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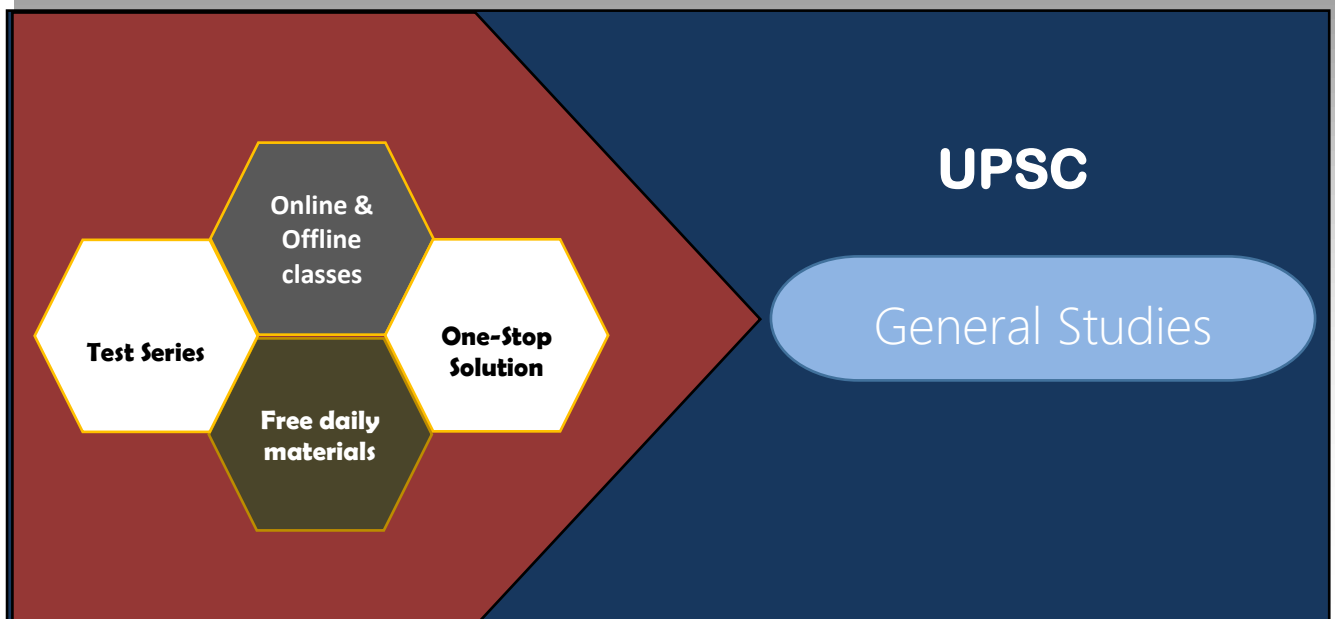
**Monthly current affairs magazine**

# **CURRENT AFFAIRS**

A MAGAZINE FOR CIVIL SERVICES PREPARATION

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**Articles of the day  
THE HINDU & INDIAN EXPRESS**



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## GS 1 : Heritage, culture ,Geography of the World and Society

### 1. IPCC releases part of the Sixth Assessment Report

The Intergovernmental Panel on Climate Change (IPCC) released the second part of its sixth assessment report. The first part was released in 2021.

#### What is IPCC?

- The IPCC, an intergovernmental body was established in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP).
- It was later endorsed by the UN General Assembly. Membership is open to all members of the WMO and UN.
- The IPCC produces reports that contribute to the work of the UN Framework Convention on Climate Change (UNFCCC), the main international treaty on climate change.
- The objective of the UNFCCC is to “stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic (human-induced) interference with the climate system.”

#### What are the Assessment Reports?

- Every few years, the IPCC produces assessment reports that are the most comprehensive scientific evaluations of the state of earth’s climate.
- Instead, it asks scientists from around the world to go through all the relevant scientific literature related to climate change and draw up the logical conclusions.
- So far, five assessment reports have been produced, the first one being released in 1990.
- The IPCC’s Fifth Assessment Report was a critical scientific input into the UNFCCC’s Paris Agreement in 2015.

#### Highlights of the recent report

- **Rapidly advancing climate change:** From the melting of the Greenland ice sheet to the destruction of coral reefs, climate related impacts are hitting the world at the high end much more quickly than previously assessed by the IPCC.

- **Limitations of technology:** The use of some technologies designed to limit warming or reduce CO<sub>2</sub> could make matters worse rather than better.
- **Impact of urbanization:** While large cities are hotspots for climate impacts, they also offer a real opportunity to avoid the worst impacts of warming.
- **Limited opportunity for mitigation:** The report has warned the opportunity for action will only last for the rest of this decade.

### Some projections of the first part of 6<sup>th</sup> Report

Apart from incorporating the latest available scientific evidence, the Sixth Assessment Report is also attempting to provide more actionable information to help governments take policy decisions.

- **Regional focus:** It is expected that this report would likely state what the scenarios for sea-level rise in the Bay of Bengal region is, not just what the average sea-level rise across the world is likely to be.
- **Rise of extreme events:** There is expected to be bigger focus on extreme weather events, like the ones we have seen in the last few weeks.
- **Vulnerabilities of urban areas:** Densely populated mega-cities are supposed to be among the most vulnerable to impacts of climate change. The report is expected to present specific scenarios the climate change impacts on cities and large urban populations, and also implications for key infrastructure.
- **Synergy of climate action is needed:** IPCC is expected to present a more integrated understanding of the situation, cross-link evidence and discuss trade-offs between different options or pathways, and also likely to cover social implications of climate change action by countries.

Here is what the previous assessment reports had said:

### First Assessment Report (1990)

- Emissions resulting from human activities are substantially increasing the atmospheric concentrations of the greenhouse gases.
- Global temperatures have risen by 0.3 to 0.6 degree Celsius in last 100 years. In business-as-usual scenario, temperatures likely to increase by 2 degree Celsius compared to pre-industrial levels by 2025, and 4 degree Celsius by 2100
- Sea-level likely to rise by 65 cm by 2100

This report formed the basis for negotiation of the UN Framework Convention on Climate Change in 1992.

### **Second Assessment Report (1995)**

- Revises projected rise in global temperatures to 3 degree Celsius above pre-industrial levels by 2100, sea-level rise to 50 cm, in light of more evidence.
- Global rise in temperature by 0.3 to 0.6 degree Celsius since late 19th century, “unlikely to be entirely natural in origin”.

This report was the scientific underpinning for Kyoto Protocol in 1997.

### **Third Assessment Report (2001)**

- Revises projected rise in global temperatures to 1.4 to 5.8 degree Celsius by 2100 compared to 1990. Projected rate of warming unprecedented in last 10,000 years.
- Rainfall will increase on an average. The report also predicts that by 2100, the sea level is likely to rise by as much as 80 cm from 1990 levels. Glaciers to retreat during the 21st century.
- Frequency, intensity and duration of extreme weather events to increase.
- Presents new and stronger evidence to suggest that global warming is mostly attributable to human activities.

### **Fourth Assessment Report (2007)**

- Greenhouse gas emissions increased by 70 per cent between 1970 and 2004.
- Atmospheric concentrations of CO<sub>2</sub> in 2005 (379 ppm) the maximum in 650,000 years.
- In worst case scenario, global temperatures could rise 4.5 degree Celsius by 2100 from pre-industrial levels. Sea-levels could be 60 cm higher than 1990 levels.

The report won the 2007 Nobel Peace Prize for IPCC and was the scientific input for the 2009 Copenhagen climate meeting.

### **Fifth Assessment Report (2014)**

- More than half the temperature rise since 1950 attributable to human activities.
- Atmospheric concentrations of carbon dioxide, methane and nitrous oxide “unprecedented” in the last 800,000 years.
- Rise in global temperatures by 2100 could be as high as 4.8 degree Celsius from pre-industrial times
- More frequent and longer heat waves “virtually certain”.
- “Large fraction of species” face extinction. Food security would be undermined.

This report formed the scientific basis for negotiations of the Paris Agreement in 2015.

## GS 2 : Polity, Governance, International Relations

### 1. Anti defection: Related issues

In its verdict in the Goa MLAs case, Bombay High Court has misread the 10th schedule of the Constitution, which was meant to prevent horse trading among legislators.

#### Understanding the Paragraph (4) of Tenth Schedule

- Paragraph (4) is an **exception to the Tenth Schedule's main provisions**.
- It operates only when the **defectors' original political party has merged with the party to which they have defected and two-thirds of the members of the legislature belonging to that party have agreed to the merger**.
- Under this provision, the merger of the original political party has to take place first, followed by two-thirds of the MLAs agreeing to that merger.
- The basic premise of the February 25 judgment is that sub-paragraph (2) is **distinct from the parent paragraph**, and a factual merger of the original political party is not necessary.
- This does not square with the content, context and thrust of **paragraph (4)**, which contemplates the factual merger of the original political party – in this case, the INC.
- The court's view – the merger of the 10 MLAs of the Congress Legislative Party with the BJP should be regarded as the Congress itself merging with the BJP – **goes against the letter and spirit of the Tenth Schedule, paragraph (4) in particular**.

#### Process for the merger: 2 conditions need to be satisfied

- **1] Merger alone is not enough:** The opening words of sub-paragraph (2) – “for the purposes of sub-paragraph (1) of this paragraph” – clearly mean that to exempt a member from disqualification on account of defection, and for considering this member's claim that he has become a member of the party with which the merger has taken place, **a merger of two political parties alone is not enough**.
- **2] Not less than 2/3 members should also agree:** Not less than **two-thirds of the members should also agree to such a merger**.



- The lawmakers made it tough for potential defectors to defect.
- The words “**such merger**” **make it clear** beyond any shadow of doubt that the merger of the original political party has to take place before two-thirds of the members agree to such a merger.
- The members of the legislature cannot agree among themselves to merge as the court has said, but they can agree to a merger **after it takes place**.

## Conclusion

The anti-defection law was designed to eliminate political defection. However, the judgment of the Bombay HC seems to assume that paragraph (4) of the 10th schedule is meant to facilitate defection. This judgment is likely to open the flood gates to defection. The Supreme Court must intervene quickly.

## 2. What is the International Court of Justice?

Ukraine has filed an application before the International Court of Justice (ICJ), instituting proceedings against the Russian Federation for committing Genocide.

### International Court of Justice

- The ICJ is the principal judicial organ of the United Nations (UN).
- It was established in June 1945 by the Charter of the United Nations and began work in April 1946.
- The court is the successor to the Permanent Court of International Justice (PCIJ), which was brought into being through, and by, the League of Nations.
- It held its inaugural sitting at the Peace Palace in The Hague, Netherlands, in February 1922.

### Its establishment

- After World War II, the League of Nations and PCIJ were replaced by the United Nations and ICJ respectively.
- The PCIJ was formally dissolved in April 1946, and its last president, Judge José Gustavo Guerrero of El Salvador, became the first president of the ICJ.
- The first case, which was brought by the UK against Albania over concerning incidents in the Corfu channel – the narrow strait of the Ionian Sea between the Greek island of Corfu and Albania.

### Seat and role

- Like the PCIJ, the ICJ is based at the Peace Palace in The Hague.

- It is the only one of the six principal organs of the UN that is not located in New York City.
- The other five organs are:
  1. General Assembly
  2. Security Council
  3. Economic and Social Council
  4. Trusteeship Council
  5. Secretariat
- The court as a whole must represent the main forms of civilization and the principal legal systems of the world.
- The judges of the court are assisted by a Registry, the administrative organ of the ICJ. English and French are the ICJ's official languages.

### **Jurisdiction of ICJ**

- All members of the UN are automatically parties to the ICJ statute, but this does not automatically give the ICJ jurisdiction over disputes involving them.
- The ICJ gets jurisdiction only if both parties consent to it.
- The judgment of the ICJ is final and technically binding on the parties to a case.
- There is no provision of appeal; it can at the most, be subject to interpretation or, upon the discovery of a new fact, revision.
- However, the ICJ has no way to ensure compliance of its orders, and its authority is derived from the willingness of countries to abide by them.

### **Judges of the court**

- The ICJ has 15 judges who are elected to nine-year terms by the UN General Assembly and Security Council, which vote simultaneously but separately.
- To be elected, a candidate must receive a majority of the votes in both bodies, a requirement that sometimes necessitates multiple rounds of voting.
- Elections are held at the UNHQ in New York during the annual UNGA meeting.
- A third of the court is elected every three years.
- The judges elected at the triennial election commence their term of office on February 6 of the following year.
- The president and vice-president of the court are elected for three-year terms by secret ballot. Judges are eligible for re-election.

### **India in ICJ**

- Four Indians have been members of the ICJ so far.

- Justice Dalveer Bhandari, former judge of the Supreme Court, has been serving at the ICJ since 2012.
- Former Chief Justice of India R S Pathak served from 1989-91, and former Chief Election Commissioner of India Nagendra Singh from 1973-88.
- Singh was also president of the court from 1985-88, and vice-president from 1976-79.
- Before him, Sir Benegal Rau, who was an advisor to the Constituent Assembly, was a member of the ICJ from 1952-53.

### Indian cases at the ICJ

- India has been a party to a case at the ICJ on six occasions, four of which have involved Pakistan.
- They are:
  1. Right of Passage over Indian Territory (Portugal v. India, culminated 1960);
  2. Appeal Relating to the Jurisdiction of the ICAO Council (India v. Pakistan, culminated 1972);
  3. Trial of Pakistani Prisoners of War (Pakistan v. India, culminated 1973);
  4. Aerial Incident of 10 August 1999 (Pakistan v. India, culminated 2000);
  5. Obligations concerning Negotiations relating to Cessation of the Nuclear Arms Race and to Nuclear Disarmament (Marshall Islands v. India, culminated 2016); and
  6. (Kulbhushan) Jadhav (India v. Pakistan, culminated 2019).

### 3. Big Oil MNCs exiting Russia

British energy major Shell ended its joint venture energy projects with a Russian energy company.

#### Why is Big Oil quitting Russia?

- Russia's decision to send military troops to invade Ukraine has led the U.S. and Europe to impose various economic sanctions on the country.
- These include cutting off a number of Russian banks from the SWIFT network for international payments as well as freezing the Russian central bank's dollar assets in order to stop the central bank from propping up the rouble.
- Many have called for sanctions that directly target Russia's energy sector, which contributed to more than a third of the Russian government's budget in 2021.
- Russia's energy sector is heavily dominated by the Russian government with major producers contributing to most of Russia's energy production.

- These companies transfer their earnings to the Russian exchequer and also play a role in Russia's foreign policy that uses energy as a bargaining chip.
- Doing business in Russia thus carries significant reputational risk for large western oil companies.

### **What will be the impact of Big Oil's exit from Russia?**

- Most of the impact of Big Oil's exit from Russia on the country's economy is likely to be over the long run rather than in the immediate future.
- Foreign companies offer important technical know-how which helps in energy exploration and production.
- They also bring precious capital to fund energy projects in Russia. These can turn out to be crucial determinants of energy sector efficiency in the long run.
- The exit could involve incurring significant losses if the Russian government decides to seize their assets.
- Western commodity trading houses also play an important role in the sale of Russian energy in the international market.
- Their exit from dealing in Russian energy assets can affect liquidity and lead to greater volatility in energy prices in the international market.

### **What lies ahead?**

- Due to Russia's heavy reliance on the energy sector, tough energy sanctions can cripple Russia's economy and rein in the Kremlin's ability to fund the war with oil revenue.
- The West has been measured in its energy sanctions till date given Europe's heavy reliance on Russian energy supplies; Russia supplies about 40% of Europe's gas needs.
- At a time when energy prices are already rising in Europe due to supply-chain disruptions owing to the pandemic and government measures to cut down the use of fossil fuels, disruptions in Russian supply can cause further pain.
- This will affect not only European consumers but also the entire world as everyone will have to pay a higher price when supply drops in what is a common, global energy market.

## **4. The Ukraine war, India and a stand of non-alignment**

**Context:** The article analyses the issues concerning India's national security along with its stand of non-alignment on the entire context of Ukraine's invasion and the impact of the rising geopolitical tensions.

### **An Overview:**

- In the wake of Ukraine's invasion by Russia, the Russian President put forth a justification for its military operation which was based on the grounds to protect the people who have been victims of genocide of the Kyiv regime.
- Russia's claim for demilitarisation and denazification of Ukraine has led to the emergence of ideological clashes and has been considered as an echo of the imperialist language in the 21st century.
- There exists a group of experts who believe that the grounds of Russia's action against Ukraine are erroneous and must be revisited.

### **India's Action:**

- The United States and its allies moved a resolution in the United Nations Security Council (UNSC) against Russia to impose further restrictive measures.
- However, India abstained to vote because of its own national security reasons.
- India's abstention to vote against Russia is a continuation of the tradition that stems from a grudge against the western players and the UNSC's actions pertaining to India's security.
- Going back to the chapters of history, India's concern on territorial integrity and sovereignty raised in the Council was responded with ignorance.
- Along with India, China and UAE also abstained from voting.
- India's stance at the UNSC exemplified its intentions to resolve the dispute through dialogues and diplomacy, thereby advocating Chapter VI of the UN that provides a roadmap for a political settlement to any dispute through diplomacy.

### **Challenge for India:**

- India is in a difficult situation with its growing relationship with the US on one hand and Russia on the other hand with which it has a time tested friendship and historic ties.
- Moreover, Russia is the primary source of military hardware and technology for India and has backed India's security concerns at many events in the UN.
- It is envisaged that in the upcoming days, India will need considerable support from Russia on the issue of Kashmir that can be introduced in the world organisation by Pakistan receiving full encouragement from China.

### **Way ahead:**

- Looking at the challenges, India's neutral stance on the invasion of Ukraine by Russia has been appreciated and necessitated on the grounds of national security and territorial integrity.
- This depicts the classical Nehruvian policy of Non-alignment (NAM) which is considered the most sustainable principle in foreign policy.
- However, if the ongoing crisis in Ukraine persists along with the renouncing of non-nuclear status by Belarus, then India's policy of non-alignment might be called into question and might not be a sustainable one.

## 5. Why draft data accessibility policy is dangerous

The Ministry of Electronics and Information Technology (MEITY) released the "Draft India Data Accessibility & Use Policy 2022".

### Objectives of the policy

- If passed, it would govern, "all data and information created/generated/collected/archived by the Government of India" as much as, "State Governments [who] will also be free to adopt the provisions of the policy".
- The twin purpose to which this data will be put to will be **government-to-government sharing and high value datasets** for valuation and licensing.

### Issues with the draft policy

#### 1] Original objective will get diluted in favour of commercial interests

- The immediate risk arises when a government starts licensing citizen data.
- Over the past three years, there has been a rapid expansion in the nature and scope of our most intimate details.
- While the middle classes faced the mendacity of voluntarily linking their Aadhaar to their bank accounts and mobile connections, today, the digital sweep is all pervasive.
- For agriculture, there is an **Agristack**; for unorganised labourers, we have the **e-SHRAM portal**; in health we have Aarogya Setu and **ABHA (Ayushman Bharat Digital Health Mission)**; and for school children and teachers there is **NDEAR (National Digital Education Architecture)**.
- For every area of our lives, the government now has a database filled with our personal data.
- **Purpose of data collection:** The stated purpose for collection has been **improving service delivery, planning and checking leakages.**

- Public data is now being viewed as a prized asset of the Union government that should be **freely shared, enriched, valued and licensed to the private sector.**
- Given that more data means more money, commercial interests will **prompt the government to collect granular personal details** through greater capture and increased retention periods.
- Tying government policy determinations with a fiscal potential may also lead to distortion of the aims of data collection – the welfare of farmers, healthcare, unorganised labourers or even schoolchildren.
- There is no indication that **consent** will be sought in a meaningful form.
- Over time, the original objectives for which databases are built will get **diluted in favour of commercial interests.**

## 2] Absence of values and objectives related to transparency

- The second issue emerges from the disingenuous phrasing of “making data open by default”.
- **Importance of open data:** The World Bank notes that one of the first benefits of open data is that it supports “**public oversight of governments** and helps reduce corruption by enabling greater transparency”.
- These principles were recognised in past policy pronouncements of the government.
- Specifically, the National Data Sharing and Accessibility Policy, 2012 and the implementation guidelines formulated in 2017 refer to the Right to Information Act, 2005.
- However, within the present draft data accessibility policy, while the phrase “open data” has been used, **its values and objectives are absent.**
- The primary, overpowering objectives in the draft data accessibility **policy and the background note are commercial.**

## 3] Absence of legal basis

- The final area for reconsideration is a larger trend of policy-based administration detached from our constitutional framework.
- Compounding this problem, the present policy, as many others, **is untethered to any legislative basis** and contains no proposals for the creation of a legal framework.
- As per the Supreme Court’s **Puttaswamy judgment on the fundamental right to privacy**, the first ingredient to satisfy constitutionality is the **existence of a legal, more often a legislative, basis.**
- Without a law, there is **absence of defined limits to data sharing** that are enforceable and contain remedies.

- **Inadequate provisions for privacy preservation:** In this case, the promise of **privacy preservation** through anonymisation tools holds little promise when it cannot be independently assessed by a body for data protection.
- Even heavily sampled **anonymised datasets** are unlikely to satisfy the modern standards for anonymisation set forth by GDPR and seriously challenge the technical and legal adequacy of the **de-identification release-and-forget model**.
- This becomes vital as it is the principal measure suggested in the draft data accessibility policy.

### Suggestions

- **Parliamentary enactments** also help bring accountability through deliberation that furthers foresight and contains financial memorandums – given that public money would be spent to enrich datasets of public data.
- Since the policy contemplates sharing data between databases of the central and state governments as well as through central funded schemes, it may also be prudent **to deliberate further in the Rajya Sabha**.
- Federalism becomes a relevant issue given that such data, when it is generated, processed and enriched by state governments to comply with interoperability standards, will lead to revenue generation for itself.

### Conclusion

These are the glaring issues in this short, draft data accessibility policy, which appears to transform the Union government into a data broker.

### 6. What is 'General Consent' for CBI?

Meghalaya has withdrawn consent to the CBI to investigate cases in the state, becoming the ninth state in the country to have taken this step.

