidemic, geopolitical tensions, and concerns about a potential economic downturn.
- In addition to these variables, Russia declared a 500,000-barrel-per-day reduction after Western countries limited the price of its petroleum in reaction to the Ukraine conflict. Russia's plan to reduce output was intended to restore "market relations" and support global oil prices.
- The voluntary output restrictions are part of a larger strategy to regulate global oil supply and demand. Since 2016, OPEC+ members have coordinated production cuts to stabilize oil prices and minimize market volatility.

- The current wave of production cuts supplements those announced in October 2022 and shows OPEC+'s continuous efforts to balance the global oil market.
- The impact of the production cuts on oil prices and the global economy remains unpredictable and will be determined by several factors, including global demand for oil, geopolitical developments, and OPEC+ countries' ability to meet production targets.

Impacts on India

- India is significantly reliant on imported crude oil, and any increase in global oil prices as a result of production reduction might have an impact on the country's economic and energy security.
- Due to geopolitical circumstances, India's crude oil imports from Russia have increased, and any disruption in supply might have a substantial impact on India's energy demands.
- If the output cuts raise world oil prices, it could lead to higher inflation and higher expenses for Indian businesses and consumers.
- To meet its energy needs, India may need to investigate alternate crude oil sources, which could result in higher costs and competition with other countries.
- The impact on India's economy will be determined by the duration and extent of the production cuts, as well as the global oil market's reaction to these cuts.
- To achieve energy security, India may need to increase domestic production, diversify import sources, and invest in renewable energy sources.

Finland's Journey, from Neutral to NATO

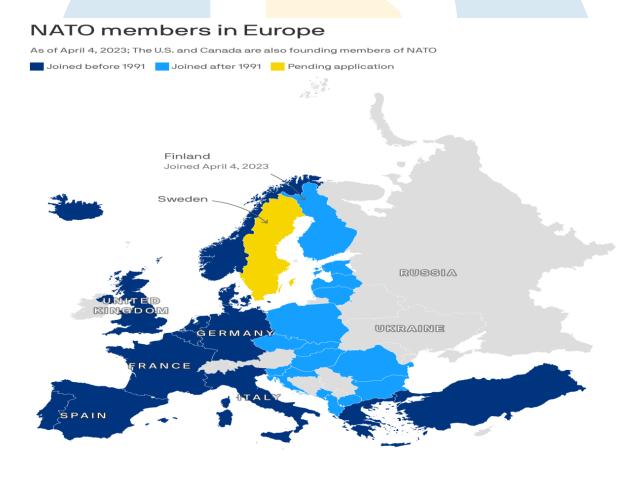
Context:

- After applying in May, Finland became the 31st country to join The North Atlantic Treaty Organization (NATO) on April 4, 2023.
- Dmitry Peskov, a Kremlin spokesman, replied to Finland's NATO membership by saying, "Naturally, this forces us to take countermeasures to ensure our own tactical and strategic security."
- An option for to join NATO for Finland could have been to build its own military capabilities and pursue greater collaboration with other European countries through structures such as the CSDP and NORDEFCO

Points to Ponder:

why Finland has chosen to remain neutral:

- Finland's fundamental goal is to ensure its security and territorial integrity. Finland avoids becoming involved in any disputes or wars with other countries by remaining neutral.
- Independence: Finland values its independence and sovereignty, and remaining neutral allows it to pursue its own foreign policy without being influenced or influenced by other countries.
- excellent relations: By being neutral, Finland is able to retain excellent relations with both Western and Eastern countries, which is critical to its economic and political interests.
- Domestic politics: Neutrality is popular among the Finnish people, and political parties have historically maintained it.



The Paasikivi Line:

Former Finnish President Juho Kusti Paasikivi devised the Paasikivi Line as a foreign policy strategy. After WWII, the strategy attempted to influence Finland's foreign policy decisions and ties with the Soviet Union.

- During the Continuation War between Finland and the Soviet Union in 1944, the Paasikivi Line was established.
- The plan was founded on the notion that Finland needed to keep good relations with the Soviet Union in order to avert another conflict and defend its own sovereignty.
- The Paasikivi Line urged for Finland to adopt a neutrality and nonalignment policy, which meant that Finland would not join any kind of military coalitions or take sides in the Cold War.
- The plan also contained the concept of "Finlandization," which referred to Finland's willingness to make compromises to the Soviet Union in order to maintain positive ties and avoid conflict with the Soviet Union.
- The Paasikivi Line was successful in improving Finland's relationship with the Soviet Union, which helped to stabilize the region and prevent another war.
- The strategy remained in place until the end of the Cold War, and Finland continued to maintain a policy of neutrality and non-alignment even after the collapse of the Soviet Union.

Russian Response on Finland joining NATO

- Russia has promised to strengthen its military presence in the region in response to Finland's membership in NATO.
- Russia also stated that Finland's decision to join the West has violated a long-standing peace treaty between the two nations dating back to the Cold War.
- Russia has expanded military exercises in the Baltic Sea region, notably near the borders of Finland. Some have seen these manoeuvres as a show of might and an attempt to scare Finland and other neighbouring countries.

The way forward:

• Diplomacy: Finland and Russia could cooperate diplomatically to enhance their ties. They might convene high-level talks to examine their

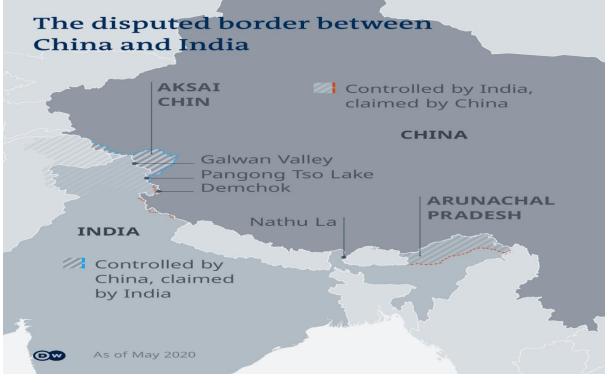
differences and explore ways to collaborate on mutually beneficial themes.