#### General Consent

- Unlike the National Investigation Agency (NIA), which is governed by its own NIA Act and has jurisdiction across the country, the **CBI is governed by the Delhi Special Police Establishment Act**.
- This makes **consent of a state government mandatory for conducting an investigation** in that state.
- There are **two types** of consent: case-specific and general.
- Given that the CBI has jurisdiction only over central government departments and employees, it can investigate a case involving state government



employees or a violent crime in a given state only after that state government gives its consent.

### **When is Consent needed?**

- General consent is normally given to help the CBI seamlessly conduct its investigation into cases of corruption against central government employees in the concerned state.
- Almost all states have given such consent.
- Otherwise, the CBI would require consent in every case.

### **What does the withdrawal of consent mean?**

- It means the CBI will not be able to register any fresh case involving a central government official or a private person stationed in these two states without getting case-specific consent.
- Withdrawal of consent simply means that CBI officers will lose all powers of a police officer as soon as they enter the state **unless the state government has allowed them.**

### **Under what provision has general consent been withdrawn?**

- In exercise of the power conferred by Section 6 of the Delhi Special Police Establishment Act, 1946, the government can withdraw the general consent to exercise the powers and jurisdiction.
- Section 6 of the Act says nothing contained in Section 5 shall be deemed to enable any member of the Delhi Special Police Establishment to exercise powers and jurisdiction in any area in a State, not being a Union Territory or Railway, area, without the consent of the Government of that State.

### **Does that mean that the CBI can no longer probe any case in the two states?**

- The CBI would still have the power to investigate old cases registered when general consent existed.
- Also, cases registered anywhere else in the country, but involving people stationed in that particular state would allow CBI's jurisdiction to extend to these states.
- There is ambiguity on whether the agency can carry out a search in either of the two states in connection with an old case without the consent of the state government.

### Why such a move by the States?

- If a state government believes that the ruling party's ministers or members could be targeted by CBI on orders of the Centre, and that withdrawal of general consent would protect them.
- This is a debatable political assumption.
- CBI could still register cases in Delhi which would require some part of the offence being connected with Delhi and still arrest and prosecute ministers or MPs.
- The only people it will protect are small central government employees.

### Legal Remedies for CBI

- The CBI can always get a search warrant from a local court in the state and conduct searches.
- In case the search requires a surprise element, there is CrPC Section 166, which allows a police officer of one jurisdiction to ask an officer of another to carry out searches on his behalf.
- And if the first officer feels that the searches by the latter may lead to loss of evidence, the section allows the first officer to conduct searches himself after giving notice to the latter.

### 7. What is 'Front-of-Pack Labelling' (FoPL)?

The Food Safety and Standards Authority of India (FSSAI) will soon start labelling the front of packaged food products with Health Star Rating (HSR).

#### What is FoPL?

- In India, packaged food has had **back-of-package (BOP)** nutrient information in detail but no FoPL.
- Counter to this, FoPL can nudge people towards healthy consumption of packaged food.
- It can also influence purchasing habits.
- The study endorsed the HSR format, which speaks about the proportions of salt, sugar, and fat in food that is most suited for consumers.
- Countries such as the UK, Mexico, Chile, Peru, Hungary, and Australia have implemented FoPL systems.

#### What warranted such rating in India?

- **Visual bluff:** A lot of Indian consumers do not read the information available at the back of the packaged food item.

- **Burden of NCDs:** Also, India has a huge burden of non-communicable diseases that contributes to around 5.87 million (60%) of all deaths in a year.
- **Healthy dietary choices:** HSR will encourage people to make healthy choices and could bring a transformational change in the society.
- **Supreme court order:** A PIL seeking direction to the government to frame guidelines on HSR and impact assessment for food items and beverages was filed in the Supreme Court in June 2021.

### Which category of food item will have HSR?

- **All packaged food items or processed food** will have the HSR label.
- These will include **chips, biscuits, namkeen, sweets and chocolates, meat nuggets, and cookies.**
- However, **milk and its products such as chenna and ghee are EXEMPTED** as per the FSSAI draft notified in 2019.

### Will there be pushback from food industry?

- **Negative warning:** Some experts opposed the use of the HSR model in India, suggesting that consumers might tend to take this as an affirmation of the health benefits rather than as a negative warning of ill effects.
- **Lack of awareness:** This is significant because there is lack of awareness on star ratings related to consumer products in India.
- **Impact on Sale:** Certain organisations fear it might affect the sale of certain food products.

### When will the rating come into force?

- FSSAI's scientific panel recommends voluntary implementation of HSR format from 2023 and a transition period of four years for making it mandatory.
- FSSAI noted that the proposed thresholds are in alignment with the models implemented in other countries and 'WHO population nutrient intake goals recommendations'.
- FSSAI will analyse the nutritional information in 100 mg of packaged food.
- The food safety compliance system licensing application portal will have a module for generating certificates wherein a licensee can enter details of a product.

## 8. Why do Indians go abroad for medical studies?

- According to estimates from Ukraine, reported in the media, around 18,000 Indian students are in Ukraine (before Operation Ganga).
- Most of them are pursuing medicine.
- This war has turned the spotlight on something that has been the trend for about three decades now.

### Preferred countries for medical degree

- For about three decades now, Indian students have been heading out to Russia, China, Ukraine, Kyrgyzstan, Kazakhstan, and Philippines to pursue a medical degree.

### Hype of becoming a Doctor

- **Prestige:** The desire to study medicine still holds a lot of value in the Indian community (the other is becoming an IAS officer).
- **Shortages of Doctor:** In many rural areas, people still look at doctors as god's incarnate.
- **Rarity of opportunity:** The lack of equal opportunities exacerbated by the caste factor in the Indian context, has a great deal of impact on the prestige still associated with being a doctor.
- **Social upliftment ladder:** For years, certain communities were denied the opportunities, and finally they do have a chance at achieving significant educational status.

### Why go abroad?

- **No language barrier:** The medium of education for these students is English, a language they are comfortable with.
- **Affordability:** The amount spent on living and the medical degree are far more affordable than paying for an MBBS seat in private medical colleges in India.
- **Aesthetics and foreign culture:** People are willing to leave their home to study far away in much colder places and with completely alien cultures and food habits.
- **Practice and OPD exposure:** It broadens students' mind and thinking, expose them to a whole range of experiences, and their approach to issues and crises is likely to be far better.

### Doesn't India have enough colleges?

#### (a) More aspirants than seats

- There are certainly far more MBBS aspirants than there are MBBS seats in India.
- In NEET 2021, as per a National Testing Agency press release, 16.1 lakh students registered for the exam, 15.4 lakh students appeared for the test, and 8.7 lakh students qualified.
- As per data from the National Medical Commission (NMC), in 2021-22, there were 596 medical colleges in the country with a total of 88,120 MBBS seats.
- While the skew is in favour of Government colleges, it is not greatly so, with the number of private medical institutions nearly neck-to-neck with the state-run ones.

### (b) Fees structure

- That means over 50% of the total seats are available at affordable fees in Government colleges.
- Add the 50% seats in the private sector that the NMC has mandated must charge only the government college fees.
- In fully private colleges, the full course fees range from several lakhs to crores.

### (c) Uneven distribution of colleges

- These colleges are also not distributed evenly across the country, with States such as Maharashtra, Karnataka, Tamil Nadu and Kerala having many more colleges.

### What about costs?

- The cost factor on both sides of an MBBS degree is significant.
- The costs of an MBBS degree in a Government college tot up to a few lakhs of rupees for the full course, but in a private medical college, **it can go up to ₹1 crore for the five-year course.**
- In case it is a management seat, capitation fees can inflate the cost by several lakhs again.
- Whereas, an MBBS course at any foreign medical university in the east and Eastern Europe costs far less (upto ₹30lakh-₹40 lakh).

### Way forward

- While PM Modi emphasised that more private medical colleges must be set up in the country to aid more people to take up MBBS, medical education experts have called for pause on the aspect.

- If the aim is to make medicine more accessible to students of the country, the path ahead is not in the private sector, but in the public sector, with the Central and State governments' involvement.
- Starting private medical colleges by reducing the strict standards set for establishing institutes may not actually be the solution to this problem, if we think this is a concern.

## Conclusion

- Creating more medical colleges will be beneficial for the country, if access and availability can be ensured.
- This will not be possible by resorting to private enterprise only.
- The State and Central governments can start more medical colleges, as recommended by NITI Aayog, by utilising district headquarters hospitals, and expanding the infrastructure.
- This way, students from the lower and middle socio-economic rung, who are otherwise not able to access medical seats, will also benefit.

## 9. Highlights of the Democracy Report 2022

A Sweden-based institute has said that India is no longer an 'electoral democracy', classifying the country as an 'electoral autocracy' instead.

### About the report

- The study, titled 'Democracy Report 2022: Autocratisation Changing Nature?' states that more than twice as many countries are undergoing Autocratisation as are witnessing democratization.
- The conceptual scheme takes into account not only the electoral dimension (free and fair elections) but also the liberal principle that democracy must protect "individual and minority rights".
- The V-Dem report classifies countries into four regime types based on their score in the Liberal Democratic Index (LDI):
  1. Liberal Democracy
  2. Electoral Democracy
  3. Electoral Autocracy and
  4. Closed Autocracy

## What is the report's methodology?

- Since key features of democracy, such as, judicial independence, are not directly measurable, and to rule out distortions due to subjective judgments, V-Dem uses aggregate expert judgments.
- It gathers data from a pool of over 3,700 experts worldwide who provide judgments on different concepts and cases.
- Leveraging the diverse opinions, the V-Dem's measurement model algorithmically.

## The Liberal Democratic Index (LDI)

- The LDI captures both liberal and electoral aspects of a democracy based on 71 indicators that make up the:
  1. **Liberal Component Index (LCI):** It measures aspects such as protection of individual liberties and legislative constraints on the executive.
  2. **Electoral Democracy Index (EDI):** It considers indicators that guarantee free and fair elections such as freedom of expression and freedom of association.
- In addition, the LDI also uses:
  3. **Egalitarian Component Index** (to what extent different social groups are equal)
  4. **Participatory Component Index** (health of citizen groups, civil society organisations) and
  5. **Deliberative Component Index** (whether political decisions are taken through public reasoning focused on common good or through emotional appeals, solidarity attachments, coercion)

## Highlights of the report

- The democratic gains of the post-Cold War period are eroding rapidly in the last few years.
- Autocratisation is spreading rapidly, with a record of 33 countries autocratising.
- The level of democracy enjoyed by the average global citizen in 2021 is down to 1989 levels.
- While Sweden topped the LDI index, other Scandinavian countries such as Denmark and Norway, along with Costa Rica and New Zealand make up the top five in liberal democracy rankings.

## What does the report say about India?

- India is one of the top ten 'autocratisers' in the world says the report.
- The report classifies India as an autocracy ('electoral autocracy') rather than a democracy, ranking it 93rd on the liberal democracy index, out of 179 countries.
- The report notes that India is part of a broader global trend of an anti-plural political party driving a country's Autocratisation.
- Ranked 93rd in the LDI, India figures in the "bottom 50%" of countries.
- It has slipped further down in the Electoral Democracy Index, to 100, and even lower in the Deliberative Component Index, at 102.
- In South Asia, India is ranked below Sri Lanka (88), Nepal (71), and Bhutan (65) and above Pakistan (117) in the LDI.

## Concerns raised by the report

- **(Communal) Polarisation:** The report also points out that "toxic levels of polarisation contribute to electoral victories of anti-pluralist leaders and the empowerment of their autocratic agendas".
- **Rise of political hate speeches:** The report states that measures of polarisation of society, political polarisation, and political parties' use of hate speech tend to systematically rise together to extreme levels.
- **Misinformation as a policy tool:** The report identified "misinformation" as a key tool deployed by autocratising governments to sharpen polarisation and shape domestic and international opinion.
- **Repression of civil society and censorship of media:** These were other favored tools of autocratising regimes.
- **Declining autonomy of Election bodies:** The report also found that decisive autonomy for the electoral management body (EMB) deteriorated in 25 countries.

## 10. FATF retains Pakistan on its terror funding 'Grey List'

The global money laundering and terrorist financing watchdog Financial Action Task Force (FATF) has retained Pakistan on its terrorism financing "grey list".

### What is the FATF?

- FATF is an intergovernmental organization founded in 1989 on the initiative of the G7 to develop policies to combat money laundering.
- The FATF Secretariat is housed at the OECD headquarters in Paris.
- It holds three Plenary meetings in the course of each of its 12-month rotating presidencies.



- As of 2019, FATF consisted of 37 member jurisdictions.

## India and FATF

- India became an Observer at FATF in 2006. Since then, it had been working towards full-fledged membership.
- On June 25, 2010, India was taken in as the 34th country member of FATF.
- The EAG (Eurasian Group) is a regional body comprising nine countries: India, Russia, China, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan and Belarus.

## What is the role of FATF?

- **Watchdog on terror financing:** The rise of the global economy and international trade has given rise to financial crimes such as money laundering.
- **Recommendation against financial crimes:** The FATF makes recommendations for combating financial crime, reviews members' policies and procedures, and seeks to increase acceptance of anti-money laundering regulations across the globe.

## What is the Black List and the Grey List?

- **Black List:** The blacklist, now called the "Call for action" was the common shorthand description for the FATF list of "Non-Cooperative Countries or Territories" (NCCTs).
- **Grey List:** Countries that are considered safe haven for supporting terror funding and money laundering are put in the FATF grey list. This inclusion serves as a warning to the country that it may enter the blacklist.

## Consequences of being in the FATF black list:

- **Economic sanctions** from IMF, World Bank, ADB
- **Problem in getting loans** from IMF, World Bank, ADB and other countries
- **Trade sanctions:** Reduction in international trade
- **International boycott**

## Pakistan and FATF

- Pakistan, which continues to remain on the "grey list" of FATF, had earlier been given the deadline till June to ensure compliance with the 27-point action plan against terror funding networks.
- It has been under the FATF's scanner **since June 2018**, when it was put on the Grey List for terror financing and money laundering risks.

- FATF and its partners such as the Asia Pacific Group (APG) are reviewing Pakistan's processes, systems, and weaknesses on the basis of a standard matrix for anti-money laundering (AML) and combating the financing of terrorism (CFT) regime.

## 11. Women and Politics

For a proper appraisal of the relations between gender and democracy, we ought to examine the links between violence, representation, and the political participation of women.

### Role of women in South Asian democracy

- Historically, one of the peculiar paradoxes of South Asian democracy has been the continued presence of strong women leaders at the executive centre coupled with a generally appalling condition of women in society at large.
- South Asia has had the largest number of women heads of state – including Sirimavo Bandaranaike, Chandrika Kumaratunga, Indira Gandhi, Khaleda Zia, Sheikh Hasina, and Benazir Bhutto – of any region in the world till recently.
- **Under-represented:** While women have played very visible and important roles at the higher echelons of power and at the grassroots level in social movements, they have been under-represented in political parties as officials and as members of key decision-making bodies.

### Electoral representation of women in India

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- In India, women currently make up **14.6 per cent of MPs** (78 MPs) in the Lok Sabha, which is a historic high.
- Although the percentage is modest, it is remarkable because women barely made up 9 per cent of the overall candidates in 2019.
- In electoral representation, has fallen several places in the Inter-Parliamentary Union's global ranking of women's parliamentary presence, from **117 after the 2014 election to 143 as of January 2020**.
- In terms of electoral quotas, there were two outstanding exceptions in the 2019 general elections.
- **Voluntary parliamentary quota:** West Bengal under Mamata Banerjee and Odisha under Naveen Patnaik opted for voluntary parliamentary quotas, fielding 40 per cent and 33 per cent women candidates, respectively.

## Growing turnout of women voters and its implications

- **Assertion of citizenship rights:** In 1962, the male voter turnout in India was 16 percentage points higher than for women. Six decades later, in the 2019 Lok Sabha elections, women's participation exceeded that of men for the first time.
- This suggests an **increasing assertion of citizenship rights** among women.
- The growing turnout of women voters **could influence political parties' programmatic priorities** and improve their responsiveness to women voters' interests, preferences, and concerns, including sexual harassment and gender-based violence.
- **Women-centric schemes:** The state government in Bengal ran and highlighted many women-centric schemes that potentially played a central role in their victory.
- The central government must be commended for its achievements in two areas in particular: Its DBT schemes such as the **Pradhan Mantri Vaya Vandana Yojana** and the **Pradhan Mantri Surakshit Matritva Abhiyan**.
- As a result, **maternal mortality rate** has reduced from **167 (2011-13)** to **113 (2016-18)**.
- **The Maternity Benefit (Amendment) Bill, 2017** is another landmark achievement that extended the paid maternal leave to 26 weeks from the existing 12 weeks.

## Way forward

- Government must use its parliamentary majority to finally pass the **Women's Reservation Bill**, as was promised in their 2014 election manifesto.
- Until that happens, the **initiative taken by the governments of Banerjee and Patnaik** to increase women's parliamentary presence must serve as an inspiration to other Indian states.

## Conclusion

The extent to which parties represent women and take up their interests is closely tied to the health and vitality of democratic processes.

## 12. How invasion of Ukraine could transform nuclear landscape of Asia

Russian President Vladimir Putin's nuclear sabre-rattling in Ukraine, has triggered a far more consequential debate on the importance of atomic weapons in deterring Chinese expansionism.

## Background

- Ukraine agreed in 1994 to give up the nuclear weapons that it inherited from the Soviet Union in return for guarantees on Kyiv's sovereignty and territorial integrity.
- Clearly, those **legal guarantees were no substitute for nuclear weapons.**

## Changing stand on nuclear weapons

- **Debate in Japan:** In an important statement last week, the former prime minister of Japan, Shinzo Abe, called for a national debate on hosting American nuclear weapons on Japanese soil.
- One element of the debate is the fact that nuclear weapons remain **the greatest deterrent**, especially against a vastly superior adversary.
- **Korea strengthening nuclear deterrence:** In South Korea, which is electing its president this week, front-runner Yoon Suk-yeol has talked of strengthening Seoul's nuclear deterrence **against both Pyongyang and Beijing.**
- Taiwan and Australia developing nuclear submarine: Taiwan, is reportedly **developing a nuclear-powered submarine** that could offer some deterrence against a Chinese invading force.
- **Australia**, which is working with the UK and the US to build **nuclear-powered submarines**, is accelerating the project after the Ukraine invasion.

## Threat of escalation to nuclear war

- The threat of escalation to the nuclear level was very much in the mind of NATO's military planners when the alliance refused to be drawn into a firefight with Russia in Ukraine.
- Moscow is also conscious of the fact that there are **two nuclear weapon powers in Europe** – Britain and France.
- **Nuclear sharing arrangement:** Russia is also aware of the “nuclear sharing” arrangements between the US and some European allies – **Belgium, Germany, Italy, and the Netherlands.**
- Under this framework, European allies host US nuclear weapons on their soil and authorise their armed forces to deliver American nuclear weapons on Russia.
- Nuclear sharing also involves continuous **consultations on nuclear doctrine** and the planning of nuclear operations.
- The US and its allies are also pursuing a “hybrid war” that boosts Ukrainian resistance against Russian armed forces and raises military, economic, and political costs of Moscow's aggression.

## Threat of China invading Taiwan

- Taiwan is far more important for Asian (and global) security than Ukraine is for Europe.
- Taiwan sits at the heart of the Western Pacific and straddles the sea line of communication in the world's most dynamic economic arena.
- It is the main source of silicon chips for the world.
- When China conquers Taiwan **it will dramatically transform the geopolitics of Asia.**
- As Putin becomes more dependent on China, Russia is bound to back Xi Jinping's ambitions in Asia.
- This is the context in which China's eastern neighbours are taking a fresh look at the nuclear option.
- **Nuclear sharing arrangement:** On the nuclear front, the debate in Japan and South Korea is about potential **nuclear sharing arrangements with the US.**
- **In Taiwan and Australia,** the emphasis is on developing nuclear-powered submarines.
- **Deployment of strategic weapons:** The US too is debating the **deployment of new strategic weapon systems in Asia** that might encourage China to pause before trying to emulate Russia's Ukraine adventure.

## Conclusion

One way or another, Russia's war in Ukraine is bound to transform the Asian nuclear landscape.

### 13. Do Economic Sanctions work as a deterrent?

The economic sanctions imposed by the US, UK, and the EU on Russia for going to war against Ukraine could prove to be detrimental to the country.

#### What do economic sanctions mean?

- Economic sanctions are penalties or bans that are levied against a country to push it to modify its strategic decisions.
- They include withdrawal of customary trade and financial relations for security and foreign policy purposes.
- Sanctions could result in cutting economic ties in every respect such as terms of trade, financial assistance, transit support, travel bans, asset freezes, and trade restrictions.
- The curbs could also be targeted, thus restricting transactions with certain businesses, groups, or individuals.

- Amid increased global and economic interdependence, they could prove to be detrimental for the targeted country.

### **How do sanctions impact an economy?**

- No country can afford to be a closed economy.
- The affected country's supply chain gets disrupted in terms of the inflow of goods and services and for reaching out to the export markets.
- In the former, there is a risk of the internal economy being crippled, especially if it depends on imports of critical raw materials.
- The domestic economy could also be deprived of external market support.
- The risk element is high especially in case of economic curbs being imposed collectively, such as by the Organisation for Economic Co-operation and Development (OECD) or the North Atlantic Treaty Organization (NATO).

### **What are the economic sanctions against Russia?**

- Major Russian banks have been banned from the SWIFT financial messaging service and their assets have been frozen.
- Sanctions have been levied on the Russian Direct Investment Fund and against some of Russia's wealthiest people.
- Access to air-space has been denied and export controls introduced.
- The countries imposing curbs on Russia account for 34% of world GDP.

### **What is the cost of such restrictions?**

- This depends on the economic strength of the country being targeted.
- Russia cannot be brushed aside as an ordinary economy.
- The country is important to the global economy because of its oil reserves and access to nuclear power.
- Russia is also a supplier of sophisticated defence products and is an important supplier of crucial defence products to India.
- Given the long-term strategic nature of the relationship, India is abstaining from voting on resolutions to condemn Russia.

### **How did India manage curbs after Pokhran-II?**

- India's dependence on external assistance was more than \$100 billion.
- The government appealed to non-resident Indians (NRIs) whose annual savings were more than \$400 billion.
- NRIs' subscription to government bonds was more than double the annual foreign assistance.
- India could also showcase its scientific strength as none of the scientists involved were trained abroad.

- This helped India display confidence, especially to investors.

#### **14. The complexities for implementing a No-Fly Zone**

The North Atlantic Treaty Organization (NATO) Secretary General stated that the organisation would not designate the Ukrainian airspace as a 'No Fly Zone' which he said would lead to a full-fledged war in Europe, involving many more countries and resulting in greater human suffering.

#### **What is a No-Fly Zone ?**

- In simple terms, a No-Fly Zone refers to a particular airspace wherein aircraft, excluding those permitted by an enforcement agency, are barred from flying.
- Articles under Chapter VII of the United Nations Charter dealing with Action with Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression' are invoked to authorise a potential no-fly zone.
- Article 39 dictates the United Nations Security Council (UNSC) to determine the probable existence of any threat to peace or an act of aggression.
- It suggests further measures, if required, are to be carded out in accordance to Article 41 and 42 to restore international peace and security.
- No fly zones have been implemented without UN mandate too.

#### **Cases of implementation**

- In 1991 after the first Gulf War, U.S. and its coalition partners imposed two no fly zones over Iraq to prevent Saddam Hussain from attacking ethnic groups.
- In non-combat situations, No fly zones can be imposed permanently and temporarily over sensitive installations or for high profile events like Olympics.

#### **What is the feasibility of 'No fly zone over Ukraine?'**

- No-fly zone declarations are essentially a compromise in situations demanding a response to ongoing violence, but full military intervention is politically untenable.
- NATO has previously imposed No-Fly Zones in non-member states like Libya and Bosnia. With Russia it fears a full-fledged war in Europe.
- It has been demanding that NATO scale back to the pre-1997 arrangements. Both Russia and Ukraine are not members of NATO.
- Due to this the idea of imposing a no fly zone' over Ukraine has been rejected outright.
- If implemented, it means NATO deploying aircraft and assets which would result in a direct confrontation with Russia.

## What are the broad contours in a No-Fly Zone?

- The UNSC had banned all flights in the Libyan airspace post adoption of Resolution 1973 in 2011 in response to the Libyan Civil War.
- Member states were asked to deny permission to any Libyan registered aircraft to use the territory without requisite approval.
- Further, the member states could bar any entity from flying if they found reasonable grounds to believe the aircraft is ferrying lethal or non-lethal military equipment.
- Member states were permitted to allow flights whose sole purpose was humanitarian, such as delivery of medical supplies and food, chauffeur humanitarian workers and related assistance, or evacuating foreign nationals from the territory.

## 15. Labour Ministry launches 'Donate a Pension' Scheme

The Union Labour and Employment Ministry has launched the “donate a pension” scheme.

### 'Donate a Pension' Scheme

- This scheme allows any citizen to pay the premium amount on behalf of an unorganized worker under the Pradhan Mantri Shram Yogi **Maan-Dhan**
- Maan-Dhan scheme is a government scheme meant for old age protection and social security of unorganized workers.

### Eligibility criteria and benefits

- The scheme was launched in 2019, allows unorganized sector workers between 18 and 40 years who earn up to ₹15,000 a month to enroll by paying a premium amount between ₹55 and ₹200, depending on the age, that would be matched by the government.
- On reaching the age of 60, the beneficiaries would get a ₹3,000 monthly pension.

### Features of the scheme

- The scheme allows a citizen to “donate the premium contribution of their immediate support staff such as domestic workers, drivers, helpers, caregivers, nurses in their household or establishment.
- The donor can pay the contribution for a minimum of one year, with the amount ranging from ₹660 to ₹2,400 a year depending on the age of the



beneficiary, by paying through maandhan.in or visiting a Common Service Centre.

## 16. Sealed cover' jurisprudence is appalling

A Division Bench of the Kerala High Court has dismissed the appeal filed by a television channel. The trouble emanating from the judgment is that the state need not even show that its security is threatened. It can conveniently choose the 'sealed cover' route.

### Background of the case

- The Ministry had said that the licence could not be renewed for reasons related to national security.
- The stand of the Government was endorsed by both the Single and Division Benches of the High Court.
- In the judgment of March 2, the Division Bench said: "It is true that the nature, impact, gravity and depth of the issue is not discernible from the files.
- Still, the Bench chose to dismiss the appeals by bluntly saying that "there are clear and significant indications impacting the public order and security of the state".
- All that is necessary to ban a news broadcaster are these 'indications' — which are never revealed to the broadcaster.

### Issues with the judgement

#### 1] Violation of the fundamental rights

- A whole set of rights are directly hit by the ban. The first is the right to **freedom of speech and expression** of the television channel.
- The **rights to association, occupation and business** are also impacted.
- Moreover, the viewers also have a right to receive ideas and information.
- All these rights are altogether suspended by the executive. The only contingency in which these rights under Article 19(1) can be **interfered with are reasonable restrictions under Article 19(2)**.
- The judgment creates a situation that endorses the breach of fundamental rights on the one hand, and blocks remedy for the victim through a court of law and a process known to law on the other hand.

## 2] Takes away the power of judicial review

- India's Constitution does not give a free hand to the executive to pass arbitrary orders violating such rights.
- **Basic feature of the Constitution:** The Supreme Court of India has repeatedly held that judicial review of executive action is the basic feature of the Constitution.
- The decisions in *Minerva Mills vs Union of India* (1980) and *L. Chandra Kumar vs Union of India* (1997) reiterated this fundamental principle.
- **Test of reasonable restriction:** If the executive wishes to limit rights – in this case, censor or restrict speech – it must show that the test of reasonable restrictions is satisfied.
- The 'sealed cover' practice inverses this position.

## 3] Lack of examination of national security ground

- There was no examination of the national security plea based on the **proportionality analysis**, well established in our recent jurisprudence.
- Also, when a three-judge Bench in the *Pegasus case* ( *Manohar Lal Sharma vs Union of India*, 2021) has categorically held that the state does not get a "free pass every time the spectre of 'national security' is raised".

### Proportionality analysis

- In *Modern Dental College vs State of Madhya Pradesh* (2016), the top court adopted the proportionality test "a limitation of a constitutional right will be constitutionally permissible if:
  - (i) it is designated for a **proper purpose**
  - (ii) the measures undertaken to effectuate such a limitation are **rationaly connected to the fulfillment of that purpose;**
  - (iii) the measures undertaken are necessary in that **there are no alternative measures** that may similarly achieve that same purpose with a lesser degree of limitation; and finally
  - (iv) there needs to be a **proper relation** ('proportionality stricto sensu' or 'balancing') between the importance of achieving the proper purpose and the social importance of preventing the limitation on the constitutional right".
- This was reiterated in *K.S. Puttaswamy vs Union of India* (2017).

### Conclusion

The *MediaOne* case might create a real problem area that needs resolution by the Supreme Court.

## 17. Tobacco and related issues in India

Tobacco is a silent killer in our midst that kills an estimated 1.35 million Indians every year.

### The harm caused by tobacco

- It is the use of tobacco as a result of which more than 3,500 Indians die every single day, as estimated by scientific studies.
- It also comes at a heavy cost: an annual **economic burden of ₹1,77,340 crore** to the country or more than 1% of India's Gross Domestic Product (GDP).

### How price and taxation of tobacco matters

- Research from many countries around the world including India shows that a price increase induces people to quit or reduce tobacco use as well as discourages non-users from getting into the habit of tobacco use.
- There is overwhelming consensus within the research community that taxation is one of the most cost-effective measures to reduce demand for tobacco products.
- There has been **no significant tax increase on any tobacco product** for four years in a row.
- This is quite unlike the pre-GST years where the Union government and many State governments used to effect regular tax increases on tobacco products.
- As peer-reviewed studies show, the lack of tax increase over these years has made all tobacco products increasingly more affordable.
- The absence of a tax increase on tobacco has the **potential to reverse the reduction in tobacco use prevalence** that India saw during the last decade and now push more people into harm's way.
- It would also mean foregone tax revenues for the Government.

### Way forward

- The Union Budget exercise is not the only opportunity to initiate a tax increase on tobacco products.
- The Goods and Services Tax (GST) Council could **well raise either the GST rate** or the **compensation cess levied on tobacco products** especially when the Government is looking to rationalise GST rates and increase them for certain items.
- For example, there is absolutely no public health rationale why a very harmful product such as the bidi does not have a cess levied on it under the GST while all other tobacco products attract a cess.

- GST Council meetings must strive to **keep public health ahead of the interests of the tobacco industry** and significantly increase either the GST rates or the GST compensation cess rates applied on all tobacco products.

## Conclusion

The aim should be to arrest the increasing affordability of tobacco products in India and also rationalise tobacco taxation under the GST.

## 18. Motor Vehicles Agreement (MVA) of the BBIN

With Bhutan continuing to sit out the Motor Vehicles Agreement (MVA) of the sub-regional Bangladesh-Bhutan-India-Nepal (BBIN) grouping, a meeting of the other three countries was held to discuss the next steps in operationalizing the agreement for the free flow of goods and people between them.

### What is Motor Vehicles Agreement (MVA)?

- India, Nepal, Bhutan and Bangladesh signed a Motor Vehicles Agreement (MVA) for the Regulation of Passenger, Personal and Cargo Vehicular Traffic among the four South Asian neighbours.
- It was signed on 15 June 2015 at the BBIN transport ministers meeting in Thimpu, Bhutan.
- The act will facilitate a way for a seamless movement of people and goods across their borders for the benefit and integration of the region and its economic development.

### Key terms of the Agreement

- **Trans-shipment of goods:** Cargo vehicles will be able to enter any of the four nations without the need for trans-shipment of goods from one country's truck to another's at the border.
- **Free transport:** The agreement would permit the member states to ply their vehicles in each other's territory for transportation of cargo and passengers, including third-country transport and personal vehicles.
- **Electronic permit:** As per the agreement each vehicle would require an electronic permit to enter another country's territory, and border security arrangements between nations' borders will also remain.
- **Ultra-security:** Vehicles are fitted with an electronic seal that alerts regulators every time the container door is opened.

### Implementation status of the agreement

- The agreement will enter into force after it is ratified by all four member nations.
- The agreement has been **ratified by Bangladesh, India and Nepal**.
- The lower house of the Bhutanese parliament approved the agreement in early 2016, but it was rejected by the upper house in November 2016.
- Bhutan has requested for a cap to be fixed on the number of vehicles entering its territory

### What next?

- India remains “hopeful” that Bhutan could change its position on the project, it was decided at a meeting in November 2021 to go ahead for now, given that there are no new signals from Thimphu on the project.
- Progress on the seven-year-old project has been slow, despite several trial runs being held along the Bangladesh-India-Nepal road route for passenger buses and cargo trucks.
- There are still some agreements holding up the final protocols.

## 19. Water management needs a hydro-social approach

The Global Water System Project, which was launched in 2003 as a joint initiative of the Earth System Science Partnership (ESSP) and Global Environmental Change (GEC) programme, epitomises global concern about the human-induced transformation of fresh water and its impact on the earth system and society.

### Valuation of water

- It is globally estimated that the gap between demand for and supply of fresh water may reach up to 40% by 2030 if present practices continue.
- **SDG 6:** The formation of the **2030 Water Resource Group** in 2008, at the instance of the World Economic Forum, and the World Bank’s promotion of the group’s activity since 2018, is in recognition of this problem and to help achieve the **Sustainable Development Goal (SDG) on water availability and sanitation for all by 2030 (SDG 6)**.
- The latest UN World Water Development Report, 2021, titled ‘**Valuing Water**’, has laid stress on the proper valuation of water by considering **five interrelated perspectives**: water sources; water infrastructure; water services; water as an input to production and socio-economic development, and socio-cultural values of water.

## Need for hydro-social cycle approach

- Designing a comprehensive mix of divergent views about water along with ecological and environmental issues held by stakeholder groups is necessary.
- In this context, a **hydro-social cycle approach** provides an appropriate framework.
- It repositions the natural hydrological cycle in a **human-nature interactive structure** and considers water and society as part of a historical and relational-dialectical process.
- The **anthropogenic factors** directly influencing a freshwater system are the engineering of river channels, irrigation and other consumptive use of water, widespread land use/land cover change, change in an aquatic habitat, **and point and non-point source pollution affecting water quality.**

## The intra- and inter-basin transfer (IBT) of water

- IBT is a major hydrological intervention to **rectify the imbalance in water availability** due to naturally prevailing unequal distribution of water resources within a given territory.
- There are several IBT initiatives across the world.
- The National River Linking Project of India is one of those under construction.
- Based on a multi-country case study analysis, the World Wildlife Fund/World Wide Fund for Nature (2009) has suggested a cautious approach and the necessity to adhere to sustainability principles set out by the World Commission on Dams while taking up IBT projects.

## Issues with assumptions, use and management of freshwater resources in India

### 1] Contestation on concept of the surplus and deficit basin

- The basic premise of IBT is to **export water from the surplus basin to a deficit basin.**
- However, there is contestation on the concept of the surplus and deficit basin itself as the exercise is **substantially hydrological.**
- Besides this, rainfall in many surplus basins has been reported as declining.
- The status of the surplus basin may alter if these issues are considered.

### 2] Low capacity utilisation

- There is concern about the present capacity utilisation of water resources created in the country.
- By 2016, India created an irrigation potential for **112 million hectares**, but the gross irrigated area was 93 million hectares.

- There is a 19% gap, which is more in the case of canal irrigation.
- In 1950-51, canal irrigation used to contribute 40% of net irrigated area, but by 2014-15, the net irrigated area under canal irrigation came down to less than 24%.
- Groundwater irrigation now covers **62.8% of net irrigated area**.
- **Low efficiency of irrigation projects:** The average water use efficiency of irrigation projects in India is only 38% against 50%-60% in the case of developed countries.
- **More water consumption for crops:** Even at the crop level we consume more water than the global average.
- Rice and wheat, the two principal crops accounting for more than 75% of agricultural production use **2,850 m<sup>3</sup>/tonnes and 1,654 m<sup>3</sup>/tonnes of water, respectively**, against the global average of 2,291m<sup>3</sup>/tonnes and 1,334m<sup>3</sup>/tonnes in the same order.
- The agriculture sector uses a little over **90% of total water use in India**.
- And in industrial plants, consumption is **2 times to 3.5 times higher** per unit of production of similar plants in other countries.
- Similarly, the domestic sector experiences a 30% to 40% loss of water due to leakage.

### 3] Low use of greywater

- Grey water is hardly used in our country.
- It is estimated that 55% to 75% of domestic water use turns into greywater depending on its nature of use, people's habits, climatic conditions, etc.
- At present, the average water consumption in the domestic sector in urban areas is **135 litres to 196 litres a head a day**.
- If grey water production in the rural areas is considered it will be a huge amount.
- The **discharge of untreated grey water** and industrial effluents into freshwater bodies is cause for concern.
- The situation will be further complicated if groundwater is affected.

### 4] Other issues

- Apart from the inefficient use of water in all sectors, there is also a **reduction in natural storage capacity and deterioration in catchment efficiency**.

### Way forward

- The issues are **source sustainability**, renovation and maintenance of traditional water harvesting structures, grey water management

infrastructure, groundwater recharge, increasing water use efficiency, and reuse of water.

- The axiom that today's water system is co-evolving and the challenges are mainly management and governance has been globally well accepted.
- It is important to include **less predictable variables, revise binary ways of thinking of 'either or'**, and involve non-state actors in decision-making processes.

## Conclusion

A hybrid water management system is necessary, where along with professionals and policy makers the individual, a community and society have definite roles in the value chain. The challenge is not to be techno-centric but anthropogenic.

## 20. Doval calls for maritime cooperation

- Fifth National Security Advisor-level talks of the **Colombo Security Conclave** held in the Maldives.

### Colombo Security Conclave:

- The Colombo Security Conclave is a **regional security grouping**.
- It was initially formed in 2011 as a trilateral Indian Ocean maritime security grouping of India, Sri Lanka and the Maldives. It was revived again in 2021.
- The Colombo Security Conclave has since **expanded both its membership as well as scope**.
  - Colombo Security Conclave envisages sharing intelligence and collaborating on the security aspects of marine security, human trafficking, counter-terrorism, and cyber security.
  - The fifth edition saw the **induction of Mauritius** as a new member and the scope of the conclave has been expanded to include **humanitarian assistance and disaster relief**

### Details:

- At the fifth conclave, India, Sri Lanka, Maldives and Mauritius discussed ways to combat maritime challenges. Apart from the maritime security aspects, the NSAs also discussed countering narcotics trafficking and transnational organised crime and cyber security and emerging technologies.
- The participating countries agreed on a **roadmap to bolster cooperation**. They identified key areas of cooperation to enhance and strengthen regional security based on **five pillars**.



- The roadmap will facilitate robust mechanisms for coordinated response **capacity building and strengthening information flow** between member states.
- Notably, **delegations from Bangladesh and Seychelles participated as observers** in the meeting raising the prospects of adding more member countries in future meetings.

#### Indian NSA's address:

- The Indian NSA highlighted **India's contribution as the first responder in the region in crisis situations** and noted the cooperation and collaboration among the member countries in tackling narcotics trafficking, organised crimes and mitigating threats posed by maritime accidents.
- Noting the fact that India's national security is deeply intertwined with the collective security aspirations of the region, the Indian Security Adviser reiterated **India's commitment to working in close cooperation with its maritime neighbours** in the form of building capacity through training, supply of equipment, upgrading coastal security installations, and exchange of information.
- The Indian NSA called for the **institutionalisation of the Colombo Security Conclave** through follow up meetings of the heads of the Coast Guards of the four member countries and the formation of joint working groups to tackle drug trafficking and transnational organised crimes.

#### India's interests:

- Given India's location in the Indian Ocean, maritime security remains a major security aspect for India. Closer cooperation among regional partners will aid India's efforts to **ensure security and stability in the region**.
- The Colombo Security Conclave being a mainly **India driven "minilateral"**, it is being seen as **India's outreach to the Indian Ocean** to underline regional cooperation and shared security objectives. In this way, India through CSC hopes to **restrict China's influence** in an area of strategic importance, and to reduce the Chinese footprint in the member countries, including the new and proposed additions.

#### 21. Can Donbas republics work as a buffer zone?

- Amid the ongoing Russia-Ukraine conflict and the questions over the status of the **Donbas Republics of Donetsk and Luhansk**, some sections have suggested the 'de facto states' model followed for Abkhazia, Transnistria and South Ossetia as a possible way out for the Russia-Ukraine conflict.

#### Para states:

- **Abkhazia, Transnistria and South Ossetia** follow a de facto state model. These territories have internal but not external sovereignty, i.e., they are not de jure states and are not recognised by the global community.
  - **South Ossetia and Abkhazia broke away from Georgia. Transnistria broke away from Moldova.**
  - Abkhazia and South Ossetia are recognised by Russia and some of its allies. Transnistria, however, is not recognised as independent even by Russia.
- Though all three territories have Russia as their patron state, the three para states have their own governments, parliaments, armed forces, constitutions, flags, anthems, etc.

### **Solution to the ongoing conflict:**

- One of the solutions to settle the crisis over Russia's invasion of Ukraine is for the **Donbas republics to follow the model of the de facto states.**
- This would ensure that the Donbas republics of Donetsk and Luhansk would get recognition from Russia, get a security guarantor and exist as de facto states. **Russia would benefit from having friendly territories on its borders,** which has been the major security demand of Russia.

## **22. Anganwadi workers to go to court against ESMA imposition**

**Context:** Delhi State Anganwadi Workers and Helpers Union (DSAWHU) said they will legally fight to revoke the “oppressive imposition” of the Essential Services Maintenance Act (ESMA).

### **Essential Services Maintenance Act (ESMA):**

- Essential Services Maintenance Act (ESMA) allows the government to prohibit striking employees from refusing to work in certain essential services, which are necessary for the maintenance of normal life in the country.

### **What are essential services?**

- Any service with respect to which the Parliament has power to make laws or the government feels that its discontinuation would affect the maintenance of supplies and services necessary for sustaining life is considered an essential service.

### **Which services fall under this category?**

- Services related to public conservancy, sanitation, water supply, hospitals or related with the defense of the country are considered essential.
- Any establishment dealing with production, supply or distribution of petroleum, coal, power, steel and fertilizers also falls under the essential services category.
- Apart from this, any service in connection with banking can be subject to ESMA.

### **Is it illegal for these employees to go on strike?**

- A strike per se is not illegal, but the government is empowered to prohibit it if it feels that the strike is gravely disturbing public life.
- For that, the government has to issue a general or special order to end the strike.
- Any strike becomes illegal after the passing of this order.

### **What actions can be taken against the employees?**

- Persons who commence the strike as well as those who instigate it are liable to disciplinary action, which may include dismissal.
- As the strike becomes illegal after ESMA is invoked, legal action can also be taken against these employees.
- Any police officer is empowered to arrest the striking persons without a warrant. Persons participating in or instigating the strike are punishable with imprisonment, which may extend to one year or with fine or both.

### **What is the Essential Commodity Act?**

- The Essential Commodity Act empowers the government to control production, supply and distribution of certain commodities.
- The act is aimed at maintaining or increasing supplies and for securing the equitable distribution and fair price availability of these commodities.
- The act is also intended to work against unethical trade practices like hoarding and blackmarketing.

### **23. 'Why can't EVMs with VVPAT be used in civic polls?'**

#### **Context:**

The Delhi High Court asked the State Election Commission as to why EVMs with VVPAT cannot be used for the upcoming elections of Municipal Corporations of Delhi (MCD).

#### **Background:**

- The High Court was hearing a petition seeking direction to the State Election Commission of Delhi to conduct the upcoming civic body polls with Electronic Voting Machines (EVM) which are compatible with Voter Verifiable Paper Audit Trail (VVPAT).
- The petition said the EVMs without VVPAT machines make it almost impossible to ascertain the accuracy of the machines and to rule out any tampering.

### **Electronic Voting Machines (EVM):**

- Electronic Voting Machine (also known as EVM) is voting using electronic means to either aid or take care of the chores of casting and counting votes.
- An EVM is designed with two units: the control unit and the balloting unit. These units are joined together by a cable.

### **Voter Verifiable Paper Audit Trail (VVPAT):**

- VVPAT or Voter Verified Paper Audit Trail allows voters to verify whether the EVM recorded their vote as per their wishes.
- The Election Commission was forced to add the VVPAT device because of a case filed by Subramanian Swamy in the Supreme Court.
- VVPATs are a second line of verification and are particularly useful in the time when allegations around Electronic Voting Machines' tampering crop up.