- Confidence Building Exercises: Finland and Russia could implement efforts to build trust in order to lessen tensions and strengthen trust between the two countries. Increased communication and transparency about military activity, joint military exercises, and cultural and educational exchanges could be among these initiatives.
- Economic collaboration: Finland and Russia could deepen their ties by increasing economic cooperation. Trade deals, joint investment ventures, and increased tourism could all fall under this category.
- Regional cooperation: Finland and Russia might collaborate in regional organisations like the Arctic Council to handle similar concerns and improve regional stability.

India's borders are safe, can't be violated: Shah

Context:

Home Minister Amit Shah claimed during a visit to Arunachal Pradesh that no country can grab even an inch of Indian territory, as he launched a village development scheme in the country's easternmost border community.



Points to Ponder:

- Arunachal Pradesh, a state in northeast India, was visited by Home Minister Amit Shah, who launched the 4,800-crore Vibrant Villages Programme. (VVP).
- The Village Development Program (VDP) will be implemented in 2,967 villages across 19 districts in four border states (Arunachal Pradesh, Sikkim, Uttarakhand, and Himachal Pradesh), as well as the union territory of Ladakh.
- The program would provide villagers with road connectivity, financial services, electricity, LPG, drinking water, employment, toilets, and digital access.
- The program's goal is to encourage individuals to stay in border areas and improve their health. People residing along the Line of Actual Control (LAC), according to the Home Minister, are considered the first line of defence.
- During his visit, the Home Minister also spoke to a public gathering, declaring that no country can seize even an inch of Indian territory. He lashed out at China, which had lately attempted to rename many locations in the state, arguing that India's borders were secure and could not be crossed even if the land measured only "the tip of a needle."
- The Chinese Foreign Ministry protested the visit by stating that it was an infringement on Chinese territory. They said that Indian authorities' activities in the area violate China's sovereignty and territorial sovereignty, and are detrimental to peace and tranquillity in the border regions.
- In the past, China has opposed visits by Indian ministers, which the government has refused.
- The Home Minister's visit comes just a week after Beijing announced plans to "rename" 11 locations in the north-eastern state in a move to claim the entire state.
- The Indian Ministry of External Affairs has not responded to the Chinese Foreign Ministry's statement.
- The Home Minister promised people "city-like" infrastructure and services within three years, as well as environmental and energy security and tourism promotion in border communities.

Vibrant Villages Programme (VVP)

• The Union Cabinet has approved the Vibrant Villages Programme (VVP) for the fiscal years 2022-23 to 2025-26.

- The plan intends to develop communities in blocks along the country's northern border, enhancing the quality of life for individuals living in specified border villages.
- The scheme's financial allotment is Rs. 4800 crores.
- The development of critical infrastructure and the establishment of livelihood possibilities in 19 districts and 46 border blocks in four states and one territory along the country's northern land border would aid in achieving inclusive growth and retaining the population in the border areas.
- The scheme is intended to identify and develop economic drivers based on the local natural and human resources of the border villages on the northern border, as well as to develop growth centres based on a "Hub and Spoke Model" through the promotion of social entrepreneurship, youth, and women's empowerment through skill development and entrepreneurship, leveraging tourism potential through the promotion of local cultural, traditional knowledge, and heritage, and the development of sustainable ecology.
- The district government will build vibrant Village Action Plans with the assistance of Gram Panchayats, guaranteeing 100% saturation of Central and state initiatives.
- The scheme's goals include all-weather road connectivity, potable water, 24x7 energy, mobile and internet access, tourism centres, multi-purpose facilities, and health and wellness centres.
- The project will not conflict with the Border Area Development Programme.
- 2500 crore rupees of the Rs. 4800 crores budgetary allocation would be utilized on roads.

Saudi Arabia's Quest for strategic autonomy

Context:

- For many years, the kingdom's animosity towards Iran was the primary motivator of Saudi foreign policy. However, last month, Saudi Arabia announced a deal to normalize diplomatic relations with Iran, mediated by China.
- Furthermore, there were allegations that Russia was mediating discussions between Saudi Arabia and Syria, which could result in the latter re-joining the Arab League before the next summit. Earlier this

week, a Saudi-Omani delegation travelled to Yemen to negotiate a durable truce with the Houthi rebels.

• Saudi Arabia is likewise attempting to strike a balance between the United States, its major armaments supplier, Russia, its OPEC-Plus partner, and China, the region's rising superpower.

Points to Ponder:

- Saudi Arabia, which formerly had an aggressive foreign policy focused on increasing its regional dominance and resisting Iran, is now pursuing a more conciliatory approach.
- Previously, the Saudis funded rebel groups in Syria and launched a bombing campaign against Iran-backed Houthi rebels in Yemen, respectively.



Recent events, however, indicate a shift in Saudi Arabia's strategy. For example, it announced a pact to normalize diplomatic relations with Iran and dispatched a delegation to Yemen to negotiate a durable truce with the Houthi rebels.

• According to other sources, Russia is mediating discussions between Saudi Arabia and Syria, which could result in Syria re-joining the Arab League before its next meeting in May.

- These shifts are most likely the result of a mix of causes, including the failure of past strategies, the shift in US priorities away from the region, and China's ascent as a new superpower in the region.
- Despite these changes, Saudi Arabia is not abandoning its connection with the United States, which remains the region's top weapons supplier and security partner.
- Instead, Saudi Arabia is attempting to fill the void left by US policy shifts by strengthening relationships with Russia and China and mending connections with regional nations without fully abandoning the US.
- These developments have far-reaching consequences for the region. Saudi Arabia's normalization negotiations with Syria, for example, or its talks with the Houthis, cannot be seen in isolation from the larger picture of the Saudi-Iran reconciliation.
- If successful, these diplomatic efforts could result in a more stable and peaceful area, with fewer proxy conflicts and better inter-country collaboration.