## **24. Pak. seeks joint probe into missile incident**

### **Context:**

- Pakistan demanded a joint investigation regarding the accidental firing of a missile which ended up in the neighboring country.

### **Background:**

- Pakistan claimed an unarmed Indian supersonic missile was landed at a place 124 km within Pakistani territory.
- The Indian Defense Ministry regretted the incident and said a technical malfunction led to the accidental firing of the missile.
- Pakistan demands a joint probe to accurately establish the facts surrounding the incident.

## **Agreement on pre-notification of flight testing of ballistic missiles 2005**

- An 2005 agreement between India and Pakistan on pre-notification of flight testing of ballistic missiles states that:
  - Each country has to notify the other at least three days in advance of the flight test it wants to undertake whether surface-to-surface, land or sea launched missiles.
  - The testing country must ensure that the launch site is not within 40 km, and the planned impact area is not within 75 km of either the International Boundary (IB) or the **Line of Control (LoC)**.
  - The planned trajectory should not cross the IB or the LoC and must maintain a horizontal distance of at least 40 km from the border.
- Before the test, the country must issue **Notice to Air Missions (NOTAM)** or **Navigational Warning (NAVAREA)** to alert aviation pilots and seafarers, respectively.

### What are the reasons for the missile malfunction?

- A striking aspect of the episode is that the missile changed direction mid-air.
- First thing could be that the coordinates are not correct.
- The missile could have malfunctioned if the target data that has been fed into the missile gets corrupted, then takes a different direction altogether.

## 25. Geneva Conventions and the Russia-Ukraine war

### Context

Russia's armed invasion of Ukraine has increased hostilities and caused large-scale destruction of infrastructure in Ukraine.

### Background

- As the Russian troops continue their operations in Ukraine, the claims of human rights violations have cropped up.
- Russia has denied the accusations of harming civilians.
- The Geneva Conventions have come into the foreground amidst the increasing casualties of civilians.

To read more about Russia-Ukraine

### The Geneva Conventions

- It is a set of rules that prescribe guidelines for combatant behaviour during a war.
- It comprises four treaties, standardised in 1949.

- Three more protocols were later added which codify ethical and legal international norms for the humanitarian treatment of civilians who are affected by the war.
- The convention mainly focuses on,
  - Treatment of civilians and prisoners of war
  - Restricting the use of conventional or biological and chemical weapons
- The Conventions have been ratified by 196 states, including all UN member states.

### The Four Geneva Conventions

- **First Convention** - It safeguards wounded and sick soldiers on land during the war.
  - The convention also extends to medical and religious personnel.
- **Second Convention** - safeguards wounded, sick and shipwrecked military personnel at sea during the war.
  - This Convention replaced the Hague Convention of 1907 for the Adaptation to Maritime Warfare of the Principles of the Geneva Convention.
  - This convention also extends to hospital ships and medical transports by sea.
- **Third Convention** - It is the most famous convention among all and it applies to the **prisoners of war**.
  - It includes a wide range of guidelines with respect to the humane treatment of prisoners, conditions of captivity, evacuation of prisoners, transit camps, food, clothing, medical facilities, and hygiene.
  - It also guarantees rights to religious, intellectual, and physical activities for the prisoners.
- **Fourth Convention** - Unlike other conventions that protect the military personnel, this convention extends protection to the civilians including those in occupied territory.

### Additional Protocols

- **Additional Protocols of 1977** - Further increased the protection to the victims of international (Protocol I) and non-international (Protocol II) armed conflicts.
  - **Protocol II** was the first-ever international treaty dedicated exclusively to the instances of non-international armed conflicts.
- **Additional Protocols of 2005** - Created the Red Crystal as an additional emblem that has the same international status as that of Red Cross and Red Crescent emblems.

## Steps for prosecution under the Conventions

- According to **Article 8** of the Rome Statute of the **International Criminal Court (ICC)**,
  - ICC has jurisdiction over war crimes, especially “when committed as part of a plan or policy or as part of a large-scale commission of such crimes.”
- Under the statute, ‘war crimes’ include:
  - Grave breaches of the Geneva Conventions
  - Wilful killing, torture, inhuman treatment, biological experiments, extensive destruction and appropriation of property
  - Compelling prisoners of war or other protected person to serve in the forces of a hostile Power and willfully depriving them of the rights to fair and regular trial
  - Unlawful deportation or transfer or unlawful confinement
  - Taking hostages
- For prosecuting combatants for war crimes, evidence could be collected for an investigation and trial at the ICC.

## Application of the conventions in the Russia-Ukraine War

- The U.S., alleging that Russia has committed war crimes in Ukraine, has called for an investigation.
- There have been photographic and video evidence of lethal firing on civilians and video evidence of bombing on schools, houses, and apartment buildings across Ukraine.
- Experts argue that much of such evidence does not answer the main question of who ordered which crime.
  - The evidence must include information on orders received from commanding officers.
  - To examine such evidence, the ICC has started an investigation under its prosecutor.
- However, in 2019, foreseeing the possibility of its invasion of Ukraine, Russia withdrew its declaration under Article 90 of Protocol 1.
  - By withdrawing this declaration, Russia has the option of refusing access to international fact-finding missions or individuals to the Russian entities, who can hold Russia responsible for the violation of the Geneva Conventions.
- Further, the four conventions and the two additional protocols of 1977 were ratified by the Soviet Union, and not by Russia, hence the Russian government can deny any responsibilities under the Conventions.

## Current Relevance of the Geneva Conventions

- In 2019, Amnesty International said that there has been an evident disregard for civilian protection and international humanitarian law in armed conflicts where four (Russia, U.S., U.K. and France) of the five permanent members of the UN Security Council are involved.
- Amnesty quoted the examples of
  - The U.S.-led coalition's attack on Raqqa in Syria, which killed 1,600 civilians.
  - Destruction of civilian infrastructure and affecting the lives of many in Aleppo and Idlib by Russian forces
  - The war in Yemen where Saudi Arabia and the UAE-led coalition killed and injured thousands of civilians triggering a large-scale humanitarian crisis.
- Recent events highlight the fact that the Geneva Conventions, further backed by the ICC orders, have not been enforced by third parties against the conflicts.
- However, the conventions in the past have been successful in increasing global awareness on human rights violations across conflict zones, and also have led to sanctions against the violators.

## 26. The functioning of the ISS after sanctions

**Context:** Russian Space Agency, Roscosmos argued that US sanctions on Russia could disrupt the functioning of the Russian spacecraft that serviced the International Space Station.

### Impact of US Sanctions on ISS Functioning:

- The U.S. imposed sanctions on Russia including a ban on transfer of technology and on Russian banks following Russia's invasion of Ukraine.
- The Russian space agency Roscosmos threatened not to cooperate with Germany on joint experiments in the Russian segment of the International Space Station.
- This could affect the Russian component of the ISS, which is responsible for correcting the ISS's orbit.
- The Russian section guarantees that the space station's orbit is corrected 11 times a year to keep it clear of space debris.
- The ISS would most likely crash into the water or land if it did not function properly.
- **Know more about the International space station(ISS)**

### What is Russia's role in maintaining the ISS?



- The International Space Station (ISS) is being developed with the help of scientists from **five international space agencies**: NASA, Roscosmos, JAXA, the Canadian Space Agency, and the European Space Agency.
- Every agency has a role to play and a stake in the ISS's maintenance.
- The module responsible for performing course corrections to the ISS's orbit is part of Russia's contribution to the partnership.
- They also transport astronauts to and from the International Space Station.

### **Why does the orbit of the ISS need to be corrected?**

- The ISS sinks from its orbit at a height of around 250 miles above the Earth due to its massive weight and resulting drag.
- It needs to be moved up to its original line of motion around once a month.
- Another reason for changing the ISS's direction is to prevent colliding with space debris, which could cause damage to the station.

### **Are there any spacecraft that could be used in the event that Russia withdraws from the effort?**

- Right now, there are two options. The Dragon module from SpaceX and the Starliner from Boeing are both capable of docking with the International Space Station. The Starliner can also transport 10 tonnes of fuel.

### **What is the likelihood of Russia backing out?**

- Though there have been previous occasions when conflicts have risen between Russia and the U.S the operation of the ISS has not been interrupted.
- "Going by the scientists' mindset and that such a significant global effort must not go down the drain, scientists from both sides are expected to work together."

### **Is it true that Russia is not at risk of the International Space Station collapsing on its soil?**

- Most of the time, the ISS orbit does not pass over Russian territory. Because the orbit is around 50 degrees, the ISS will most likely fall to that level.
- Closer to the equator, the likelihood of it slipping into their realm is greater.

## **27. No ovation for India's stand on the Ukraine war**

### **Context:**

- India has had to walk a **diplomatic tightrope over Russia-Ukraine issue** as it tries to balance its ties with Moscow and the West.

### **India's stand on the Russia- Ukraine conflict:**

- India's first statement in the UN Security Council (UNSC) did not name any country directly but it said it regretted that calls from the international community to give **diplomacy and dialogue** a chance had not been heeded. It, however, stopped short of criticising Russia.
- India talked about the importance of the UN Charter, international law, and respect for the sovereignty and territorial integrity of states while calling on the member states to honour these principles in finding a constructive way forward.
- India along with 34 other countries **abstained from a UN General Assembly resolution** that censured Russia over its military actions against Ukraine. India had also **abstained from the UN Security Council procedural vote** to call for a General Assembly session on the Ukraine crisis.
- India appears to be following the **strategy of non-alignment** and promoting dialogue to resolve issues. India has been constantly **appealing for peace**. India at UNSC strongly emphasized the need for all sides to exercise the utmost restraint and intensify diplomatic efforts to ensure a mutually amicable solution.
- India's stand on the ongoing Ukraine-Russia crisis could be termed as

### **Arguments in favour of India's stand:**

- Arguments justifying India's stand on the issue rely on the fact that in international affairs, a country must be primarily **guided by its national interest**.

### **Strategic significance of Russia for India:**

- Given India's very high **dependence on Russia for defence equipment** and the likely need of **support on the Pakistan issue in the Security Council**, India must not offend Russia by condemning the invasion and this could be one of the main reasons behind India's stand.
- Russia continues to be India's largest arms supplier even though its share has dropped to 49% from 70% due to India's decision to diversify its portfolio and boost domestic defence manufacturing.
- Russia is supplying equipment like the S-400 missile defence system which **gives India crucial strategic deterrence against China and Pakistan**, and that is the reason why it went ahead with the order despite threats of looming US sanctions.

### East-west conflict:

- Another important argument for the current stand rests on the grounds that the Russian invasion and the West's reaction, is a conflict between the east and the west, and India should stay out of it.

### Student evacuation issue:

- India also has had the tough task of trying to **evacuate 20,000 citizens, mostly students, from Ukraine.**
- Given that **safety assurances are needed from all parties in a conflict** to run a successful evacuation operation partly explains India's neutral stand on the issue. India's taking side in the conflict could endanger the safety of its citizens.
- Notably, India has been able to get help both from Ukraine and Russia to evacuate its citizens. With hundreds of citizens still stuck in Ukraine, India with its stand can continue to seek cooperation from all sides.

### Balancing ties:

- **India has a connection with both countries involved in the war – economically, security-wise, education-wise and politically as well.** This is the reason why India has taken a neutral stand in the conflict.
- **India's neutral stand allows it to keep channels open with everyone.** In that sense, India is in a unique position as it's one of the few countries which has good relations both with the west and Russia.

### Arguments against India's stand:

#### Weal moral principles:

- India's action is tantamount to averting attention from **unprovoked aggression towards an independent country** by the much stronger Russian army.
- India's refusal to take a firm line on the Russian invasion comes across as India's lack of compassion for the people of Ukraine facing military aggression. India's stand on the issue comes across as unethical given that India chose its own national interests over the plight of innocent Ukrainian nationals.
- This would **adversely impact, India's image in the international domain** where it seeks to establish itself as the 'Vishwaguru' or World Teacher.

#### Lack of commitment to international laws and principles:

- The stand taken by India also demonstrates the lack of commitment to established principle in international affairs. It in fact goes against the principles of **Panchsheel**- the guiding principle for Peaceful Coexistence in international relations.
- The stand also goes against the **ancient belief of Vasudhaiva Kutumbakam**, implying that the world is a family.
- The stand taken by India leave it in the company of Russia and China. These nations have often indulged in aggression against sovereign states and viewed as disruptors of international peace and security.

#### **Interests and principles cannot be separated:**

- The article argues that it is **untenable to separate national interests and national principles**. Given that the principles are the most deeply held beliefs about how the world must be ordered, then the nation's interest lies in ensuring that these principles prevail in international relations.
- The article argues that India's stand on the issue could rebound on Indians in their interaction with the rest of the world in the future, unfavourably. If India does not want to see itself to be the victim of territorial aggression in the future, it must communicate strongly on the world stage that it condemns the Russian invasion of Ukraine.

#### **Changed international relations dynamics:**

- Notably, India had taken a similar stance during the Soviet invasion of Hungary in 1956 where it had abstained from voting in the UN. The article however argues that the two situations cannot be compared given that **in the 1950s the West was mostly unsympathetic to India's concerns and was backing Pakistan** on the Kashmir issue with the erstwhile Soviet Union rescuing India several times by exercising its veto in the UN Security Council.
- The current situation however is different given that **India shares strategic relations with the U.S. led west** and also there is public condemnation of unconditional support of Pakistan vis-à-vis India in these countries. Notably **Russia has been growing close to Pakistan**, with the sale of weapon systems and bilateral military exercises.

#### **Flawed defence supply argument:**

- Though India continues to rely on the Russians for defence equipment and their spare parts, at the same time there has been the **emergence of a global market for arms**. So India could as well source such equipment or spare parts from the global market if Russia decides to block arms and spare supplies to India.

- Notably **India too has been diversifying its defence imports** with new agreements with U.S., Israel, France, Sweden etc. This offers India a great degree of independence from excessive dependency on Russia.

### Conclusion:

- India being a democracy cannot look away from the violation of widely accepted norms contained in the unprovoked invasion of Ukraine for fear of losing access to its supply of armaments or of reciprocal support in the UN on matters of concern to it.
- Instead India must take a long view of how it wants to engage with the world and deal with such situations. **Sticking to the time tested principles and norms of international relations** is not just in India's national interest, it is also its own reward.

### 28. A new deal

- The **Vienna talks** aimed at reviving the **Joint Comprehensive Plan of Action (JCPOA)**, also known as the Iran nuclear deal, have slowed down given the new Russian demand seeking written guarantees that the economic sanctions imposed on Russia for its attack on Ukraine will not in any way harm its future trade and defence ties with Iran.

### Russian blocking of the deal:

- Though the U.S. and Europe are reportedly looking for alternatives to revive the nuclear deal without Russia, it would not be easy given the **role envisaged for Russia under the agreement**.
  - Russia, an original signatory of the JCPOA, is a member of the **joint commission** that supervises Iran's compliance. Also, Russia is required to take control of Iran's excess enriched uranium and work with Iran to turn its **Fordow nuclear plant** into a research facility.
- Also, Iran and China would not be ready to go ahead with the deal without Russia given that **Iran treats Russia as one of its allies**.
- This leaves the future of the nuclear deal in Russian hands.

### Concerns over the delay:

### Deepen security crisis in West Asia:

- As per available reports, after the unilateral U.S. withdrawal from the 2015 nuclear deal, Iran started enriching uranium to a higher purity. Now, nuclear experts believe **Iran is just months away from having enough high purity**

**uranium to make a nuclear bomb.** This adversely impacts the security situation in West Asia.

- The growing nuclear capability of Iran and the delay in concluding a new deal to curb its nuclear programme threaten to deepen the security crisis in West Asia.

#### **Global oil prices:**

- Removing sanctions on Iran and **letting Iran's oil enter the global market could help ease oil and gas prices**, which shot up after the Russian attack on Ukraine.
- The delay in finalizing this agreement could inflate global oil prices.

#### **Recommendations:**

The negotiating countries should continue to **push for a collective agreement.**

### **29. Wearing hijab is not essential part of religion: Karnataka HC**

#### **Context:**

- The Karnataka High Court upheld the hijab ban and dismissed several petitions contesting the prohibition on wearing hijabs in educational institutions.

#### **What is the Karnataka Hijab row?**

- Six female students from Government College in Udupi reported that they were not permitted to enter classrooms wearing hijab, bringing the hijab debate to the fore.
- The ban of hijab in classrooms was justified by the Karnataka government under the 1983 Education Act.
- Muslim students filed several applications in the Karnataka High Court, claiming the right to wear hijabs in class under Articles 14, 19, and 25 of the Indian Constitution.
- **Know more about the Karnataka Hijab row in CNA dated Feb 7, 2022.**

#### **Karnataka High Court Observation:**

The Karnataka High Court observed that wearing the headscarf is not an obligatory religious practice in Islam. As a result, it is not protected under Article 25 of the Constitution's right to freedom of religion.

- The Karnataka government's order providing guidelines for uniforms in schools and pre-university colleges under the provisions of the Karnataka Education Act, 1983 was also supported by the Bench. The court ruled that it was a reasonable and legally valid restriction.

### 30. SC averse to 'sealed cover jurisprudence'

**Context:** The Supreme Court's two distinct benches have criticized the government's "sealed cover jurisprudence" in the courts.

#### What is 'Sealed Cover' Jurisprudence?

- Sealed Cover Jurisprudence is a practice used by the Supreme Court and sometimes lower courts, of asking for or accepting information from government agencies in sealed envelopes that can only be accessed by judges.
- There is no specific law that defines the doctrine of sealed cover.
- **Reasons for providing details in sealed cover are:**
  - To protect highly sensitive information which may injure even national security or "public order".
  - The disclosure would affect an ongoing investigation.

#### Examples of 'Sealed Cover' Jurisprudence:

#### What is the criticism of 'Sealed Cover' Jurisprudence?

- 'Sealed Cover' Jurisprudence is challenged because it is incompatible with the Indian legal system's values of transparency and accountability.
- It is in contrast with the concept of an open court, where decisions can be scrutinized by the public.
- Furthermore, it is maintained that denying accused parties access to such information obstructs their right to a fair trial and adjudication.
- The Supreme Court ruled in the case of P Gopalakrishnan v. State of Kerala in 2019 that disclosure of documents to the accused is constitutionally required.

### 31. An accidental missile launch

**Context:** In March 2022, a missile was “accidentally released” from India which landed inside the territory of Pakistan.

### **About the accidental missile launch incident:**

- A missile was “accidentally launched” during routine maintenance and inspection and landed within Pakistani territory.
- The Indian Defense Ministry expressed regret for the incident, claiming that the missile was accidentally launched due to a technical malfunction.
- India declared that the government places the utmost importance on the safety and security of weapon systems, and that any flaws discovered would be addressed swiftly.

### **Which is the missile system in question?**

- Although the government has not confirmed which missile was engaged, reports say it was the BrahMos supersonic cruise missile system.
- Since India joined the Missile Technology Control Regime (MTCR) in 2016, it has been working to improve the missile’s range, and multiple tests have been conducted.
- **Know more about BrahMos.**

### **Implications of the accidental missile launch**

- Both India and Pakistan are nuclear-weapons powers with a diverse arsenal of tactical and strategic missiles.
- Given the sensitive nature of the relationship, any such mishap could be misinterpreted as an attack, prompting retaliatory steps on the other side and further escalation.
- Pakistan further urged the international community to take seriously this “grave nature incident in a nuclearized environment” and do its part in promoting regional strategic stability.

### **Concerns with strategic stability regime in South Asia with respect to crisis management**

- Despite the fact that India and Pakistan signed a ‘Pre-Notification of Flight Testing of Ballistic Missiles’ agreement in October 2005, cruise missiles are not included as part of this agreement.
- For some years, the two sides have not held structured discussions on nuclear and conventional confidence-building measures (CBMs).
- China, the region’s third nuclear-armed power, has so far declined to engage in strategic stability talks with India. Apart from being in a military standoff



with India, China is more involved than ever in the India-Pakistan dispute. This adds to the strategic instability in the region.

- As a result of the above developments, the regional strategic stability regime is becoming increasingly insecure.

### Way Forward:

- During both crisis and peacetime, India and Pakistan urgently require faster means for communicating sensitive information. It will ensure that messages are delivered on time and that confidence-building initiatives are implemented correctly.
- India and Pakistan could consider establishing mechanisms similar to nuclear risk reduction centers (NRRCs), which were established during the Cold War between the US and the Soviet Union. Such a group may exchange messages on a regular basis, provide timely clarifications, and monitor compliance with agreements.

## 32. 'Bharat Natyam' in Indian diplomacy

### Important diplomatic moves of India in the early 1990s:

- **India's foreign policy challenge in the early 1990s** was as profound as the economic crisis that India faced during the same period.
- The **disintegration of the Union of Soviet Socialist Republics (USSR) into 15 republics in 1991** marked a major change in global international relations and more so for India which had a reliable ally in USSR. The end of the Cold War and the world order becoming unipolar forced Indian policymakers to adapt to the **changed global political and economic realities**.
- Indian policymakers were forced to reshape India's foreign policy and national security strategy.
  - Recognising that India would need the support of the West and especially the US the then administration laid the foundations for a **revival of US-India ties** acknowledging the importance of the US in the global strategic architecture. The leadership of the two countries decided to have frank exchanges on issues that had divided them during the Cold War including issues like 'nuclear proliferation and disarmament'.

- This was done even as India **maintained its traditional ties with Russia**. India opened new embassies to build new relationships with the erstwhile Soviet Union states.
- In the Middle East, India shed its reluctance and moved forward to take unprecedented initiatives. India established **full diplomatic ties with Israel in 1992** announcing the opening of embassies and exchanging Ambassadors for the first time, even as it **reached out to Iran**.
- Recognizing the pattern of shifting of the centre of gravity of global economics to East Asia and also realizing the potential of linking India's economic future to the booming economies in East Asia, India under its '**Look East**' policy worked towards expanding its engagements with the Association of Southeast Asian Nations (ASEAN). Notably, apart from being critical to India's economic revival aspirations, the move was also a subtle attempt to counterweight rising Chinese dominance in the region.
  - In 1992 India and ASEAN embarked on a **sectoral-dialogue partnership** which became a **full dialogue partnership by 1995**.
- In 1993, India and China initiated the first of many confidence-building measures, notably the **Agreement on the Maintenance of Peace and Tranquillity along the Line of Actual Control** in the India-China Border Areas. Simultaneously, **India and Taiwan deepened their economic and cultural ties**.

### **Dixit principles and its relevance:**

- India's diplomatic moves of the early 1990s give an idea of how India was responding to the changes taking place around it in the wider world even as it sought to secure its own national interests. The author of the article, Rakesh Sood terms this approach to international relations as the Dixit principles in honour of the then Foreign Secretary, Jyotindra Nath Dixit.
- These principles helped India effectively navigate the turbulent times of the 1990s and also set the course for successful Indian foreign policy going ahead. The decisions of those times have continued to shape India's international relations over the last two decades.
  - The India and Israel relationship has blossomed into one of India's most significant strategic partnerships in the last three decades.
  - The India U.S. relationship, revived in the early 1990s, led to the path-breaking **India-U.S. Civil Nuclear Cooperation Agreement in 2008**.
  - In 1996, India joined the security dialogue platform, the **ASEAN Regional Forum**. Since 2002, the relationship has strengthened further with the **annual India-ASEAN summit**.

- The approach of the early 1990s is everywhere in Indian foreign policy today: Moving away from non-alignment to **issue-based alignments**; Delhi's subtle balancing act in the Middle East; trying to establish a stable balance with China; more robust defence diplomacy in key global geographies; the outreach to East and Southeast Asia as part of India's 'Look East' and 'Act East' policies.
- The approach has transformed the way India engaged with the world and contributed to India's rise in the global inter-state hierarchy.

### **Relevance to the present times:**

- The Dixit principle and the approach it recommends would be very useful for India under the present circumstances too amid the turmoil caused by the Russia-Ukraine crisis in international relations.
- **India's neutral stand on the Ukraine conflict and its abstention from the votes in the UN Security Council and General Assembly** are based on an assessment of India's core national interests and also an attempt to take the middle path which would allow India to create space for diplomatic manoeuvre with the different stakeholders.

### **33. In times of war, the yuan as a reference currency for interim oil trade**

#### **Context**

India and Russia are examining ways to use the Chinese yuan as a reference currency to ease the oil trade between them.

#### **Impact of economic sanctions on Russia**

- There is a huge drop in the demand for Russia's oil in the western countries post its military operation in Ukraine and the following sanctions.
- Despite there being no explicit ban announced on imports from Russia, traders are hesitant to purchase Russian energy as they fear that further sanctions may leave them holding energy inventory that they cannot sell.
- Russia was expelled from the SWIFT payments as a part of the economic sanctions imposed by the western allies against Russia's invasion of Ukraine.
  - As a result, the energy imports from Russia have reduced significantly.
  - Russian businesses are unable to pay for imports and consumers have not been able to purchase goods.
- The foreign reserves of Russia's Central bank were also frozen, further impacting Russia's ability to use its reserves to support its currency.

- As a result of these, the Russian rouble (the official currency of the Russian Federation) has lost nearly 25% of its value against the U.S. dollar since the war.

### **Russia offers oil to India**

- Considering its current economic situation, Russia has offered to sell oil to India with remarkable discounts.
- To facilitate oil trade between India and Russia, neither the rouble nor the Indian rupee is suitable as a global currency for trade.
  - Thus, the Chinese yuan is looked at as an alternate option.

### **Rise of value of Chinese yuan against U.S. dollars**

- A major amount of oil trade across the world takes place in U.S. dollars as it is widely accepted in the global market for goods and services.
- The acceptability of currencies mainly depends on their purchasing power (the amount of goods and services that can be bought).
  - The U.S. has been an economic powerhouse and hence countries across the world have been trading in U.S. dollars, hoping that this will help facilitate their trade with America.
- The U.S. is maximizing its economic power by freezing dollars that belong to its adversaries. Hence, many countries are looking at alternatives to the U.S. dollar.
- As China has emerged as a major economic power in recent times, the value and acceptability of its currency yuan have increased in the global trade circles.

### **Path ahead**

- Despite the rise of the Chinese yuan as an alternative, about 90% of the global trade still takes place with the use of U.S. dollars.
- There are still several doubts and questions regarding the feasibility of the use of yuan.
- Russia using yuan as reference currency to trade with India means that,
  - The amount of trade that happens between Russia and India will be in terms of the yuan without the Chinese currency being used.
  - Or yuan could be used to facilitate trade between the countries.
- As the Russian rouble and the Indian rupee are not widely accepted global currencies, there is a problem if there is a trade imbalance between the countries.
  - In 2021, Russia's exports to India stood at \$6.9 billion compared to India's exports to Russia being worth \$3.3 billion.

- India has a trade deficit of over \$3 billion.
- Russia cannot accept the rupee instead of the dollar in bilateral trade, as it would be difficult for it to get rid of its excess rupee holdings as the rupee's acceptability in global trade is meagre as compared to that of the dollar.
- Hence the use of the yuan, which is more widely accepted, can help solve the issues.
- The use of the yuan might result in a potential fall in the status of the dollar unless the U.S. takes up measures and continues to be the most dominant economic superpower.

### 34. Treating values of individual freedom as trifles

- The Karnataka High Court judgment in the **Resham vs State of Karnataka case**.

For information on the background of the case refer to the following article:

#### High Court Judgment:

- The Karnataka High Court has **upheld the ban imposed on the use of hijabs by students in classrooms across the state of Karnataka**.

#### Reasoning for the judgment:

- The judgment is premised on the following arguments.
  - The court held that the **wearing of a hijab is not essential to the practice of Islam**, and, therefore, the petitioners' right to freedom of religion is not impinged by the ban on the wearing of the hijab.
  - The Court held that there is **limited scope for the right to free expression and privacy that can be claimed within the confines of "qualified public spaces"** like a classroom and that individual rights cannot be asserted to the detriment of general discipline and decorum.
  - The Court took note of the fact that since the government order does not by itself ban the use of a hijab and since it is otherwise neutral, there is no discrimination aimed at Muslim women students as claimed by the petitioners.

#### Concerns:

- The article expresses concerns over the High Court judgment based on the following arguments.

#### Flawed essential religious practices doctrine:

- The main argument of the Court in rejecting the plea arguing for wearing a hijab as a legitimate exercise of religious freedom was that the petitioners failed to produce any evidence to show that the use of a hijab was essential to Islam. The article argues that the Judiciary is ill-equipped to do so and this does not augur well for a secular judiciary.
  - Something is an essential practice only if its absence or removal has the effect of destroying the religion itself.
- The article argues that the essential religious practice itself is a flawed doctrine and that the matter could have been disposed of without entering the theological domain.
  - It would be far better if a claim for Article 25's protection is tested against constitutional values such as equality, dignity and privacy, subject, of course, to health and public order.

### Overlooking freedom of conscience:

- The petitioners had contended that they wore the hijab as a matter of conscience and the court has failed to consider this aspect of the plea.
  - **Article 25 of the Constitution** guarantees to all persons the right to profess, practise and propagate religion and "freedom of conscience."
- This judgment fails to recognize the principle adopted by the Supreme Court in the **Bijoe Emmanuel (1986) case** where the rights of Jehovah's Witnesses who refused to partake in the singing of the national anthem was protected based on the argument that so long as the students conscientiously believed that they must not participate in the recital, their rights could only be abridged only in the interests of public order, morality or health.
- By linking cases dealing with a right to conscience with aspects of religious freedom, the Karnataka High Court again deviates from the spirit of the Bijoe Emmanuel case where the Supreme Court decided the case explicitly based on conscience and had noted that **conscience need have no direct relation to religious faith**.

### Enforcing popular morality:

- The article argues that as against the expectation of the judiciary standing as guardians of individual freedom, the judiciary has time and again enforced the popular morality of the day, **treating values of individual freedom as dispensable**.
- The judgment fails to recognize that in this particular case the **exercise of free choice was curtailed by state action**.

### Flawed argument against free expression in qualified public spaces:

- The argument that derivative rights based on rights to freedom of speech and privacy are incapable of being invoked in protected environments like schools ignores the classic test for determining when and how the right to free expression can be legitimately limited – **the test of proportionality**. The Court failed to consider this legal doctrine.

#### **Failure to allow for “reasonable accommodation”:**

- Despite some precedents like Kendriya Vidyalayas allowing for hijabs within the contours of the prescribed uniforms, the Court has overlooked the request for “reasonable accommodation” in this case.
  - The principle of ‘reasonable accommodation’ is that a pluralist society may allow social diversity without undermining the sense of equality.
- There is no reason to not accommodate the choice of an additional piece of clothing that does not interfere with the prescribed uniform.
- Also given that religious and cultural marks on the forehead and accessories on other parts of the body are not disallowed, the argument that the court was looking for uniformity falls flat.

#### **Undermine social democracy:**

- The article argues that the judgment adversely **impacts the principles of liberty, equality, and fraternity** envisaged to be upheld by our Constitution.

### **35. Russia-Ukraine conflict: ICJ’s provisional measures on military operations**

#### **Context**

Ukraine approached the International Court of Justice (ICJ), denying any acts of genocide against the allegations made by Russia.

#### **Background**

- Russia has defended its military operation in Ukraine as a retaliation to the act of genocide against the Russian-speaking people in the Donetsk and Luhansk regions.
- In this context, Ukraine approached ICJ (a principal judicial organ of the UN) and requested the court to hold that no acts of genocide defined under the Genocide Convention 1948 have been committed by Ukraine.
- Ukraine also sought the court to suspend Russia’s military operations in Ukraine immediately and ensure that Russia would not aggravate it further.
- The ICJ ordered Russia to immediately suspend all its military advances in Ukraine.

## Genocide Convention 1948

- The Convention on the prohibition of genocide was passed by the General Assembly in 1948 and came into effect in 1951.
- The Article II of the Convention describes genocide as carrying out acts intended “to destroy, in whole or in part, a national, ethnic, racial or religious group”.
- Objectives of the Convention:
  - Prevention of genocide as well as the punishment of the crime.
  - Legal obligations on states that are party to the convention include the obligation not to commit genocide.
- Russia and Ukraine along with India are parties to the Genocide Convention.

## The Jurisdiction of ICJ

- **Article 36(1)** of the **Statute of the ICJ** mentions that the ICJ will have jurisdiction in all matters relating to the UN Charter, or other treaties or conventions that are in force.
- The **Article IX** of the **Genocide Convention 1948** mentions that the disputes between states relating to the interpretation, application or fulfilment of the Genocide Convention, as well as those relating to the responsibility of a state for genocide shall be submitted to the ICJ at the request of any of the parties to the dispute.

## The powers of ICJ to indicate provisional measures

- Article 41 of the Statute of the ICJ, empowers the court to provide provisional measures to protect the rights of the parties involved.
  - The parties to the dispute and the UN Security Council have to be notified of such provisional measures provided by the court.
- In the LaGrand (2001) case between Germany and the U.S. relating to the denial of consular access to a German national in the U.S., the ICJ clarified that such provisional measures are binding in nature and set up international legal obligations.
- The provisional measures may be provided by the ICJ on the request of a state party or also suo moto.
- Also, in the **Tehran Hostages Case (1980)** the court ruled that the absence of one of the parties concerned cannot itself be an obstacle to the indication of provisional measures.
- In the recent hearing, the court proceeded to decide the case despite the absence of Russia in the oral proceedings.



## Conditions on the powers of ICJ

- In the *Gambia v. Myanmar* (2020) case (genocide of Rohingyas in Myanmar), the court ruled that it would use the power to provide provisional measures only if it is satisfied that rights which are being asserted by the party which is requesting provisional measures are “at least plausible”.
- There should be a link between the provisional measure which has been requested and the plausible right that is to be protected.
- There must be a “real and imminent risk” of “irreparable prejudice” to the rights claimed before the ICJ.
  - The court has held that the loss of human lives, harm to the environment, and the refugee crisis are all instances of irreparable harm.

## Relevance in Russia-Ukraine conflict

- The ICJ in the Ukraine case held that Ukraine has a plausible “right of not being subjected to military operations by Russian forces for the purpose of punishing and preventing alleged acts of genocide.”
- The ICJ does not have the mechanism to ensure the enforcement of the judgment.
  - However, Article **94(2)** under the **UN Charter** mentions that if a state fails to perform obligations prescribed by ICJ, the **UN Security Council** (UNSC) can take up necessary actions to give effect to the judgment.
  - This possibility is not viable as Russia has veto power in the UNSC.
- Stalemate in the UNSC empowers the UN General Assembly (UNGA) to recommend measures for the peaceful settlement of the situation.
  - In the **Nicaragua v U.S. (1984) case**, when the U.S. refused to accept the ICJ decision, and the UNSC was deadlocked, the UNGA adopted several resolutions condemning the U.S.’s behaviour.
- Further, the **Uniting for Peace Resolution of 1950** by the UNGA during the Korean War, empowers UNGA to take up any matter which threatens international peace and security, and to make relevant recommendations.
  - The power of the UNGA to ‘recommend measures for peaceful adjustment’ has been upheld by the ICJ in many previous instances.
- Russia’s absence in the oral proceedings has reflected its disrespect for international law and international institutions.
  - If Russia does not comply with the provisional measures of the ICJ, the reputational harm to its regime will only be compounded.
  - Non-compliance with provisional measures will justify counter actions against Russia.

### 36. One more age group to get vaccines

The Government's action to start COVID-19 vaccinations for children between 12 and 14 years with Corbevax.

#### Background

- India has thus far vaccinated about 60% of its population with around 180 crore doses.
- In January (2022), India started vaccinating children in the age group 15-17 and 9 crore vaccine doses have been administered.
- The Health Ministry announced that those between 12 and 14 years will also be eligible for vaccination.

#### Corbevax

- Corbevax is a protein-based vaccine manufactured by Biological E Ltd.
- **Spike protein production:** The spike protein is grown in yeast cells.
- **Working:** The subunit vaccine contains a harmless S protein. Once the immune system recognizes the protein, it produces antibodies to fight infection and is less likely to trigger adverse reactions.
- Corbevax has been approved by the Drugs Controller General of India (DCGI) based on the results of the ongoing phase II and III clinical trials. The vaccine has been approved for adults as well.
- Details of its efficacy studies have not been made public.
- The Centre has placed an order for over 50 million doses of vaccine at a price of ₹145/dose.
- Biological E Ltd claims that the vaccine can be stored in ordinary refrigerators.

#### Key concerns

- The National Technical Advisory Group on Immunisation (NTAGI), which reviews data on vaccine safety and recommends the administration of vaccines has not scrutinised the Corbevax.
- Concerns were raised about the absence of efficacy data for Covaxin at the time of approval which arguably led to vaccine hesitancy in the beginning. The same is being followed in the case of Corbevax.
- Questions are raised as to why only Corbevax is administered when both Covaxin and Corbevax are approved for immunisation of children.
- The decision to use the new Corbevax vaccine first on children without widespread use in adults is also criticised.

- India has performed inadequately in reporting and recording adverse events post-vaccination.

### **37. India, Japan set target for \$42 bn investment**

**Context:** India and Japan have set an investment target of “five trillion yen” (\$42 billion) in the next five years.

#### **India and Japan Trade Relations**

- In recent years, the economic relationship between Japan and India has steadily expanded and deepened.
- The volume of trade between the two countries has increased.
- India was the 18th largest trading partner for Japan, and Japan was the 12th largest trading partner for India in 2020.
- Also, direct investment from Japan to India has been increased, and Japan was the 4th largest investor for India in FY2020.
- Know more about **India - Japan Relations**.

#### **Challenges to India and Japan Trade Relations**

- The global post-COVID recovery process falters and “geopolitical developments” present new challenges.
- Russia’s invasion of Ukraine is a grave development and there is a clear sign of differences over India-Japan stands on the Russia-Ukraine conflict.
- Conflict in the India-China relationship is another matter of concern as Japan observed that normalcy would depend on the progress of the situation at the Line of Actual Control (LAC) with China.
- Indian exports to Japan are presently affected by a number of issues, which include both tariff, and non-tariff barriers like Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary Measures (SPS).

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### **39. How Russia’s bankruptcy law can punish foreign companies**

**Context:** This article examines Russia’s new bankruptcy law and its consequences on the companies desiring to leave Russia amidst the Russia-Ukraine war.

#### **How does Russia’s bankruptcy law differ from that of the United States?**

- In the U.S., bankruptcy laws are meant to give indebted companies a fresh start. Distressed firms in the U.S. usually enter bankruptcy willingly; the law lets them retain existing management and control over assets.
- Russia’s law generally prioritizes the needs of creditors who are owed money. This means creditors, including the Russian government, can force a company into involuntary bankruptcy and oust its management.
- Some legal experts said foreign companies fear Russian creditors could abuse that process to install leaders willing to sell their assets to business rivals or companies aligned with the Russian government.

#### **Concerns with Russian bankruptcy law**

- Russian courts have been more willing to pursue criminal penalties for some bankruptcy-related offenses, such as hiding assets.
- Tax debt has been used to drive companies into bankruptcy in Russia, in a way that penalizes foreign investors, according to an international arbitration court.

- The Permanent Court of Arbitration in The Hague ruled in 2014 that Russia had manipulated the legal system to bankrupt Yukos Oil in 2006 after its chief had fallen out with Vladimir Putin.
- Experts believe that since the Russian government owns major energy firms, it could use energy bills as well as taxes to force a company into bankruptcy.

### **Russian bankruptcy law and Impact on India**

- As foreign companies seek to exit Russia over the war in Ukraine, they face the prospect that Russian bankruptcy law could be used to seize assets and even lead to criminal penalties.
- Some businesses are concerned that bankruptcy law will be used to retaliate against the firms that are leaving, experts said.
- That proposal would build on the bankruptcy law's procedure for installing court-appointed external management, but could be wielded against companies with no debt, experts said.

### **40. Why the West should focus on China**

#### **Context**

The Russian offensive on Ukraine on the night of February 23-24 shocked the world. The trigger for the conflict has been the rise of anti-Russia/Putin and pro-Europe lobby in Ukraine, led by President Volodymyr Zelenskyy and with the tacit support of the US and the West.

#### **Background of the conflict**

- The situation became deeply polarised after battle lines were drawn in 2015, with **Ukraine's breakaway Donbas region** seeking a merger with Russia, after Crimea's unification with the latter.
- Russia has, over the years, quite correctly questioned the **relevance of NATO** – a grouping of the Cold War era – and its **expansion eastwards**.
- For instance, NATO included the **Commonwealth of Independent States (CIS)** countries of Georgia and Ukraine, earlier part of the Soviet Union, in its "Partnership for Peace" programme, despite Russian objections.

#### **Implications of war for geopolitics and role of China**

- Geopolitics will never be the same, especially with Germany and Japan announcing militarisation initiatives, polarisation in Europe and the **strengthening of the anti-US nexus of China- Russia-Turkey-Iran**.

- **Focus moves away from China:** A matter of concern is that once again, **the attention of the US and the West has been diverted from China**, the main adversary, to a war that should not have taken place.
- **Possibility of annexation of Taiwan:** In the current conflict, the ineptitude of the US/NATO to support Ukraine with “boots on the ground” is bound to embolden China in its nefarious design to annex Taiwan.
- This could also lead to **increased hostility by China in the resolution of land disputes** with the neighbouring countries, as well as in the South and East China seas.

## Conclusion

For India, the greatest lesson is that it will have to meet the Chinese challenge on its own. There is no likelihood of the US or any other nation getting involved in India’s fight with China. Let us focus on atmanirbharta in all its dimensions.

## 41. Deepening investments in Australia-India strategic, economic, and community ties

### Context

On March 21, Prime Ministers of India and Australia held their Virtual Summit and took stock of the pace of implementing the Australia-India Comprehensive Strategic Partnership.

### India-Australia relations

- Since we elevated our relationship in 2020, we have advanced practical actions on cyber and critical technologies, maritime affairs, defence ties, economic and business links and Quadrilateral cooperation.
- The two Prime Ministers announced a range of tangible and practical initiatives spanning the breadth of our shared economic, strategic, and regional interests.

### Areas of cooperation

- **Energy partnership:** Both countries are working on a new and renewable energy partnership, to support the development of technologies such as green hydrogen and ultra-low cost solar.
- We are also supporting **research and investment** to unlock Australian critical minerals for Indian advanced manufacturing.
- We will boost collaboration on **innovation, science and entrepreneurship**, to scale up ideas that address global challenges.

- **Space sector:** We are also increasing investments into our countries' rapidly growing **space sectors**.
- We are establishing the Australia-India **Centre of Excellence for Critical and Emerging Technology Policy** – and a Consulate-General – in Bengaluru.
- Australians value highly the Indian diaspora and student contributions to its community – **whether economic, social, or cultural**.
- Australia and India are also working to ensure **a peaceful and stable region**.
- Both countries are committed to a free and open Indo-Pacific.
- In our **defence relationship**, there is an enhancement in **information sharing and operational cooperation**.
- Such arrangements also help continue delivering quality humanitarian support to the region, seen recently when India helped Australia's Pacific family, Tonga and Kiribati.

## Conclusion

These investments in strategic, economic, and community ties show what we can achieve when two multicultural democracies join in a spirit of trust and understanding.

## 42. On South Asia, US must reorient itself

### Context

On the external front, Russia's Ukraine war and the Sino-Russian alliance are setting the stage for a reordering of South Asia's great power relations.

### Opportunity for the US in South Asia

- If it looks beyond the region's immediate response to the war in Ukraine, Washington can **seize the current opportunity to elevate the US's salience for the Subcontinent in partnership with India**.
- The Indo-Pacific strategy offers new pathways for the US to limit the traditional economic and military weight of China and Russia in the Subcontinent.

### Three regional trends in South Asia

#### 1] Decline of Pakistan's influence

- In the wake of the missile accident, Islamabad moved to seek international intervention, including from the UN Secretary-General.
- But there were few takers for this old South Asian formula, except in Beijing.

- Underlining the peremptory dismissal of Islamabad’s concerns is a deeper trend – **the relative decline of Pakistan’s international standing.**
- Since his election, US President Joe Biden has refused to call Imran Khan, who runs a “major non-NATO ally”; high-level visitors from Washington now skip Pakistan during South Asia visits.
- Chinese and Russian official visitors are among the few to combine trips to Delhi and Islamabad.
- Islamabad’s decline after the **US withdrawal from Afghanistan** is likely to accelerate amidst Pakistan’s deepening domestic political chaos.
- With an economy that is smaller than that of Bangladesh and limited prospects for rapid growth in the coming years, Pakistan will find it hard to match its traditional claim for “strategic parity” with India.