What do Russia-China and Saudi-Iran deals mean for India?

- The deepening of Russia-China ties could represent a challenge for India, as the country has historically had strong connections with both Russia and China and has also had a history of conflict and rivalry with China. India would have to strike a careful balance between its interests and connections with both countries.
- The effects on India could be noticed in the energy and defence sectors. China's ambitions for higher imports may result in increased competition for energy resources, while China's procurement of the S-400 before India may raise concerns about India's defence capabilities' security.
- The new front created by the Russia-China alliance and the Iran-Saudi Arabia agreement may make the G-20 consensus more difficult. India will have to strive harder to reach an agreement with all parties involved.
- The agreement between Iran and Saudi Arabia could be beneficial to India because both countries are supportive of one another.
- However, the fact that China brokered and is a guarantee of the Iran-Saudi Arabia agreement may make both countries lean closer toward Beijing. This may provide significant hurdles for India, particularly considering China's growing involvement in the region.
- With China's expanding influence, India's poor relationship with Iran, caused by the cancellation of oil supplies, reduced investment in Chabahar, and the I2U2, could worsen. This may make it more difficult for India to avoid Pakistan and fulfil its connectivity objectives.

• Connectivity between India via Chabahar and Russia via the INSTC could be restricted. To guarantee that its connectivity aspirations are not jeopardized, India will need to collaborate with all parties involved.

Myriad woes

Context:

The junta, which is renowned for attacking civilians, conducted air strikes on an opposition rally in the rebel-held Sagaing district on Tuesday, killing over 100 people, including women and children.

Points to Ponder:

- Myanmar's military dictatorship has conducted airstrikes on opposition meetings, killing civilians as well as opposition militants.
- The battle between the regime and the National Unity Government (NUG) and its armed branch, the People's Defence Force (PDF), as well as ethnic militias, has devolved into a civil war.
- The administration holds the majority of population centres but has lost large swaths of territory to the opposition, necessitating the deployment of air strikes as a tactic.
- Regional powers including Russia, China, and India have given the regime implicit support, while the Association of Southeast Asian Nations (ASEAN) has submitted a five-point peace plan that the regime has refused to engage with.
- Restoring democracy under a federal constitutional order is the only long-term and just option.
- Regional powers and the international community must employ economic and political pressure to push the dictatorship to negotiate and share power with the opposition.
- Sanctions and other economic and political pressure can be used to accomplish this.
- A peaceful resolution is critical for Southeast Asia's stability, and regional and international parties must not view the crisis as Myanmar's internal problem.



Background on Myanmar's political unrest

- Myanmar, commonly known as Burma, was ruled by a military dictatorship from 1962 until 2011, when former general Thein Sein began transitioning to a quasi-civilian government.
- However, the transition was partial, since the military retained enormous power and influence over the government and the country's institutions.
- In the country's first free and fair elections in decades, Aung San Suu Kyi's National League for Democracy (NLD) won a resounding win in 2015.
- Despite being excluded from the presidency due to a constitutional provision, Suu Kyi, a former political prisoner, and Nobel winner became the country's de facto leader.

- The world community chastised Suu Kyi's government for its treatment of ethnic minorities, particularly the Rohingya Muslim minority in Rakhine province.
- Over 700,000 Rohingya refugees were forced to flee to neighbouring Bangladesh in 2017 as a result of a military campaign in Rakhine state.
- Despite the criticism, the NLD won a landslide victory in the 2020 elections, but the military called the results into question, claiming voter fraud.
- The military staged a coup in February 2021, arresting Suu Kyi and other key government officials and proclaiming a state of emergency.
- Protests and civil disobedience erupted after the coup, but the military responded with deadly crackdowns, murdering hundreds of citizens.
- In reaction to the coup, opposition organizations founded the NUG, which has subsequently been recognized as Myanmar's legitimate government by various countries.
- The battle between the regime and the NUG and its armed branch, the People's Defence Force (PDF), as well as ethnic militias, has devolved into a civil war.

India's Stand on this issue

- India's present pro-democracy position is a departure from its earlier prodemocracy stance, motivated by a desire to balance China's influence and suppress insurgencies along the Indo-Myanmar border.
- After Myanmar acquired independence in 1948, India and Myanmar were once close allies, but their ties deteriorated following Myanmar's military revolution in 1962.
- In 1988, India sided with pro-democracy camps, chastised the junta, provided material support to democracy campaigners, and established refugee camps in areas populated by political activists.
- In the 1990s, India's foreign policy evolved from Nehruvian idealism to realism, and its attitude towards Myanmar shifted from pro-democracy to pro-military.
- India's present strategy prioritizes security and political reasons over democratic values, and the country has made no statement on the coup or formally recognized the results of the 2020 elections.
- The reason for India's change is to offset China's influence in Myanmar and to restrain rebel groups in north-eastern India that it accuses China of aiding.
- India believes that building a strong relationship with Myanmar will serve its interests better in the long run, and the Tatmadaw's inability and unwillingness to respond to India's concerns means that India would lose relatively little by endorsing the country's democratically elected leaders.

Way forward

- Increased international pressure: The international community, including regional countries and organizations such as the UN, should impose economic and political pressure on the regime to negotiate and share power with the opposition.
- Negotiation and dialogue: The regime should be urged to engage in dialogue with the opposition, especially the NUG, to find a peaceful settlement to the crisis.
- ASEAN's five-point peace plan implementation: All sides should implement and support the ASEAN plan to cease hostilities and begin the inclusive discussion.
- Demobilization and disarmament: Both the regime and opposition organizations should be urged to disarm and demobilize their fighters.
- Humanitarian assistance and support: Humanitarian assistance and support should be provided to people impacted by the conflict, particularly refugees and internally displaced persons (IDPs), as well as to local organizations offering assistance.
- Engagement and negotiation with ethnic minority groups: Engaging and negotiating with ethnic minority groups with long-standing grievances with the central government is critical to achieving long-term peace.
- Accountability and justice: The regime and opposition organizations must be held accountable for human rights breaches, and victims and their families must be granted justice.