## 2] Declining interest in China’s Belt and Road Initiative in South Asia

- Just a couple of years ago, China’s commercial march into South Asia seemed unstoppable. Not any longer.
- **Troubles in Pakistan and Sri Lanka:** Pakistan and Sri Lanka, which embraced the BRI with great gusto, **are South Asia’s two worst-performing economies.**
- The deepening economic crises are compelling the elites of Pakistan and Sri Lanka to focus on non-Chinese financial sources to stabilise their economies.
- **Sri Lanka**, which ostentatiously refused to accept \$480 million developmental assistance from the US in 2020, is now desperately looking for hard currency support for its sinking economic fortunes.
- **In Nepal**, the dominant communists had made political opposition to US infrastructure assistance of \$500 million as a life and death issue for a decade.
- At the end of last month, Nepal’s parliament ratified the US loan that will facilitate Nepal’s infrastructure development and its economic integration with the Subcontinent.

## 3] The growing possibilities for US security cooperation with the Subcontinent

- During the Cold War, the US military engagement was limited to Pakistan.
- In the 21st century, there has been a steady expansion of US defence cooperation with India.
- The current focus on the Indo-Pacific is getting Washington to **modernise the defence partnerships with the smaller countries of the region.**
- The Trump Administration discarded the traditional obsession with Pakistan and began to recognise the strategic significance of the smaller South Asian states for its Indo-Pacific strategy.
- The visit of US Undersecretary of State to Bangladesh over the weekend saw progress towards signing the so-called GSOMIA (General Security of Military



Information Agreement) that codifies the commitment to protect classified military information.

## Conclusion

Reversing that must necessarily involve deeper security cooperation with the region and developing alternatives to military dependence on Beijing and Moscow. This is best done in partnership with Delhi.

### 43. SC backs Centre's OROP scheme

The Supreme Court has upheld the Centre's one rank, one pension (OROP) scheme for the armed forces.

#### What is the news?

- The Supreme Court has ruled that there was “no constitutional infirmity” in the way the government had introduced ‘one rank, one pension’ (OROP) among ex-service personnel.
- The scheme, notified by the Defence Ministry on November 7, 2015, was challenged by Indian Ex-Service Movement, an association of retired defence personnel.

#### What is OROP Scheme?

- OROP means that any two military personnel retiring at the same rank, with the same years of service, must get an equal pension.
- While this might appear almost obvious, there are several reasons why two military personnel who may have retired at the same rank with the same years of service, may get different pensions.

#### Need for the scheme

Military personnel across the three services fall under two categories, the officers and the other ranks.

- **Early age of retirement:** The other ranks, which are soldiers, usually retire at age 35.
- **No benefits from pay commissions:** Unlike government employees who retire close to 60, soldiers can thus miss out on the benefits from subsequent pay commissions.
- **Salary based pension:** And since pensions are based on the last drawn salary, pensions too are impacted adversely.

- **Ranks based discrimination:** The age when officers in the military retire depends upon their ranks. The lower the rank, the earlier they superannuate.
- **Liability against the sacrifice:** It was argued that early retirement should not become an adverse element for what a soldier earns as pension, compared with those who retire later.

### Earlier pension mechanism

- From 1950 to 1973, there was a concept known as the **Standard Rate of Pension**, which was **similar to OROP**.
- In 1974, when the **3rd Pay Commission** came into force, **certain changes were effected** in terms of weightage, additional years of notion service, etc., with regard to pensions.
- In 1986, the **4th Pay Commission's report brought further changes**.
- What ultimately happened was that the **benefits of the successive pay commissions were not passed** to servicemen who had retired earlier.
- Pensions differed for those who had retired at the same rank, with the same years of service, but years apart.

### Demand for OROP

- Ex-servicemen demanded OROP to correct the discrepancy.
- Over the decades, several committees looked into it.
- The Brig K P Singh Deo committee in 1983 recommended a system similar to Standard Rate of Pension, as did Parliament's standing committees on defence.
- The Narendra Modi government notified the current **OROP scheme in November 2015**, and it was made applicable from July 1, 2014.

### Issues with OROP

- During the OROP protests of 2013-15, it was argued repeatedly that meeting the demand would be **financially unsustainable**.
- Because soldiers retire early and **remain eligible for pension for much longer** than other employees, the Defence Ministry's pension budget is very large, **impacting capital expenditure**.
- The total defence pensioners are 32.9 lakh, but that includes 6.14 lakh defence civilian pensioners.
- The actual expenditure of the Defence Ministry on pensions was **Rs 1.18 lakh crore in 2019-2020**.
- The Defence Ministry's **pension-to-budget ratio is the highest among all ministries**, and pensions are more than **one-fifth of the total defence budget**.

- When the late Manohar Parrikar was Defence Minister, it was estimated that a one-time payout of Rs 83,000 crore would be needed to clear all past issues.

### Challenge to OROP

- The petitioners contended that the principle of OROP had been replaced by 'one rank multiple pensions' for persons with the same length of service.
- They submitted that the government had altered the initial definition of OROP and, instead of an automatic revision of the rates of pension.
- Under this, any future raising of pension rates would be passed on to past pensioners – the revision would now take place at periodic intervals.
- According to the petitioners, this was arbitrary and unconstitutional under Articles 14 and 21.

### What has the SC ruled now?

- The court did not agree with the argument that the government's 2015 policy communication contradicted the original decision to implement OROP.
- It said that "while a decision to implement OROP was taken in principle, the modalities for implementation were yet to be chalked out.
- The court also said that while the Koshyari Committee report furnishes the historical background of the demand, and its own view on it, it cannot be construed as embodying a statement of governmental policy.
- It held that the OROP policy "may only be challenged on the ground that it is manifestly arbitrary or capricious".

## 44. Indian Legislative Service

### Context

The appointment of Dr. P.P.K. Ramacharyulu as the Secretary-General of the Upper House by M. Venkaiah Naidu, Chairman of the Rajya Sabha, on September 1, 2021, was news that drew much attention. Ramacharyulu was the first-ever Rajya Sabha secretariat staff who rose to become the Secretary-General of the Upper House.

### Responsibilities and role of Secretaries-General of both the Houses

- Secretaries-General of both the Houses are mandated with many parliamentary and administrative responsibilities.
- **Privileges:** The Secretary-General also enjoys certain privileges such as freedom from arrest, immunity from criminal proceedings, and any obstruction and breach of their rights would amount to contempt of the House.

## Principle of secretariate independent of executive government

- **Article 98 of the Constitution** provides the scope of separate secretariats for the two Houses of Parliament.
- The principle, hence, laid in the Article is that the secretariats should be **independent of the executive government.**

## Issues with appointing civil servant

- A **separate secretariat** marks a feature of a functioning parliamentary democracy.
- **Against the principle of independence:** Serving civil servants or those who are retired come with **long-held baggage and the clout of their past career.**
- When civil servants are hired to the post of Secretary-General, this not only dishonours the purpose of ensuring the independence of the Secretariat but also **leads to a conflict of interests.**
- **Against the principle of separation of power:** It breaches the **principle of separation of power.**
- The officials mandated with exercising one area of power may not expect to exercise the others.
- **Lack of expertise:** One of the prerequisites that demand the post of the Secretary-General is **unfailing knowledge and vast experience of parliamentary procedures,** practices and precedents.
- Most of the civil servants **lack precisely this aspect of expertise.**

## Way forward: All-India service

- There are thousands of legislative bodies in India, ranging from the panchayat, block panchayat, zila parishad, municipal corporations to State legislatures and Union Parliament at the national level.
- Despite these mammoth law-making bodies, **they lack their own common public recruiting and training agency** at the national level.
- Ensuring competent and robust legislative institutions demands having qualified and well-trained staff in place.
- The growth of modern government and expansion of governmental activities require a matching development and laborious legislative exercise.
- Creating a common **all-India service cadre – an Indian Legislative Service** – is a must.
- The Rajya Sabha can, under **Article 312**, pass a resolution to this effect.
- In the United Kingdom, the Clerk of the House of Commons has always been appointed **from the legislative staff pool** created to serve Parliament.
- It is high time that India adapts and adopts such democratic institutional practices.

## Conclusion

A common service can build a combined and experienced legislative staff cadre, enabling them to serve from across local bodies to Union Parliament.

## 45. Fighting TB with lessons learnt during Covid pandemic

### Context

On World TB day, we need to ask how best we can leverage the lessons learnt from Covid-19 to help gain a new momentum in TB control.

### Comparing the impact of Covid-19 and TB

- In the first year of the Covid-19 pandemic, 1.8 million people were reported to have succumbed to the virus.
- In the decade between 2010-20, 1.5-2 million individuals died every year because of tuberculosis.
- The difference in responses to the two pandemics can only be explained by the differences in the profiles of those who get infected.
- **TB disproportionately affects people in low-income nations**, the poor and the vulnerable.
- The increased burden on healthcare to manage Covid has led to a serious setback in TB control.
- 

### Using lessons from Covid-19 for TB control

- To leverage the lessons learnt from Covid-19 to control TB, we need to focus on the epidemiological triad: Agent, host and the environment.
- **Test, treat and track** has been a strategy successfully employed for Covid.
- **Scaling up testing:** We need to aggressively scale up testing with innovative strategies such as active surveillance, bidirectional screening for respiratory tract infections using the **most sensitive molecular diagnostics**, and contact tracing.
- **Vaccine:** The biggest victory against Covid has been the speed with which vaccines were developed, scaled up and deployed.
- We need to replicate the same for tuberculosis, lobbying for funding from governments and industry to develop a successful vaccine for TB.
- **Social security programs for the prevention of risk:** Malnutrition, poverty and immuno-compromising conditions such as diabetes are some of the factors strongly associated with TB.

- Social security programmes that work towards **prevention of modifiable risk factors** would possibly pay richer dividends than an exclusive focus on “medicalising” the disease.
- **Environmental factors:** Environmental factors which have been neglected include ventilation of indoor spaces, educating individuals to avoid crowds when possible, and to encourage voluntary masking, especially in ill-ventilated and closed spaces.
- **Investment and actions:** Covid has been a stellar example of how investments and actions can be swift, and public education can transform behaviour.
- Similar aspirations for TB can help turn this crisis into an opportunity to re-imagine our overburdened and underfunded systems.
- **Involvement of private sector:** We need to actively engage the private sector, build bridges and partnerships as we did in the case of Covid.

### Way forward

- The country needs to invest in state-of-the-art technologies, build capacity, expand its health workforce and strengthen its primary care facilities.
- It also needs to consider **telemedicine and remote support** as important aspects of health services.
- We need to build an open and collaborative forum where all stakeholders, especially affected communities and independent experts, take a lead role.

### Conclusion

We have ignored TB for too long. It's time we acknowledge the magnitude of the disease, and work harder at offering individuals equitable healthcare access and resources that the disease warrants.

**GS 3 : Economy, Science and Technology, Environment**

## 1. Protocols for social media

### Context

The lack of clear systems within social media companies that claim to connect the world is appalling. It is time that they should have learned from multiple instances, as recent as the Israeli use of force in Palestine.

### Role of social media platforms in the context of conflict

- There was no unpredictability over **conflicts in the information age spilling over to social media platforms**.
- In the context of conflict, social media platforms have multiple challenges that go unaddressed.
- **Threat of information warfare:** Content moderation remains a core area of concern, where, essentially, information warfare can be operationalised and throttled.
- Their sheer magnitude and narrative-building abilities place a degree of undeniable onus on them.
- After years of facing and acknowledging these challenges, most social media giants are yet to create **institutional capacity** to deal with such situations.
- Additionally, they also act as a conduit for further **amplification of content on other platforms**.
- Major social media platforms such as Facebook, Instagram, and Twitter also provide space for extremist views from fringe platforms, where the degree of direct relation to the user generating such content is blurred.

### Technology falls short

- **Misinformation and disinformation** are thorny challenges to these platforms.
- **Algorithmic solutions** are widely put to use to address them.
- These include identification of content violative of their terms, reducing the visibility of content deemed inappropriate by the algorithm, and in the determination of instances reported to be violative of the terms by other users.
- More often than not in critical cases, these algorithmic solutions have misfired, **harming the already resource-scarce party**.
- The operational realities of these platforms require that the safety of users be prioritised to address pressing concerns, even at the cost of profits.

## Lessons for India

- The lack of coherent norms on state behaviour in cyberspace as well as the intersection of business, cyberspace, and state activity is an opportunity for India.
- Indian diplomats can initiate a new track of conversations here which can benefit the international community at large.
- India should ensure that it initiates these conversations through well-informed diplomats.
- Finally, it is necessary to **reassess the domestic regulatory framework** on social media platforms.
- Transparency and accountability need to be foundational to the regulation of social media platforms in the information age.

## Conclusion

It is in our national interest and that of a rule-based global polity that social media platforms be dealt with more attention across spheres than with a range of reactionary measures addressing immediate concerns alone.

## 2. Land protests over Deocha Pachami Coal Block

The West Bengal government's ambitious Deocha Pachami coal block mining project in Birbhum district has run into hurdles over land acquisition and other issues.

### Deocha Pachami Coal Block

- The State government is planning to start mining at the Deocha Pachami coal block, considered to be the largest coal block in the country with reserves of around 1,198 million tonnes of coal.
- It is spread over an area of 12.31 sq. km, which is around 3,400 acres.
- There are around 12 villages in the project area with a population of over 21,000, comprising Scheduled Castes and Scheduled Tribes.

### Why are locals upset?

- The project is facing protests over land acquisition of which a significant part is forest land.
- Locals, mostly Santhal tribals, have close affinity with the land, with forests and waterways, and rely on it for their needs.



- The tribals were harassed and had been arrested under false and serious charges for protesting.
- Also, the project details have not yet been made public; and the environment clearance is awaited.

### 3. The history of the Kuki insurgency in Manipur

**Context:** The first of the two phases of the Assembly Elections was underway in Manipur.

#### Who are the Kukis?

- The Kukis are an ethnic group including multiple tribes originally inhabiting the North-Eastern states of India such as Manipur, Mizoram and Assam; parts of Burma (now Myanmar), and Sylhet district and Chittagong hill tracts of Bangladesh.
- While Kuki is not a term coined by the ethnic group itself, the tribes associated with it came to be generically called Kuki under colonial rule.
- In Manipur, the various Kuki tribes, living mainly in the hills, currently make up 30% of the total population of the State.
- While Churachandpur is their main stronghold, they also have a sizable population in Chandel, Kangpokpi, Tengnoupal and Senapati districts.
- The rest of the population of Manipur is made up mainly of two other ethnic groups –
  - the Meiteis or non-tribal, Vaishnavite Hindus who live in the valley region of Manipur,
  - the Naga tribes, historically at loggerheads with the Kukis, also living in the hilly areas of the State.

#### What led to the Kuki Insurgencies in Manipur?

- The Kuki insurgent groups have been under Suspension of Operation (SoO) since 2005 when they signed an agreement for the same with the Indian Army.
- In 2008, the groups entered a tripartite agreement with the State government of Manipur and the Central government to temporarily suspend their operations and give political dialogue a chance.

#### Roots of Kuki Insurgency:

- The roots of Kuki militancy lie in conflicts of ethnic identity.
- First was the demand for self-determination solely for groups belonging to their ethnic fabric, meaning the dream to form a Kukiland which includes Kuki inhabited regions of Myanmar, Manipur, Assam and Mizoram.

- The second reason for insurgency lies in the inter-community conflicts between the Kukis and the Nagas in Manipur.
- The Kuki insurgency in Manipur grew in real terms in the 1980s and after the Kuki-Naga conflicts of the 1990s.
- This is when the Kuki National Organization (KNO) and its armed wing Kuki National Army (KNA) were formed.

### **Kuki-Naga Conflict:**

- The community could not shed internal differences between tribes and take a single line of action.
- At present, the demand has come to the formulation of an independent district which was formed under the sixth schedule of the Constitution.
- The Kuki-Naga conflict was started over securing identity and land as some Kuki inhabited areas coincided with Naga inhabited areas.
- Even though clashes have reduced in recent decades, tensions between the two ethnic groups still exist.

### **Where do the Kukis stand today?**

- The temporary SoO agreements were made in order to start a political dialogue about giving some form of self-determination to the Kukis.
- The SoO has been extended by the Government almost every year since 2008, with Kuki outfits threatening to breach the agreement by taking up arms again and boycotting the Government.
- In 2012, the groups held a nearly eight-month-long blockade of highways around their area, costing the Government a couple of crores in losses each day.

## **4. Need for political will to tackle climate change**

### **Context**

Intergovernmental Panel on Climate Change (IPCC) report released on Monday its sixth assessment report.

### **Bleak assessment of our future**

- In its sixth assessment report, titled '**Impacts, Adaptation and Vulnerability**', the IPCC discusses the increasing extreme heat, rising oceans, melting glaciers, **falling agricultural productivity**, resultant food shortages and increase in diseases like dengue and zika.
- **Failed climate leadership:** Antonio Guterres, the United Nations Secretary General, quoted in The New York Times, describes the IPCC report as being

“an atlas of human suffering and a damning indictment of **failed climate leadership.**”

- The IPCC warns that should our planet get warmer than 1.5 degrees Celsius from pre-industrial times (we are at 1.1 degrees at present), **then there will be irreversible impact on “ecosystems with low resilience”** such as polar, mountain and coastal ecosystems “impacted by glacier melt, and higher sea level rise”.
- This will cause devastation to “infrastructure in **low-lying coastal settlements**, associated livelihoods and even erosion of cultural and spiritual values.”
- The increased heat will lead to an **increase in diseases** like diabetes, circulatory and respiratory conditions, as well as mental health challenges.

### Impact on India

- **Climate “maladaptation”**: The IPCC also highlights that **climate “maladaptation”** will especially affect “marginalised and vulnerable groups adversely, indigenous people, ethnic minorities, low-income households and informal settlements” and those in rural areas.
- Therefore, India, with a majority of its people falling in these categories, will be especially devastated.
- The IPCC highlights India as a **vulnerable hotspot**, with several regions and cities facing climate change phenomena like flooding, sea-level rise and heatwaves.
- For instance, Mumbai is at high risk of sea-level rise and flooding, and Ahmedabad faces the **danger of heat waves** – these phenomena are already underway in both cities.
- **Vector-borne and water-borne diseases** such as malaria and dengue will be on the rise in sub-tropical regions, like parts of Punjab, Assam and Rajasthan.
- When the concentration of carbon dioxide in the atmosphere increases, the grains we consume, including wheat and rice, **will have diminished nutritional quality.**
- Over the past 30 years, major **crop yields have decreased by 4-10 per cent globally** due to climate change.
- Consequently, India, which continues to be predominantly **agrarian**, is likely to be especially hurt.
- **Urban India is at greater risk** than other areas with a projected population of 877 million by 2050 nearly double of 480 million in 2020.
- The **concentration of population** in these cities will make them extremely vulnerable to climate change.

## Conclusion

Fighting climate change requires fiscal expenditure and policy changes fuelled by political will, which will reap results in a decade or so. Yet, our political class has no cohesive and urgent policy roadmap to combat rising emissions and our diminishing life spans.

## 5. How to handle impact of Ukrainian crisis on India's energy sector

### Context

The Ukraine crisis will affect India's energy landscape in many ways. This article analyses the impact and suggest the policy measures.

### The trajectory of oil prices

- The inflation-adjusted price of Brent crude is \$83/bbl (as of writing, the nominal price is \$116 / bbl), which is lower than the peak of \$145/ bbl in 2008 and the average price that year of \$100/bbl.
- In other words, prices could rise much further and we would still not be in uncharted waters.
- **Factors affecting prices:** The price trajectory will depend on the **duration of the conflict**, its impact on global energy demand, countervailing supply measures (for example, drawdown of strategic reserves, diversion of US LNG supplies to Europe, the Iranian nuclear deal which, if signed, could release up to 1 mbd of Iranian crude into the market) and whether in all this mayhem, the pipeline infrastructure currently feeding Russian gas into Europe remains operational.
- **Impact on India's earnings:** Our earnings from petroleum products (diesel, petrol, naphtha) will be adversely impacted.
- In 2021, **these products generated \$39 billion in revenue** and at 14 per cent, they accounted for the **highest share of export earnings**.

### Impact on India's energy assets in Russia

- ONGC has a 26 per cent stake in the Vankor oil field, a 20 per cent stake in the Sakhalin-1 LNG/oil export complex.
- All these holdings have eroded substantially in value.
- In India, Rosneft (the Russian national oil company) operates the 20 mtpa refinery in Vadinar through Nayara Energy.
- Nayara is not sanctioned but the traders of crude/products might worry about transacting with an Indian company owned by a sanctioned Russian entity.

## Four emergent energy trends that would affect India

- **1] Energy ties of Russia and China:** Only last week, for instance, Gazprom signed off on an agreement to build a second gas pipeline to China christened “Power of Siberia 2”.
- The “Power of Siberia 1” pipeline has been pumping gas into China since 2019.
- **2] Emergence of US as second largest producer:** The emergence of the US as the largest producer of oil in the world and potentially the largest exporter of LNG.
- It has the capacity to blunt the impact of a supply shortfall but as it is controlled by **profit-maximising private corporates**.
- **3] The ability of Saudi Arabia to swing the crude oil market:** It is the one member of **OPEC plus with significant spares**, low cost, producible capacity (approx 3 mbd) of crude oil.
- The US has pressured Saudi to bring this volume into the market but they have, as yet, not buckled.
- **4] China’s dominance over rare earth metals:** The chokehold of China over the rare earths, minerals and components that are required to effect the transition to a clean energy system.

## Suggestions for India

- **1] Take into account uncertainty:** Frame the policy around the expectation of continuing volatility.
- **2] Strategic reserves: Build up strategic reserves** to safeguard against the unexpected.
- **3] Transnational pipelines:** Revive conversations with Turkmenistan and Iran about a transnational gas pipeline.
- **4] Reduce dependence on China for minerals and components required for the transition to clean energy:** Fast forward efforts to **decouple the supply chain dependence on China for the minerals** and components required for the clean energy transition.
- And, finally bring in psychologists to get a better fix on the logic that drives the decisions of the energy autocrats in Russia, Saudi Arabia and China.

## Conclusion

The Ukraine crisis throws up many learnings. But one needs particular emphasis. It is not enough to read the tea leaves of supply, demand and geopolitical trends to understand the trajectory of the energy market.

## 6. Filling the physical gaps in India's digital push

### Context

A lot has been written about the emphasis on “digital” in the 2022 Union Budget. But one aspect that hasn't been talked about as much is the importance given in the budget to digital public infrastructure (DPI).

### Significance of digital public infrastructure (DPI) in India

- **A global trendsetter:** India is seen as a global trendsetter in the DPI movement, having set up multiple large-scale DPIs like Aadhaar, UPI and sector-specific platforms like DIGIT for eGovernance and DIKSHA for education.
- Improvement in public service delivery: These DPIs have helped push the frontier of public service delivery.
- **Four key announcements in Budget:** This year's budget adds to the growing discourse on DPIs by making **four key announcements:**
- **1] In health,** an open platform with digital registries, a unique health identity and a robust consent framework;
- **2] In skilling,** a Digital Ecosystem for Skilling and Livelihood (**DESH-Stack**) to help citizens upskill through online training;
- **3] a Unified Logistics Interface Platform (ULIP)** to streamline movement of goods across modes of transport; and for travel,
- **4] In mobility,** an “open source” **mobility stack** for facilitating seamless travel of passengers.
- Analysis by the Centre for Digital Economy Policy Research (C-DEP) estimates that national digital ecosystems could add over 5 per cent to India's GDP.

### Suggestions

- But important design considerations must be set right if we are to truly unlock the value of these platforms.

#### 1] Differentiating between tech and non-tech layer

- We need to differentiate between the “tech” and “non-tech” layers of our digital infrastructure.
- While India seems to have made significant headway on the “tech” layers, the “**non-tech**” layers of **community engagement and governance** need a lot more work.
- The combination of these three layers is what is critical to making tech work for everyone.

- Together, they embody what we call the **open digital ecosystems (ODE) approach**.

## 2] Get non-tech layers right

- To unleash the true potential of India's ODEs, we need to get the "non-tech" layers right, by **prioritising principles around data protection, universal access and accountability**.
- In this regard, three specific non-tech levers are critical.
- **1] Data protection:** Protecting the data of all users and giving them agency over how their data gets used.
- The passage of a robust **Data Protection Bill is imperative**.
- But we also need to go beyond the mere requirement of "consent".
- **2] Address digital divide:** It is important to address the digital divide.
- Research by ORF, for instance, shows that Indian women are 15 per cent less likely to own a mobile phone and 33 per cent less likely to use mobile internet services than men.
- So, we need a "phygital" approach that provides services through both online and offline options and strong grievance redressal mechanisms.
- **3] Institutional mechanism:** As we push the frontier on digitisation, India must also focus on developing anchor institutions and robust governance frameworks.
- Just as Aadhaar is anchored by **UIDAI under an Act of Parliament**, and the Ayushman Bharat Digital Mission is anchored by the National Health Authority, every **new ODE requires an accountable institutional anchor**.
- These institutions are critical for setting standards, ensuring a level playing field and safeguarding consumer interest.

Consider the question "India is seen as a global trendsetter in the DPI movement, having set up multiple large-scale Digital Public Infrastructures(DPI). List the various DPIs in various sectors in India. Suggest the changes needed in the non-tech layers of these DPIs."

## Conclusion

From Aadhaar and UPI to DBT and CoWin, India's tech stacks are grabbing global attention. It is now critical to bring the gaze on to the non-tech layers of the stack, so that the potential of these platforms can be unlocked for every Indian.

## 7. Stagflation' in India

Reports suggest that crude oil prices soared and touched almost \$140 per barrel mark amid Russian invasion of Ukraine. This has posed a risk of causing Stagflation in India.

### What is Stagflation?

- Stagflation is a stagnant growth and persistently high inflation. It, thus, describes a rather rare and curious condition of an economy.
- Iain Macleod, a Conservative Party MP in the United Kingdom, is known to have coined the phrase during his speech on the UK economy in November 1965.
- Typically, rising inflation happens when an economy is booming – people are earning lots of money, demanding lots of goods and services and as a result, prices keep going up.
- When the demand is down and the economy is in the doldrums, by the reverse logic, prices tend to stagnate (or even fall).
- But stagflation is a condition where an economy experiences the worst of both worlds – the growth rate is largely stagnant (along with rising unemployment) and inflation is not only high but persistently so.

### How does one get into Stagflation?

- The best-known case of stagflation is what happened in the early and mid-1970s.
- The OPEC (Organisation of Petroleum Exporting Countries), which works like a cartel, decided to cut crude oil supply.
- This sent oil prices soaring across the world; they were up by almost 70%.
- This sudden oil price shock not only raised inflation everywhere, especially in the western economies but also constrained their ability to produce, thus hampering their economic growth.
- High inflation and stalled growth (and the resulting unemployment) created stagflation.

### Is India facing stagflation?

- In the recent past, this question has gained prominence since late 2019, when retail inflation spiked due to unseasonal rains causing a spike in food inflation.
- In December 2019, it was also becoming difficult for the government to deny that India's growth rate was witnessing a secular deceleration.
- As revised estimates, released in January end, now show, India's GDP growth rate decelerated from over 8% in 2016-17 to just 3.7% in 2019-20.



- However, the answer to this question in December 2019 was a clear no.
- For one, in absolute terms, India's GDP was still growing, albeit at a progressively slower rate.

### Why this is a cause of concern?

- Russia is the world's second-largest oil producer and, as such, if its oil is kept out of the market because of sanctions, it will not only lead to prices spiking, but also mean they will stay that way for long.
- While India is not directly involved in the conflict, it will be badly affected if oil prices move higher and stay that way.
- India imports more than 84% of its total oil demand. At one level, that puts into perspective all the talk of being Atmanirbhar (or self-reliant).
- Without these imports, India's economy would come to a sudden halt – both metaphorically as well as actually.

### Expected impact on Indian Economy

- Higher inflation would rob Indians of their purchasing power, thus bringing down their overall demand.
- In other words, people are not demanding enough for the economy to grow fast.
- Private consumer demand is the biggest driver of growth in India.
- Such aggregate demand – the monetary sum of all the soaps, phones, cars, refrigerators, holidays etc. that we all spend on in our personal capacity – accounts for more than 55% of India's total GDP.
- Higher prices will reduce this demand, which is already struggling to come back up to the pre-Covid level.
- Fewer goods and services being demanded will then disincentivise businesses from investing in new capacities, which, in turn, will exacerbate the unemployment crisis and lead to even lower incomes.

## 8. Centre and RBI must rely on unconventional policies to manage finances better

### Context

Amid Ukraine crisis and high oil prices, the larger concern is how the government and the RBI will navigate this period at a time of record government borrowings, and prevent domestic interest rates from hardening.

### The Triffin paradox in current context

- It is ironic that even as emerging economies running current account deficits are **getting punished by a depreciating currency and a hardening of interest**

rates, we are witnessing the US dollar appreciating and US treasuries strengthening.

- The most common argument for such a macroeconomic paradox is named after the economist Robert Triffin (the Triffin Paradox).
- It postulates that **the US current account deficit** is purely a reflection of the US supplying large amounts of dollars to fulfil the world's demand.
- In other words, central banks across the world must build up claims on the US to back their domestic money growth.

### Dollar's dominance

- Former US Federal Reserve Chairman Bernanke even extended this argument in 2005 to the "saving glut" proposition by espousing that **emerging economies were accumulating foreign exchange reserves** in dollars, and diverting domestic savings to buy US treasuries.
- There are several counter arguments to this view that effectively state that the **dominance of the US dollar is inevitable in the global financial architecture**, and it is purely a fault of emerging market economies.

### Need for the unconventional tools to avoid the disruption by government borrowing

This can be done in the following ways

#### 1] Spread the borrowing over four quarters after taking real-time view of disruption

- Every year, the government front-loads its large borrowing programme by **completing 60 per cent of the borrowings in the first half of the year**.
- This time, the RBI and the government may take a real-time view of disruptions and spread the **borrowings over four quarters**, keeping the initial two quarters light.
- The borrowing programme can also be announced as per a quarterly schedule and there could be even **two auctions during the week**.
- These steps could smoothen out the non-disruptive elements in government borrowings.

#### 2] Reconfigure the borrowing program

- For example, as rates move up, **banks tend to prefer short-term investments** while insurance companies, provident funds and others prefer longer-term investments.
- Given this, the borrowing schedule can be reconfigured with a higher proportion of short-and medium-tenor securities being offered in the initial

months, while pushing back the longer tenor securities to the second half of the year.

### 3] Push Small Savings Schemes

- Third, **small savings collections** have significantly exceeded budget estimates.
- The government could think of giving a push to small savings schemes such as the Sukanya Samridhi Yojana (SSY).
- The SSY has witnessed the registration of 2.82 crore girl children in the seven years since its inception in 2015, leaving enough room for further mop-up.
- The newly opened accounts may even be given an enhanced savings limit in the first year to catch up for the years lost for these new additions.

### 4] Listing of LIC

- LIC currently holds around **Rs 23.5 trillion** worth of government bonds, higher than even than the RBI.
- LIC's G-sec holding is around 19 per cent, while in comparison the banking system's ownership stands at around 38 per cent.
- Thus LIC's listing should augur well for the bond market as the insurance behemoth may have to deploy a greater share of inflows in safer avenues domestically.
- This is a plausible option as banks may have to readjust their deposits into credit as the economic recovery gains momentum.

### Conclusion

Rising oil prices have placed policymakers in an unenviable position. If higher oil prices are fully passed through, it will result in higher inflation and hence higher rates as a consequence. In such a scenario it is best to follow the first option by using unconventional policy measures.

## 9. Why society gains when start-ups fail

### Context

As per the Economic Survey 2021-22, India has become the third-largest startup ecosystem in the world after the US and China.

### Start-up ecosystem in India

- India attracted huge investment in startups in 2021: Private equity investment was \$77 billion, of which **\$42 billion went to early-stage ventures.**

- Every startup where salaries are paid by investors rather than customers is breathlessly rethinking business plans.

## How do startups benefit society?

### 1] Innovation, productivity and job creation:

- The high failure rate of startups is not a problem per se – society only **needs a few successes to harness the gains of innovation, productivity and job creation.**
- A new book, The Power Law makes the case that startup investing is **unlike public market investing.**
- He suggests public markets follow a **“normal” distribution** like human height – most people cluster around the average with a few exceptionally low or high.
- But venture investments follow a “power law” of distribution, that is, most go to zero but the tiny number that succeeds more than compensate for the losses or mediocrity of the many.

### 2] Losses caused by startups are not passed on to society

- Startups **don't socialise their losses**, Corporate bank loans expanded from Rs 18 lakh crore in 2008 to Rs 54 lakh crore in 2014.
- Such high corporate bank loans created bad loans that needed many lakh crores of government money to recapitalise nationalised banks.
- This money was diverted from government spending on healthcare, education and defence.
- The current venture capital binge will also create many write-offs but **this cost will fall on consenting adults with broad shoulders – foreign institutions, angel investors and entrepreneurs with successful previous exits.**

### 3] Startups will solve real problems for Indians:

- Ending our poverty needs higher productivity regions, cities, sectors, firms and individuals.
- A modern state is a welfare state that does less commercially so it can do more socially.
- It needs allies in reimagining financial inclusion, supply chains, distribution logistics, employability, retail, transport, media, healthcare, agriculture and much else.
- Many of our startups shall redeem their pledge to solve these problems “not wholly or in full measure, but very substantially”.

### Three issues related to startups

- **1] Fiscal and monetary policy normalisation:** The global capital supply fuelling startup funding faces challenges from **fiscal and monetary policy normalisation:** The rate-sensitive two-year US government bond recently touched a 1.6 per cent yield after being at 0.4 per cent as recently as November – because the risk-free return cannot be return-free-risk forever.
- Investors are returning to weighing financial sustainability and capital efficiency along with addressable markets.
- **2] Excesses:** This explosive startup funding has **created excesses.**
- **3] A different approach of public markets:** Private markets are not only delaying IPOs – Amazon went public within three years of starting with less than half the value of a unicorn – but unicorn IPOs’ underperformance suggests that **public markets have a different calibration.**

### Conclusion

The few startups that survive will raise India’s soft power and prosperity by using improbable ideas to solve impossible problems. What we need is to ensure the policy environment for the startups to boom.

## 10. Inland water transport system in India: Potential and challenges

- Month after setting sail on the Ganga from Patna, a vessel carrying 200 metric tonnes of food grains for the Food Corporation of India (FCI), docked at Guwahati’s Pandu port on the southern bank of the Brahmaputra.
- The occasion is believed to have taken inland water transport, on two of India’s largest river systems, to the future.

### Why is a Ganga-Brahmaputra cargo vessel in focus?

- There is nothing unusual about a cargo vessel setting sail from or docking at any river port.
- This has rekindled hope for the inland water transport system which the landlocked northeast depended on heavily before India’s independence in 1947.

### Inland water service: A necessity for the NE

- Seamless cargo transportation has been a necessity for the northeast.

- Around Independence, Assam's per capita income was the highest in the country.
- This was primarily because of access for its tea, timber, coal and oil industries to seaports on the Bay of Bengal via the Brahmaputra and the Barak River (southern Assam) systems.
- Ferry services continued sporadically after 1947 but stopped after the 1965 war with Pakistan, as Bangladesh used to be East Pakistan then.
- The scenario changed after the river routes were cut off and rail and road through the "Chicken's Neck", a narrow strip in West Bengal, became costlier alternatives.
- The start of cargo movement through the Indo-Bangladesh Protocol (IBP) route is going to provide the business community a viable, economic and ecological alternative.

### **How did the water cargo service through Bangladesh come about?**

- The resumption of cargo transport service through the waterways in Bangladesh has come at a cost since the Protocol on Inland Water Transit and Trade was signed between the two countries.
- India has invested 80% of ₹305.84 crore to improve the navigability of the two stretches of the IBP (Indo-Bangladesh Protocol) routes – Sirajganj-Daikhowa and Ashuganj-Zakiganj in Bangladesh.
- The seven-year dredging project on these two stretches till 2026 is expected to yield seamless navigation to the north-eastern region.
- With this, the distance between NW1 and NW2 will reduce by almost 1,000 km once the IBP routes are cleared for navigation.

### **Policy boosts to IWs**

- The Government has undertaken the Jal Marg Vikas project with an investment of ₹4,600-crore to augment the capacity of NW1 for sustainable movement of vessels weighing up to 2,000 tonnes.
- Sailors who made the cargo trips possible have had difficulties steering clear of fishing nets and angry fishermen in Bangladesh.
- These hiccups will get sorted out with time.

### **Why go for IWT?**

- Inland Water Transport (IWT) is a fuel-efficient, environment friendly and cost effective mode of transport having potential to supplement the over-burdened rail and congested roads.
- It is a boon where road transport is least feasible.

## **11. Kudankulam panchayat adopts resolution against AFR**

- Kudankulam Village Panchayat has passed a resolution against setting up of the 'Away From Reactor' (AFR) facility at the Kudankulam Nuclear Power Project site for permanently storing nuclear waste generated in the reactors.
- They have cited the radioactive threat posed by the storing of highly radioactive nuclear fuel waste.

### Spent nuclear fuel:

- Spent nuclear fuel, also called used nuclear fuel, is the fuel that has **undergone a reactor campaign** and is **no longer useful** for sustaining the nuclear fission chain reaction in a thermal reactor.
- Spent fuel discharged from a power reactor **contains residual  $^{235}\text{U}$  and converted plutonium, as well as fission-product and transuranic wastes.**
- Spent nuclear fuel is **highly radioactive and potentially very harmful**. Spent fuel is dangerous because it contains a mixture of fission products, some of which can be long-lived radioactive waste, and also **plutonium which is highly toxic**. This necessitates remote handling and shielding.

## 12. Ukraine halts half of world's neon output for chips, clouding outlook

**Context:** Leading firms in Ukraine have shuttered their semiconductor grade neon production as Russian troops have escalated their attacks on cities throughout Ukraine.

### Impact of Russia-Ukraine crisis on semiconductor grade neon production:

- Some 45%-54% of the world's semiconductor grade neon comes from two Ukrainian companies, Ingas and Cryoin.
- With Cryoin and Ingas sidelined, the price of semiconductor-grade neon will inevitably increase as their rivals will need to increase output to meet growing demand.
- The stoppage casts a cloud over the worldwide output of chips forcing some firms to scale back production.
- Semiconductor shortage likely means further constraints for the broader supply chain and inability to manufacture the end-product for many key customers.

## 13. Digitisation in banks causing unmatched disruption: Khara

**Context:** State Bank of India's Chairman has raised concerns over the increase in digitisation in banks.

## Digitalisation in the Banking Sector

- “Digital Banking” refers to digitalizing the traditional methods of banking to conduct banking transactions more smoothly.
- Digital innovation is redefining industries and changing the way businesses function.
- Banks have adopted the digital revolution, which has reduced their cost and widened the area of services they offer.

## What are the Concerns?

- Digitisation and innovative technologies are creating unprecedented disruption in the banking sector and the rate of change is accelerating.
- There is a realization among banks that the scale and adoption of digital transformation are to keep pace with the rapidly changing ecosystem.
- Cybercrime is the use of digital instruments to further illegal ends, such as committing fraud, violating privacy, or stealing identities. As the information and services have been digitalized the risk has been increased for both the bank and the consumer.
- Mobile banking has omitted several people who are unable to access these services due to affordability and lack of skills.

## Conclusion:

Banks need to be agile and nimble as technology increases customer expectation and the regulatory landscape also evolves rapidly to keep pace with technological advancement. To achieve the digital transformation goal, banks and financial institutions need to have a clear vision of what they intend to achieve with technology.

## 14. Shutdown this misguided energy policy

### Context

Russia’s attacks triggered fire near the Zaporizhzhia nuclear plant in Ukraine.

### Details

- The Zaporizhzhia nuclear plant in Ukraine is Europe’s largest nuclear plant.
- Russian troops seized the Zaporizhzhia nuclear power plant after intense fighting during which shelling caused a fire to break out at a training facility on the site.
- A major catastrophe would have happened if the fire had further spread across the site.



## The Fukushima incident

- In 2011, a massive tsunami triggered by an earthquake, impacted the power supply and cooling system of three Fukushima Daiichi reactors, resulting in a major nuclear accident.
- Despite the quick shut down of the reactors, the radioactive cores continued to produce heat as the cooling system was impacted, causing the meltdown of the entire plant.
- Post the Fukushima accident there was a transformation in the nuclear power situation beyond Japan and plans for scaling up nuclear power were put on hold across the globe.
- In 2008, the U.S. projected an expansion of nuclear capacity to 114.9 GW by 2030.
  - However, in 2021, it was estimated that capacity would reduce to 83.3 GW.
- Even on a global scale:
  - In 1996, 17.5% of the world's electricity was from nuclear sources.
  - But by 2020, it had declined to around 10%.

## Nuclear Energy Situation in India

- India also cut its nuclear energy ambitions after the Fukushima incident.
  - In 2008, it was projected that India would have 650GW of nuclear-installed capacity by 2050.
  - However, in 2010 it was said that capacity would reach 35 gigawatts by 2020.
  - The total installed capacity currently (2022) is only 6.78 GW.
- India plans to build 10 indigenous reactors along with 28 additional reactors out of which 24 would be imported from countries like France, Russia and the United States.
  - Out of 24, six are of the water-water energetic reactors (VVER) that have had multiple operational problems at Kudankulam in Tamil Nadu.
  - 12 are said to be imported from the U.S., which includes AP1000 reactors that were abandoned in South Carolina.
  - The other six are of the European Pressurized Reactors (EPR) type that France failed to complete in its own country.

## Key Concerns regarding Nuclear Energy

- **Cost factor** – With the cost of energy generation from solar photovoltaics and wind turbines reducing significantly, nuclear energy is no longer an economical source.

- If nuclear energy is to be sold at a competitive rate, it should be greatly subsidised by the government.
- **Not feasible imports** - An EPR plant that is planned to be imported from France now costs significantly more than what was estimated in 2013, electricity from these reactors would cost a minimum of ₹15 per unit excluding transmission costs, whereas, energy from solar and wind projects costs around ₹4.30 per unit.
  - The energy produced from AP1000 reactors would also cost the same as EPR plants.
- **Risks associated with safety** - In a country that is densely populated and with less advanced emergency health care facilities, a nuclear disaster could be catastrophic.
  - There are also strong protests by the local communities against setting up nuclear reactors.
- **Concerns about climate change** - Climate change will further increase the risk of nuclear accidents.
  - Apart from the Fukushima incident, a wildfire near the Hanul nuclear power plant in South Korea caused panic.
  - In 2020, a tornado caused the shut down of the Duane Arnold nuclear plant in the U.S.

## Conclusion

Considering the high risks associated with nuclear reactors and their high costs, it would be best for the Government to have a relook at its Nuclear Energy Policy as the resources spent on nuclear energy will yield faster results if they are redirected towards other renewable sources.

## 15. Skies wide open

### Context

The Government allows scheduled commercial international flights to resume their operations.

### Details

- After a suspension of operations for 2 years due to the pandemic, the scheduled international commercial flights will restart their operations in India.
- This move is said to be significant as the travel, tourism and hospitality sectors are one of the most affected due to the pandemic.

### Extent of losses due to the pandemic

- It is estimated that the global aviation industry because of COVID-19 and the following restrictions on travel between 2020 and 2022 saw losses of about \$201 billion.
- The tourism and hospitality sectors which are dependent on travel also suffered huge losses.
- India's foreign exchange income from foreign tourism saw a 76% decline compared to the previous years.
- Reports also suggest that about two crores plus jobs were lost in the tourism sector.

### Impact of crisis in Ukraine

- There has been a huge increase in the prices of oil due to the Russian military advances in Ukraine.
  - Due to this, the cost of aviation turbine fuel (ATF) has also increased by 60%.
  - Fuel prices account for nearly 20% of global airline's operating costs and the increase in costs will further affect the airlines' profitability.
- The crisis has also inflated the costs of a wide range of commodities that will further hamper the prospects of the tourism industry.
- The fear of spillover effects of the war also impacts the travel and tourism sectors.

### Recommendations

- Governments around the world should work to restore the confidence of travellers by strict enforcement of COVID-19 protocols and widening vaccination coverage.
- Government should have a relook at its tax policies as the indirect taxes dent the airlines' revenues by 21%.
- Reducing the ATF prices by cutting duties would also help the sector.