LoC Agreement Of 2007

Context:

Although events prevented an agreement from being reached, the reality remains that the LoC is an idea that has survived the test of time, circumstances, and drastic transformations in the India-Pakistan equation.

Points to Ponder:

• Former Special Envoy Satinder Lambah reveals that an agreement on the Line of Control (LoC) in Kashmir, intended to make borders irrelevant, was ready to be signed by then-Prime Minister Manmohan Singh and Pakistan President General Musharraf, but was shelved due to the 2007 Pakistani judiciary standoff and the 2008 Mumbai attacks.

- The agreement comprised a 14-point list of rules that included open trade, the abolition of cross-border terrorism, the protection of human rights, and the reduction of military presence on both sides of the LoC.
- The current state of India-Pakistan relations is bleak, with no political interaction, trade, direct travel links, or High Commissioners in each other's nations.
- However, the relationship's long arc always veers towards engagement, and the two parties are said to have negotiated a series of answers that would lead back to quasi-normalcy.
- The next step would be to revisit the nearly-completed deal from 15 years ago, which Lambah claims was legally validated but was affected by India's decision to abolish J&K's special status and statehood on August 5, 2019. However, these actions may not change the basis for a J&K dispute settlement.
- However, the back-channel process between India and Pakistan has continued and focuses on preventing hostilities, as it did follow the downing of an Indian Air Force pilot in Pakistan in 2019, the LoC ceasefire agreement of 2021, or the aftermath of an Indian Air Force live missile accidentally launched into Pakistan in March 2022.
- According to reports, the two sides have discussed a series of actions that would lead to a return to
 - quasi-normalcy, including
 - the restoration of statehood and elections in J&K,
 - the reappointment of High Commissioners, and
 - the restoration of visas and people-to-people contacts.
- There have been discussions about efforts such as the Kartarpur Corridor and a "Sharda Peeth Corridor" across the temple in Pakistan-occupied Kashmir's Neelum Valley.
- The next step could be to revisit the nearly completed deal from 15 years ago, which attempted to make the Line of Control obsolete by treating it as a normal border between the two countries. This deal was legally reviewed and might serve as the foundation for resolving the J&K dispute, even if New Delhi tries to withdraw J&K's special status and statehood in 2019. Despite the two countries' current difficult relations, history reveals that the relationship always tends towards engagement.



Indo-Pak Relations

- Historical disagreements: India and Pakistan have a long history of territorial and political disagreements, notably the Kashmir issue.
- Border disputes: India and Pakistan's border is strongly militarised, and there have been numerous battles and skirmishes along the border throughout the years.
- Terrorism: India has accused Pakistan of backing terrorist organisations responsible for strikes on Indian soil.
- Nuclear weapons: Both India and Pakistan have nuclear weapons, heightening tensions between the two countries.
- Diplomatic tensions: The two countries' diplomatic relationship has been fragile, with regular accusations and counter-accusations of meddling in each other's affairs.

- Water disputes: India and Pakistan share several rivers, and there have been disagreements about water distribution and management.
- Cultural differences: India and Pakistan have diverse cultural identities, which has occasionally resulted in conflicts and misunderstandings between the two countries.

Way Forward

- Opening up avenues of communication is the most critical step in settling any problem. India and Pakistan should hold high-level meetings regularly to discuss their issues and concerns.
- Measures to boost confidence and decrease tensions: Both countries should implement ceasefire agreements and exchange cultural and sporting delegations to boost trust and reduce tensions.
- Trade and economic links: Increased trade and economic ties will benefit both India and Pakistan. Encouragement of cross-border commerce and investment could contribute to mutual trust and economic development in the region.
- People-to-people relations: Increasing people-to-people contacts, such as through tourism and cultural exchanges, can help to bridge the gap and enhance understanding between the two countries.
- Identifying and addressing the root sources of tension: Both India and Pakistan should endeavour to identify and address the root reasons for their difficulties, such as historical conflicts and terrorism. This might include engaging in conversation to find a long-term solution to the Kashmir problem as well as taking firm action against terrorist organisations.

END

India's Deep Ocean exploration

Context:

NIOT is set to spearhead a 6000-meter dive into the Indian Ocean with a mission to explore marine biodiversity and the potential of the sea bed.

Points to ponder:

- The National Institute of Ocean Technology (NIOT) is setting up a Samudryan mission to deploy an Indian team of up to 6000M.
- Only very few countries were able to achieve this deep-sea exploration. The countries that were able to do so are the US, China, France, Russia, and Japan.
- These explorations help in finding mineral signs of wealth like copper, gold rare earth elements, etc.
- It helps us to understand the biodiversity of the sea bed.
- These missions also help in mapping the ocean beds which helps in reducing exploitation and reducing damage.



Samudryan Mission

- This Indian initiative was launched in the year 2019 to conduct deep ocean exploration focused on India's special economic zones and continental shelf.
- The NIOT was established under the Ministry of Earth sciences in the year 1993 and headquartered in Chennai.
- The programs consist of various crewed and uncrewed submersibles tasked with exploring and mapping sea beds.
- One Of the primary sites of exploration would be at 29000 sq mi site at the central Indian Ocean basin.
- This site was allocated by the international sea bed authority to explore and extract polymetallic nodules on the sea bed.

- Matsya-6000 is an indigenous titanium-built submersible under development for this sole purpose.
- It will be deployed in deep seas with a three-person crew onboard and has the capability of making multiple trips each lasting 12 hours. This mission is scheduled to happen in 2025

Polymetallic nodules

- Polymetallic nodules are seafloor deposits.
- They are made up of a variety of metals, including iron, manganese, copper, cobalt, and nickel.
- They are potato-shaped and range in diameter from 2 to 10 centimetres.
- They are porous and black.
- Polymetallic nodules are thought to be the precipitate of hot fluids discharged through mineralized pathways from the deep interior of the oceanic crust.
- They are rich in rare earth minerals like gold, silver, and zinc.

Deposit in India

- The Indian Ocean contains polymetallic nodules, mainly in the Central Indian Ocean Basin (CIOB) and the southwestern part of the Bay of Bengal.
- The Indian Ocean is believed to contain over 380 million metric tonnes of polymetallic nodules, with the CIOB contributing to a large percentage of this resource.
- India is one of the countries currently investigating the economic mining possibilities of polymetallic nodules in the Indian Ocean.

Other Countries involved in Deep Sea diving

- Pacific Ocean: In addition to India, China, Japan, Korea, and Russia have been investigating the possibility of polymetallic nodules in the Pacific Ocean.
- Atlantic Ocean: The Atlantic Ocean is also known to have polymetallic nodules, although they are not as abundant as in the Pacific Ocean. Countries like Brazil and Germany have explored the potential of these nodules in the Atlantic.
- The Indian Ocean has polymetallic nodules as well, and various countries, notably India, China, and Japan, have been exploring the region for mineral resources.

• The Arctic Ocean is another prospective location for polymetallic nodules, and countries such as Russia and China have expressed interest in researching this region.

ISRO launches 36 One Web Satellites



Points to ponder:

 LVM3 (GSLV Mark-3) is the Indian Space Research Organization's largest payload rocket, which carried 36 One Web satellites on board
 This is Network Access Associates

operation under a contractual arrangement with New Space India Ltd (NSIL) to launch 72 satellites into low earth orbit. (LEO).

• The current mission called for the 43.5-meter-tall, 643-tonne spacecraft to put 36 One Web Gen-1 satellites totalling about 5,805 kg into a 450-kilometre circular orbit with an inclination of 87.4 degrees.

Helicopter cannot go into a tailspin

Context: Recent Helicopter crashes in Cochin and Mumbai.



Points to ponder:

- India's indigenous Advanced Light Helicopter ALH-Dhruv crashed near Mumbai after experiencing a "sudden loss of power and rapid loss of height.". In a separate incident, An Indian coast guard ALH MK-3 MR helicopter on a demonstration flight crashed at Cochin International Airport shortly after take-off from the airport's coast guard station.
- In the Mumbai mishap, the chopper floated upright thanks to safety floats that served their function. Rescue teams arrived quickly, and recovery teams used extra buoys to boost the helicopter's buoyancy. Floating cranes raised the copter cleanly and hauled it onshore. The safe result suggests that the expenditures in contemporary survival aids, crew training, search and rescue, and crash and salvage operations yielded excellent returns
- These Advanced light helicopters of the Indian Navy and coast guard were grounded until pending investigation.
- These are comparatively new aircraft, and the fleet cannot stay suspended for long because they provide a lifeline to security employees in many distant defence positions.
- If not addressed promptly, potential flaws in the design, production, quality control, or certification will have an impact on ALH's civil and export potential. It makes eminent sense for all parties to work on a war posture to address design and production failures

Possible Flaws

- Human error is responsible for more than 80% of all aviation mishaps worldwide. Major mishaps in the ALH fleet have been caused or ascribed to catastrophic failure or breakage in the flight control chain. Such mistakes are almost always disastrous.
- Thus, certification necessitates a degree of dependability and redundancy in these systems to avoid a significant breakdown throughout the fleet's lifespan. According to reports, the regulating authority, the Centre for Military Airworthiness and Certification (CEMILAC) in Bengaluru, has taken the Mumbai mishap and the ALH's control failings very seriously.

History

- The ALH is a multirole helicopter designed and developed by Hindustan Aeronautics Limited (HAL), an Indian aerospace company.
- It is a twin-engine helicopter that has been in service with the Indian Armed Forces since the 1990s.

- The ALH is designed to perform a variety of roles, including transport, utility, reconnaissance, and anti-submarine warfare.
- It can operate in a wide range of weather conditions and terrains, including high altitudes and hot temperatures.
- The ALH is equipped with advanced avionics and weapon systems, including a modern glass cockpit, night-vision imaging systems, and missile warning systems.
- It can carry a variety of weapons, including rockets, torpedoes, and machine guns.
- The ALH is used for both military and civilian purposes, including search and rescue, disaster relief, and offshore oil rig support.
- It has proved to be a reliable and versatile platform for a wide range of missions.

Army to get satellite will help provide missioncritical data

Context:

The Ministry of Defence (MoD) has signed three contracts worth ₹5,400 crore — two with Bharat Electronics Limited (BEL) worth ₹2,400 crores for procurement of Automated Air Defence Control and Reporting System 'Project Akashteer' for the Army and Sarang Electronic Support Measure (ESM) systems for the Navy. Another ₹2,963-crore contract is with NewSpace India Limited (NSIL), a Central Public Sector Enterprise under the Department of Space, for an advanced communication satellite, GSAT 7B, for the Army.



Points to ponder:

• The 'Project Akashteer' Automated Air Defence Control and Reporting system will provide the Indian Army's Air Defence units with a unique, cutting-edge capability to operate in an integrated manner.

- Akashteer will allow the Indian army to watch low-level airspace over battle regions and successfully manage Ground Based Air Defence Weapon systems.
- Sarang is an advanced Electronic Support Measure device for Indian Navy helicopters that was created and built in-house by the Defence

Electronics Research Laboratory in Hyderabad as part of the Samudrika project.

- Both initiatives will promote Indian electronics and associated sectors, including MSMEs that are BEL subcontractors, to participate. The scheme will also help to generate roughly two lakh man-days of employment over three years.
- The satellite will significantly improve the Indian Army's communication capacity by enabling mission-critical, beyond-line-of-sight contact with soldiers and divisions and weapon and aerial platforms. The geostationary spacecraft, the first of its kind in the five-tonne class, will be built entirely in India by Indian Space Research Organizations.

GPT-4 — a shift from 'what it can do to 'what its augurs'

Context:

The advent of large language models raises the question about building models that leave out society's concerns



Introduction:

- OpenAI has developed a new AI language model called GPT-4, which is an improvement over its predecessor GPT-3.5.
- GPT-4 can accept both text and image input and produce more creative and conversational language.
- The model can understand human emotions and describe images, benefiting the visually impaired.

Capabilities:

- GPT-4 can take into context up to 25,000 words, an improvement of more than 8x compared to GPT-3.5.
- It scored in the 90th percentile in a simulated bar examination and performed well in various courses in environmental science, statistics, art history, biology, and economics.
- However, it did not perform as well in advanced English language and literature.
- Its language comprehension surpasses other high-performing language models in English and 25 other languages, including Punjabi, Marathi, Bengali, Urdu, and Telugu.
- GPT-4 can potentially replace white-collar jobs, especially in programming and writing.
- The model has sparked discussions about the emergence of artificial general intelligence, which can excel at several task types and combine concepts.

Ethical concerns:

- GPT-4 is still prone to flaws, such as producing incorrect information and harmful biases and stereotypes.
- OpenAI has not been transparent about the inner workings of GPT-4, which has raised concerns about critical scrutiny and safety.
- The model has been trained on data scraped from the internet that may contain harmful biases and stereotypes, and OpenAI's efforts to fix these biases may not be sufficient.
- There is a potential for GPT-4 to be misused as a propaganda and disinformation engine, raising concerns about where the decision to not do the wrong thing should be born: in the machine's rules or the human's mind.
- OpenAI has made efforts to make GPT-4 safer to use but whether these efforts will be sufficient remains to be seen.

ISRO releases images of Earth captured by its EOS-06 satellite

Points to Ponder:

- Images of Earth taken by the EOS-06 satellite have been published by the Indian Space Research Organisation. According to the space agency, the pictures are mosaics created by the ISRO's National Remote Sensing Centre. (NRSC)
- On November 24, the ISRO launched the EOS-06 third-generation satellite in the Oceansat family aboard the PSLV-C54, along with eight Nano-Satellites.
- The EOS-06 is designed to collect ocean colour data, sea surface temperature data, and wind vector data for use in oceanography, climatology, and meteorology. The satellite also provides value-added services such as possible fishery zones based on chlorophyll, SST, and wind speed, as well as land-based geophysical parameters.



Earth Observation Satellites

- India has its series of Earth observation satellites called the Indian Remote Sensing (IRS) satellites.
- The IRS satellites are part of the Indian Space Research Organisation's (ISRO) remote sensing program and are used for natural resource management, disaster management, and environmental monitoring.
- The IRS satellites carry a range of sensors and instruments to capture data in various regions of the electromagnetic spectrum.
- The data collected by the IRS satellites is used for applications such as land use and land cover mapping, crop yield estimation, and forest cover monitoring.
- India's latest Earth observation satellite is the EOS-03, which was launched in August 2021.

• The EOS-03 satellite is equipped with a synthetic aperture radar (SAR) sensor and will be used for applications including disaster management, agriculture, forestry, and coastal zone monitoring.

What is the open-source seeds movement?

Context:

- The World Trade Organization was founded in 1994, and this ushered in a worldwide IPR regime for plant varieties. Concerns about the freedom to innovate were made by this consolidation of rights in the seed industry.
- Plant-breeders' rights and patents are the two types of IPR security that are available in agriculture. Together, they limit the freedom of farmers to create novel varieties using germplasm from varieties that have IP protection.
- Farmers-led seed distribution and conservation methods will result from



the open-source strategy used in the seeds industry. In India, farmers are involved in numerous efforts for the conservation and sharing of traditional varieties.

Points to ponder:

• Patents and plant producers' rights: Plant-breeders' rights (PBR) and

patents developed, especially in the US, as a result of the emergence of hybrid seeds, scientific plant breeding, and other factors. These privileges enable the owners to lawfully enforce intellectual property rights and demand royalties on seeds. (IPR). In some circumstances, the owners of the rights can also limit the unauthorized use of seeds to create new types.

- IPR security in agriculture: Plant-breeders' rights and patents are the two main forms of IPR protection in this industry. Together, they limit the freedom of farmers to create novel varieties using germplasm from varieties that have IP protection. The quantity of plant varieties with IP protection has grown as a consequence.
- High prices for genetically modified seeds and IP claims have given rise to several issues and problems, including the state's involvement in India's Bt cotton seed program. The demand for options increased as public-sector breeding decreased and the private sector took control of the seed industry.

- Open-source seeds: An alternative strategy that permits the unrestricted interchange and use of seeds is the open-source model for seeds and plant varieties. The approach, which encourages innovation and cooperation among farmers, researchers, and other stakeholders, is founded on the tenets of open-source software.
- Open-source seeds in India: The Centre for Sustainable Agriculture (CSA) in India has created an open-source model that involves a contract between CSA and the person or organization receiving the seed or genetic material. This strategy can be used by farmer-led seed conservation and distribution networks to encourage farmer participation in plant breeding activities and traditional variety conservation and sharing programs.
- Farmer varieties: Farmers in India who fulfil certain requirements may register "farmer varieties" under the Plant Variety Protection and Farmers' Rights Act of 2001. They are allowed to exchange, replant, and reuse seeds, but they are not allowed to breed or deal in varieties that are legally protected by the Act for profit.
- Benefits of open-source seeds: By encouraging experimentation, adaptation, and acceptance, open-source principles can assist in overcoming the shortcomings of conventional varieties. This model could support farmer-led efforts for traditional variety preservation and sharing as well as cooperative plant breeding, all of which would be advantageous for India's food security and climate resilience.

Awaiting lift-off into the Second Space Age

Context:

India's modest entry into the First Space Age, followed by several gains, should be utilized to assist the country in realizing its enormous potential in the Second Space Age.

Points to Ponder:

• The Space Age began in 1957 with the launch of Sputnik 1, and we are now in the Second Space Age, with private companies playing the majority of the roles.



The precise date of the second space age is unknown. However, it is largely agreed that it began between the 1950s and 1991, during the cold war between Russia and America.

India's space journey:

- The creation of the Indian National Committee for Space Research (INCOSPAR) in 1962 marked the start of India's space program.
- INCOSPAR was renamed the Indian Space Research Organization in 1972. (ISRO).
- Aryabhata, India's first satellite, was launched in 1975.
- The creation of the Indian National Committee for Space Research (INCOSPAR)With the launch of the Satellite for Television Experiment (SITE) in 1983, India became the seventh country to have a satellite in geostationary orbit.
- India successfully launched its first lunar mission, Chandrayaan-1, in 2008, which uncovered indications of water on the moon.
- In 2013, India launched its first interplanetary mission, the Mars Orbiter Mission (MOM), which successfully entered Mars orbit in 2014.
- ISRO broke the previous record of 37 satellites launched by Russia in 2014 by launching 104 satellites in a single mission in 2017.
- ISRO's Chandrayaan-2 project tried to land a rover on the moon in 2019, but the mission failed after the rover crashed during the landing attempt.
- The GSAT-7A, India's first dedicated military satellite, will enable secure communication with the Indian armed services in 2021.
- India's space program is expanding, with ambitions for trips to Venus, the sun, and beyond.

Space Potential

- Increased investment in space exploration and research could result in major economic growth and technological advancement in India.
- With a trained workforce and a track record of successful missions, India has the potential to become a major player in the global space business.
- ISRO, India's space agency, has already made substantial contributions to space exploration, including a record-breaking launch of 104 satellites on a single rocket in 2017.
- India has also participated in international space cooperation and partnerships with countries such as the United States, Russia, and France.
- Instead of relying on imports, India's focus on creating its space technology and capabilities could lead to increased self-sufficiency and strategic independence.
- With projects such as satellite-based telemedicine and e-governance services for rural areas, India has also proved its commitment to utilising space technology for social and economic development.
- Continued investment in space science and exploration may offer environmental benefits as well, such as monitoring climate change and natural disasters.

Creating an Enabling Environment:

- Policy support: The government should offer policy support for spacerelated enterprises and research, including financing and incentives.
- Education and training: A priority should be placed on teaching and training the workforce in the domains of space science, engineering, and technology.
- Investment in research and development is critical for advancing the state-of-the-art in space technology and exploration.
- Collaboration and partnerships: Partnerships among government agencies, academic institutions, and the private sector can stimulate innovation and offer resources for space-related endeavours.
- Infrastructure: A solid infrastructure, including launch sites, tracking and control stations, and communication networks, is required to support space activities.
- Regulatory framework: To assure safety, security, and conformity with international rules and regulations, a well-defined regulatory framework is required.
- The Indian private sector is responding to the Second Space Age's expectations. Their revenue is dependent on space-related operations, and they require a unique partnership with ISRO and the government. ISRO is now an operator, user, service provider, licensor, rule maker, and

incubator. It has led India through the First Space Age and now needs to focus on what it does best with its resources and high-quality workforce — research.

Prior infections driving dengue virus evolution in India

Context:

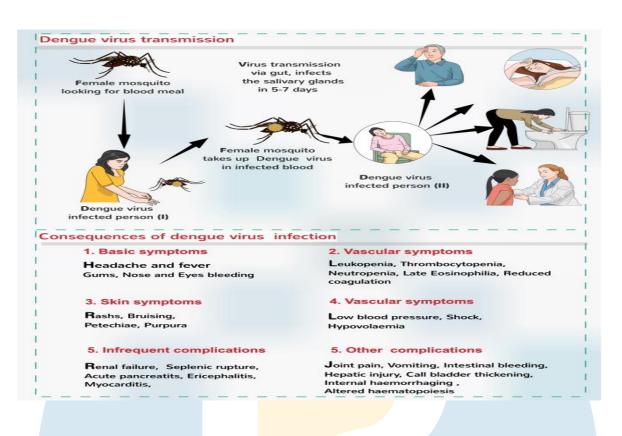
A team led by Dr. Rahul Roy from the Department of Chemical Engineering at the IISc conducted a detailed investigation of the virus diversity and evolutionary dynamics in India based on an analysis of 184 whole-genome dengue sequences and 408 E gene sequences from India spanning more than 60 years. They studied how viruses evolve from their forebears in the presence of serotypes.

Points to ponder:

- Dengue (DENG-gey) fever is a mosquito-borne sickness that occurs worldwide in tropical and subtropical locations. Mild dengue fever is characterized by a high fever and flu-like symptoms. Dengue hemorrhagic fever, often known as severe dengue fever, can result in severe bleeding, a precipitous drop in blood pressure (shock), and death.
- The article highlights a study led by Dr. Rahul Roy of the IISc's Department of Chemical Engineering that examined the virus diversity and evolutionary dynamics of the dengue virus in India.

The situation in South India

- South India is dominated by the DENV-4-Id lineage.
- This India-specific lineage is responsible for around 50% of infections in South India.
- According to the experts, the DENV-4-Id lineage will become prominent in North India as well.
- The divergence of envelope gene sequences of circulating dengue viruses in South India shows that all four serotypes are co-evolving.
- In South India, the E gene diverges from the original sequence for all serotypes, but this divergence varies throughout time.
- Virus evolution between serotypes has ramifications for vaccination efficacy.



Cross-Protection from Dengue Virus:

- When a person has been infected with one dengue virus serotype, he or she is protected from reinfection with the same serotype for some time.
- After two to three years, the protective effect of cross-protection against a serotype begins to decrease.
- Antibody-dependent enhancement (ADE) occurs when a person who has previously been infected with one serotype of the dengue virus gets infected with a second serotype. Because the antibodies from the prior infection facilitate the entry of the new virus into cells, ADE can result in more severe illness symptoms.
- Viruses that are related to but not identical to the serotype that caused the first infection have a greater propensity to cause severe disease by exploiting weaker immune responses.
- Due to the immunological selection pressure induced by past infections, a distinct Indian dengue lineage (DENV-4-Id) belonging to serotype 4 has emerged. (DENV-4).

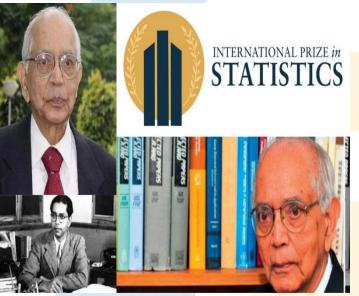
Ways to Prevent

• Remove standing water: Because dengue is spread by mosquitos that develop in stagnant water, it is critical to remove any sources of standing water around your home, such as flower pots, buckets, and old tires.

- Apply a mosquito repellent containing DEET, picaridin, IR3535, or lemon eucalyptus oil to exposed skin and clothing, especially during the day.
- Wear protective clothing: To avoid mosquito bites, wear long-sleeved shirts, pants, and socks.
- Use mosquito nets: If you sleep during the day when mosquitoes are most active, use mosquito netting over your bed.

C.R. Rao wins Nobel Prize equivalent in statistics

Context:



Calyampudi Radhakrishna Rao, an Indian-American statistician, has been awarded the 2023 International Prize in Statistics, the statistical equivalent of the Nobel Prize.

Points to Ponder:

• Calyampudi Radhakrishna Rao, an Indian-American statistician, has been given the 2023 International Prize in Statistics, which is the statistical

equivalent of the Nobel Prize.

- The prize is granted every two years to an individual or team who has made significant contributions to science, technology, and human welfare through the use of statistics.
- Rao's work has influenced economics, genetics, anthropology, geology, national planning, demography, biometry, and medicine, among other subjects.
- His seminal 1945 study, "Information and accuracy attainable in the estimation of statistical parameters," accelerated the development of contemporary statistics and its use in research.
- Rao was only 25 years old when he published this paper.
- He did his PhD in 1946-1948 at King's College, Cambridge University, under the supervision of Ronald Fisher, regarded as the father of modern statistics.

- One of Rao's papers in 1948 offered a novel generic approach to testing hypotheses, now widely known as the "Rao score test."
- As early as 1949, he contributed to orthogonal arrays, a concept in combinatorics used to create experiments with qualitatively good results.
- Rao spent four decades at the Indian Statistical Institute after joining there by chance after being unable to find a scholarship or a job elsewhere.
- His work has been lauded as influential and revolutionary, with some describing to him as "the person who did the most to continue [P.C.] Mahalanobis's work as a statistician leader in India."
- His contributions to statistics have had an impact on many sectors and are still relevant today, as indicated by his latest award.

PSLV-C55 mission

Context:

The Indian Space Research Organisation (ISRO), which is set to fly the Polar Satellite fly Vehicle C55 (PSLV-C55) mission on April 22, will conduct scientific experiments in orbit by utilising the spent PS4 (PSLV's fourth and final stage) as an orbital platform.

Points to Ponder:

- On April 22, the Indian Space Research Organisation (ISRO) will launch the PSLV-C55 mission, which will conduct scientific experiments using the expended PS4 as an orbital platform.
- The principal satellite for the project is the TeLEOS-2 satellite, which is being created in collaboration with DSTA (representing the Government of Singapore) and ST Engineering.
- The TeLEOS-2 satellite will fulfil the satellite imagery needs of several agencies within the Singapore government, providing all-weather day and night coverage with 1m full-polarimetric resolution.
- The Lumelite-4 satellite will also be aboard the PSLV-C55 mission.
- The PSLV Orbital Experimental Module (POEM) will be utilised to undertake seven experimental non-separable payloads.
- After satellite separation, the PS4 will be employed as a platform for experiments for the third time.
- The PSLV-C55 mission is a specialised commercial mission that launches both satellites into an eastward low-inclination orbit.

TeLEOS-2

- The TeLEOS-2 satellite is being developed in collaboration with DSTA (representing the Singapore government) and ST Engineering.
- Once installed and operational, it will be utilised to support the satellite imagery needs of various agencies within the Singapore government. TeLEOS-2 is equipped with a Synthetic Aperture Radar (SAR) payload.
- TeLEOS-2 will be capable of imaging at 1m full-polarimetric resolution and will provide all-weather day and night coverage.

LUMILITE-4

- A*STAR's Institute for Infocomm Research (I2R) and the National University of Singapore's Satellite Technology and Research Centre (STAR) collaborated on the LUMELITE-4 satellite.
- LUMELITE4 is a high-performance 12U satellite that will be used to demonstrate the High-Performance Space-borne VHF Data Exchange System (VDES).
- It plans to use the VDES communication payload developed by I2R and STAR's scalable satellite bus architecture to improve Singapore's e-navigation maritime safety and to aid the global shipping community.

POEM-2

- The mission includes the PSLV Orbital Experimental Module (POEM), which uses the discarded PS4 stage of the launch vehicle as an orbital platform to conduct scientific experiments using non-separating payloads.
- ISRO/Department of Space, Bellatrix, Dhruva Space, and Indian Institute of Astrophysics on the payloads