## 16. Understanding citizens' reluctance to pay taxes

**Context:** In a research project, a team of researchers studied how willingness to pay property taxes changes with new information on how tax money is spent by the government.

### What are the Significant Findings of the study?

- According to benefit-based taxation theory, the willingness among citizens to pay taxes depends on the benefits that taxpayers expect to receive in return for paying their taxes.
- People may be more willing to pay taxes if they believe that the money will be spent in a way that personally benefits them.
- Thus, taxes that are purely aimed at redistribution of wealth may not appeal to a lot of taxpayers.

### **Which Factors Affect Citizens' willingness to pay taxes?**

- **Lack of Knowledge about tax spending:**
  - The misperceptions and inadequate information about how the taxes that they paid were being spent by the government holds back the households from paying the taxes.
- **Lack of access**
  - Another factor affecting willingness of citizens to pay taxes is lack of access to information about how tax revenues are being spent by the government.

### **Recommendations:**

- The researchers recommend informing the households during tax filing season about the actual share of property taxes that went into public education and other social welfare sectors.
- If the government spent a larger share of taxes towards funding social services, there will be significant change in taxpayers behavior.
- It is recommended that the government should offer detailed information on the various purposes (such as health, education, roads, etc) towards which tax collections will be earmarked.
- These steps will reduce the tendency to appeal against taxes and increase willingness to pay taxes.

### **Lessons for India**

- The study's conclusions may hold lessons for countries like India where there is an active push by the government to get more citizens to pay their taxes.
- A significant share of tax evasion happens in India. This is because citizens do not feel that they receive sufficient benefits from the government for the taxes that they already pay.
- So, an effective way to improve tax compliance could be to improve the provision of benefits and make the government more accountable.

## 17. Unguided missile

### Context:

- The accidental firing of a missile by India into Pakistan.

### Response from the two countries:

- The Government of India has stated that the incident happened in the course of routine maintenance, due to a technical malfunction. However taking note of the serious lapse, the Indian government has ordered a high-level Court of Inquiry.
- Pakistan has expressed serious concerns over the technical lapses of such serious nature, especially in the handling of strategic weapons like missile systems. Pakistan has called for a joint probe along with the involvement of the international community.

### Concerns:

#### Unintended damage:

- Such accidental firing can cause unintended damage on large scales including **loss of life and property**.
- In a similar incident in February 2019, a Mi-17V5 crashed in Budgam killing its personnel onboard and a civilian on the ground. Inquiry revealed that it was shot by an Israeli-origin Spyder surface-to-air missile system of the Indian AirForce due to certain lapses in the missile system.

#### Unintended escalation of tensions:

- Such incidents could have led to **serious, unintended escalation of tensions between the two nuclear-armed countries** of India and Pakistan. Such nuclear escalation in the **volatile region** will only end in destruction on both sides.

#### Dent India's image on the global stage:

- Such incidents could **dent confidence of the international community in India**.
- India's global image of being a **responsible nuclear power** has been built over decades of restrained words and thoughtful action. Though the security of India's nuclear command and technical capabilities has never been in doubt, such incidents would adversely impact India's reputation.

- India is a **member of the Missile Technology Control Regime** since 2016. Such recognition comes with an acceptance of India's capability of handling its military strengths and contributing to global security. Generally, the handling and the launch of missiles are highly regulated with checks and balances to avoid accidents. The occurrence of such an incident shows the insufficiency of these measures and hence creates **doubts about India's capacity to handle nuclear and other military assets.**

## 18. The surge in oil and natural gas prices

**Context:** The US announced the banning of the import of Russian oil, liquefied natural gas, and coal. In the run-up to the U.S. announcement, international oil prices surged to a 14-year high.

### Russia's energy exports:

- Russia is the world's third-largest oil producer, after Saudi Arabia and the United States.
- Russia is the world's largest exporter of crude and oil products.
- Russia is the second-largest supplier of crude to the world after Saudi Arabia.
- Russia is also a major exporter of natural gas and supplied almost a third in Europe.
- The revenue it made from the sales of oil and gas in 2021 accounted for 36% of Russia's total revenue.
- China is the world's largest importer of crude oil, is Russia's single-biggest buyer and purchased about 20% of Russian oil exports, on average in 2021.

### Impact of US ban on Russia and on global crude prices:

- The U.S. ban would impact about one-tenth of Russia's oil exports.
- Among its allies, the U.K. announced that it would phase out the import of Russian oil and oil products by the end of 2022.
- The ban by the US and the UK and the decision of some other pro-Ukraine countries not to buy Russian fuel could deepen the fuel oil prices crisis.
- It explained at the time that many international energy traders have been shunning Russian cargoes of oil to limit financial and reputational risks in the wake of the invasion and the sanctions. However, without the rest of Europe and China joining the import ban on Russian oil and gas, the impact would not be as severe on Russia's economy.

- The rise in Crude prices is a major setback for global economic growth as Russia is one of the largest exporters of crude oil globally.

### Impact on India:

- India is the world's third-largest oil consumer, behind the US and China. The oil demand is growing at three-four per cent a year in the country.
- India's trade comprises only 1% of oil imports from Russia, but there could be a spillover impact in the form of **high inflation** and **sluggish growth**.
- **High oil prices** or **supply disruptions** will mean costlier petrol and diesel for private vehicle owners.
- Besides, **transportation** of essential commodities including fruits, vegetables and food grains will also cost more.
- India's worry is linked to the **slowing down of the economy**.
  - The crude oil trade mostly takes place in US dollars.
  - This means more dollars spent from foreign exchange reserves on oil or, conversely, fewer dollars available for other items of import needed by India.

### 19. The war's cold facts and what India needs to glean

#### Context:

- Amidst the ongoing Russia-Ukraine conflict, the article written by retired Air Vice Marshal Manmohan Bahadur takes stock of India's geopolitical positioning and analyses the key defence and security learnings for India from the conflict.

#### Major learnings:

#### Fallacy of collective defence:

- Though the Western countries led by the U.S. have been supplying arms and intelligence inputs to Ukraine in its conflict with Russia, the Ukrainians have had to face the brunt of the Russian military might all alone.
- The United States has backed away from sending its own army on the ground given that this could lead to substantial risks for itself. This has **exposed the fallacy of an ally coming to fight with you and for you**.
- This indicates that a **nation's vital interests can be protected only by that nation itself**.

#### Importance of military power:

- Despite almost a global condemnation of Russia's moves in the conflict and the threat of economic sanctions, Russia has been able to push ahead with its plans and seems close to realizing its security demands.
- This is indicative of the fact that in the real world, 'power' talks and is in line with the famous observation by the fifth century BC Greek historian Thucydides who wrote: "Right, as the world goes, is only in question between equals in power – while the strong do what they can and the weak suffer what they must."
- The unfolding events in Ukraine prove that **hard power dictates terms in geopolitics**.

### Importance of self-sufficiency in defence domain:

- India has had to walk a diplomatic tightrope over the Russia-Ukraine issue as it tries to balance its ties with Russia and the West. One of the prime reasons for this stance has been the **heavy dependency of India on Russia and the western countries for defence equipment**.
- For a nation to have strategic autonomy in matters of national security, **self-sufficiency in defence research and development and manufacturing is imperative**.
- Additionally, such self-sufficiency would afford the required deterrence to prevent war, and to prosecute it (war) if deterrence fails.

### The Indian experience so far:

- India's defence and security experience has been similar. During the **1962 India-China war**, Russia was not supportive of India and it in fact sided with China and the Americans though offered moral and logistic support. It turned down India's request for military help.
- India's focussed efforts at strengthening its defence capabilities helped it **win the wars of 1965 and 1971**.
- **The 1974 'peaceful' nuclear explosion and the 1998 Operation Shakti nuclear tests** have helped India achieve a degree of nuclear deterrence in the nuclear realm. This is crucial given that India faces two nuclear adversaries on its borders.
- Recognizing the perils associated with heavy dependency on other countries for defence equipment, after the Cold War ended, **India diversified its defence purchases to dilute its dependence on Russia**.

### Recommendations:

- Based on the above observations, the article makes the following recommendations for India.



- Given that an atomic weapon is a deterrent in the nuclear realm and not a determinant of 'conventional' power the author suggests **improving India's conventional defence capabilities.**
- Recognizing India's lag in conventional military capability, the **Atmanirbhar thrust in matters of defence research and development and manufacturing** has to become a national endeavour in mission mode.

## 20. India's solar capacity: Milestones and challenges

**Context:** This article examines the milestones achieved by India in solar capacity installations and the challenges associated with it.

### India's Efforts in Solar Energy and Manufacturing Capacity:

- In 2021, India added a total of 10 Gigawatts (GW) of solar energy to its installed capacity.
- India already has more than 50 GW of installed solar capacity.
- India's capacity additions place the country fifth in the world in terms of solar power deployment, accounting for about 6.5 percent of total worldwide capacity.
- According to Crisil, India has 3 GW of solar cell production capacity and 8 GW of solar panel production capacity.
- India bought almost \$76.62 billion worth of solar cells and modules from China alone in 2021-22, accounting for 78.6% of the country's total imports.

### Why is India falling short in roof-top solar installations?

- The sharp increase in large-scale ground-mounted solar energy is symptomatic of a significant drive across the country to increase the share of utility-scale solar projects. There seems to be a greater focus on such projects over smaller rooftop projects.
- Residential consumers and Small and Medium Enterprises (SMEs) that want to install rooftop solar (RTS) have limited financing options.
- RTS continues to have limited penetration across the country, owing to lukewarm responses from power distribution firms (DISCOMS) to adopting net metering.

### Challenges to India's solar power capacity addition

- Despite large increases in installed solar capacity, solar energy's contribution to the country's power output has not kept pace.
  - For example, solar power generated only 3.6 percent of India's total electricity generation in 2019-20.

- Domestic solar manufacturing capacity is insufficient to meet the country's current prospective demand for solar energy.
- Land costs, substantial T&D (expand) losses and other inefficiencies, and grid integration issues continue to plague the utility-scale solar PV business.
- Conflicts with local people and biodiversity preservation norms have also arisen under large scale solar power plants.
- Furthermore, because India lacks the capacity to manufacture solar wafers and polysilicon, there is no backward integration in the solar value chain.

### **Recommendations:**

- For solar systems, India has to embrace a circular economy approach. This would allow for the recycling and reuse of solar PV waste throughout the solar PV supply chain. This could reduce the need for new materials and also in the process reduce the costs of the PV modules.
- India may want to consider adopting norms for Extended Producer Responsibility (EPR). This might provide a competitive advantage for indigenous manufacturers while also resolving waste management and supply-side restrictions.
- Governments, utilities, and banks will need to look into new financial mechanisms to lower lending costs and lower the risk of investment for lenders.
- Increased knowledge and accessible financing for solar projects could help ensure that solar devices are used by a large number of SMEs and households across the country.

## **21. Patent rights on COVID-19 jabs may be waived**

### **Context**

Intellectual property rights (IPR) on COVID-19 vaccines held by international pharmaceutical companies may be relaxed for 5 years.

### **Background**

- India and South Africa were the earliest proponents of the waiver of IPR restrictions on essentials to fight against COVID-19 in 2020.
- About 100 countries, including the U.S., supported India's proposals.
- India, along with many other developing countries, already has a system of compulsory licensing, wherein the government if needed can authorise the production of drugs or vaccines despite the protection by patents.

### **Waiver of IPR**

- In the backdrop of a continuing dispute in the World Trade Organization involving India, South Africa, the European Union (EU) and the U.S., the EU proposed a waiver of IPR on COVID-19 vaccines.
- The waiver will not apply to COVID-19 drugs and diagnostic devices.
- The EU also rejected India's demand to relax IPR restrictions on COVID therapeutics.

### **The impact of waiver of IPR on COVID-19 vaccines**

- It permits the pharmaceutical companies in developing countries to make and export vaccines without explicit permission from the patent holders.
- However, it is still not known as to what extent this move will benefit Indian manufacturers, who have licensing arrangements with global pharmaceutical companies and also have developed indigenous vaccines.
- A clause in the proposal states that these "waivers" would apply to developing countries that have not exported more than 10% of the COVID-19 vaccine doses in 2021 and there is no clarity if India is included in this definition.
- The proposals apply to patented products only and since firms like Moderna and Pfizer have not patented their vaccines in India, it would not help in their manufacturing in India.
- The manufacturing know-how, which is more important than the patents, would still be considered a trade secret that continues to be withheld.

### **Key concerns**

- Experts believe that the proposals have the same essence as that of compulsory licensing in India and hence believe that there is no real push by India which might have serious consequences in future negotiations.
- Experts also believe that the Indian industry is worried more about the supply lines being cut off by the West if we are adamant on a complete waiver and hence India is "playing it safe".
- The waiver has to be extended to COVID-19 drugs and diagnostic devices as India currently has plenty of vaccines but not the drugs and therapeutics.

## **22. 'EV sales will rise 10 times by 2022-end'**

### **Context**

The Union Road Transport and Highways Minister appealed for adopting alternative fuels.

### **Rise in the sale of electric vehicles (EVs)**

- The minister said that the sales of electric vehicles (EVs) would increase by 10 times in the country by the end of 2022.
- Between 2019-20 and 2020-21,
  - The sale of two-wheeler EVs increased by 422%
  - The sale of three-wheelers increased by 75%
  - The sale of four-wheelers increased by 230%
  - The number of electric buses also saw an increase of about 1,200%
- The minister further added that the cost of petroleum vehicles will be the same as that of electric vehicles.
- According to the reports, the number of EVs registered in 2021 was 1.7% of petrol and diesel vehicles registered.

### The need to adopt alternative fuels

- India at present imports crude oil worth ₹8 lakh crores.
- According to the current trends, the imports are expected to touch ₹25 lakh crores.
- In the economic as well as the ecological and environmental interest of the country, it has become necessary to adopt alternative fuels like electricity, ethanol, methanol, biodiesel, bio-CNG, and green hydrogen.

### Advantages of hydrogen

- Hydrogen is said to be the “fuel for the future”.
- Hydrogen is a clean source of alternative fuel that can be used to power the fuel cells of zero-emission vehicles.
- Hydrogen has a high potential for domestic production that can help in reducing the imports of fossil fuels.
- Hydrogen has high efficiency i.e. about 2 to 3 times more efficient than gasoline.
- Hydrogen can also be easily stored in tanks as it is lighter and also is easy for refilling.

## 23. Clean energy must use the battery of a circular economy

### Context:

- In the recent budget speech, the Finance Minister had emphasised the **role of cleaner technologies in India’s future economic growth** while also noting the importance of **transitioning to a circular economy** from the existing linear one.
- In this respect, the article analyses the significance of adopting a circular economy in the renewable energy sector and makes some recommendations in this direction.

## Significance of circular economy:

### Handling waste:

- The circular economy model with its inbuilt efficient waste management ecosystem would be necessary to manage the enormous waste generated by renewable energy projects in the coming decades.
- As per the estimates of the International Renewable Energy Agency (IRENA), the **cumulative waste generated by India's total installed solar capacity could be as high as 325 kilotonnes by 2030.**

### Economic aspects:

- A robust renewables waste management and recycling ecosystem could **help India create new jobs**. It would help create quality employment opportunities for future generations across the entire value chain of waste management and recycling.
- Notably, it will also help **formalize the largely informal nature of India's recycling sector** which would help workers in the informal sector access various socio-economic benefits.
  - A majority of India's recycling sector is informal and workers have to work in unsafe environments without standardised wages.

### Ensured supply of raw materials:

- Efficient metal recovery from waste provides a **resilient supply of raw material** for the renewable energy manufacturing industry.
- This could help insulate these industries from potential supply chain shocks of raw materials while ensuring **energy security for India.**

### Reduce environmental harm:

- Landfilling is the cheapest and most common practice to manage renewable energy waste currently. However, it is not environmentally sustainable. The various metals and non-metals used in these components could leach into the environment and enter the food chain.
- An efficient recycling system could help reduce such environmental harm and help mankind towards a **sustainable future.**

### Recommendations:

- The article recommends the following steps to nurture a circular economy in the Indian renewable energy industry.

### A clear framework:

- The Indian policymakers should **revise the existing electronic waste management rules** and the extended producer responsibility provision to bring various clean energy components under its ambit.
- The manufacturers, assemblers, importers and distributors in the renewable energy industry should be brought under the ambit of electronic waste management rules and there should be a **clear cut allocation of responsibilities** to these stakeholders.

### Ban on unscientific approaches:

- **Dumping and burning** related components should be banned.
  - The leaching of heavy metals such as lead and cadmium from solar photovoltaic modules remains a major environmental concern.
  - Burning the polymeric encapsulant layer in solar photovoltaic modules releases toxic gases such as sulphur dioxide and some volatile organic compounds.

### Thrust on Research and Development:

- The renewable energy industry should invest in the research and development of recycling technologies.
- Besides the traditional methods of dismantling and disassembly, the R&D efforts should focus on **discovering new ways of recycling** that have higher efficiency and are less damaging to the environment.

### Ensuring adequate and affordable finance facilities:

- There is a need for **innovative financing routes** for waste management.
- Provisions like **lower interest rates** on loans disbursed for setting up renewable energy waste recycling facilities, issuing **performance-based green certificates** to recyclers that could be traded to raise money for waste management would help ease the financial burden.

### Creating a market:

- The creation of a market for recycled materials through **mandatory procurement** by the renewable energy and other relevant manufacturing industries will create the necessary demand for such goods.

### Focus on quality of goods:

- There needs to be an improvement in product design and quality.

- The product designs should be simplified to reduce the recycling steps.
- Toxic metals such as cadmium and lead should be substituted in renewable energy components.
- The Union and State governments should set **stringent quality control standards** for components used in their tenders. This will prevent premature end-of-life of components and consequent waste creation.
- Apart from helping reduce waste generation, such quality enforcement could also help position India's renewable energy industry as a global supplier of quality products.

## 24. Transmogrifying a behemoth – the Railways

### Context:

- The article while taking note of some recent improvements in the services of Railways cautions against the continued neglect of some crucial policy issues related to the Indian railways.

### Developments in the railway sector:

- Proposals for bullet trains.
- Introduction of '**Vande Bharat**' express trains.
  - Vande Bharat is a semi-high speed trainset, each of 16 coaches, and self-propelled – they do not require an engine. Budget 2022 laid out a grand plan of introducing 400 semi-high speed, next-generation Vande Bharat trains in the next three years.
- Introduction of Vistadome coaches along selected routes.
- Remodelling of railways stations along the 'airport standard'.
- Historically **lower number of accidents**.
- Historic levels of **capital investments** in the railway sector.
  - The capex outlay for 2021-22 is Rs 2,15,000 crore which is more than five times the 2014 level. The next 10 years will see a very high level of capital expenditure in the railway sector.
- Record levels of freight loading.
- **National Rail Plan**
  - The National Rail Plan lays down the road map for capacity expansion of the railway network by 2030 to cater to growth up to 2050. It envisages the creation of a future-ready railway system that is able to not only meet the passenger demand but also increase the modal share

of railways in freight to 40-45 per cent from the present level of 26-27 per cent.

### Concerns:

- The article argues that the points discussed above amount to mere feel-good image makeover of the railways and there continues to be neglect of crucial policy issues, especially those that concern the financial health and the future management architecture of the Indian Railways.

### Precarious financial health:

- While the recent budget reflects a 'surplus' of ₹875 crore for the railways, the article argues that this is mainly attributable to **window dressing of the financial statistics** to hide the actual financial status of the railways which continues to remain in deficit.
- The planned **projects like line doubling of existing routes, the introduction of new lines and 100% electrification require huge investments and have long gestation periods**. Given the limited fiscal capacity of the government, these projects will need to be financed by heavy institutional/market borrowings at relatively high rates. Hence the repayment of loans and interest will continue to remain a pressure on the railways at least in the near future until the new infrastructure additions start generating revenues for the railways. Notably, some experts have also raised doubts over the **financial viability** of some of the planned infrastructural projects.
- The **Eighth Pay Commission**, normally due by around 2025-26, is bound to strain finances further.

### Confusion regarding management architecture:

- There continues to be **mixed signalling on changing the management architecture of the Indian Railways**.
  - In 2019, the government decided to do away with the system of recruiting officers to the 'Group A' services in the Railways through the Combined Engineering Services Examination (for technical posts) and the Civil Services Examination (for non-technical positions). Instead, it proposed having recruitments to a single service called the **Indian Railways Management Service (IRMS)**. This decision was based on the argument that the old system had led to **departmentalism in railways** which was hampering optimum decision making and the smooth working of the Railways.
  - In what is being viewed as a turn around the recruitment to the IRMS would be made through the Civil Services Examination. This is based



on the questionable argument that since about 70% of the candidates who qualify in the CSE are engineers there is no need to hold separate exams for IRMS. This the article argues could **impact the quality of human resources especially manning technical roles.**

- The kind of career progression possible in such a system will again lead to the **generation of generalists as against the desire to have domain experts** as envisaged by the changes made to the management architecture.
- The privatisation moves of the Indian railways is also fraught with challenges. The Indian Railways is poised to migrate to the Public Private Partnership (PPP)/Joint Venture (JV) mode or outright privatisation in its major activities such as train running, asset maintenance, station management, project management and execution, production units and medical services. This will result in all relevant domain expertise resting in the private sector, only supported at certain levels by the IRMS cadre. This does not augur well for the building of a strong IRMS cadre with experience and expertise.
- The lack of a clear policy for the management architecture of the railways will result in **systemic challenges in its functioning going ahead.**

## 25. Will the war in Ukraine rattle India's banks?

### Context

- Reports suggest that the crisis in Ukraine will cause hardships to the Indian economy.
- S&P Global, which is a rating agency, predicts that the rising inflation and borrower stress could impact the ability of companies in India to pay back loans fully.

### Impact of Ukraine war on Indian Economy

- The war in Ukraine has affected the production and logistics of various raw materials and goods.
- Ukraine is the key source of sunflower oil to India. The war has affected the supplies and this would further affect the prices of edible oils.
- War in Ukraine has resulted in the closedown of its neon factories that account for nearly 50% of the global supply which is crucial in the production of semiconductors.
  - This along with the prevailing global chip shortage issues has serious repercussions on car and automobile manufacturing in India.

- The domino effect on industries' supply chains will harm the ability of businesses to repay their loans.

### **Other factors that hinder the ability of companies to repay loans.**

- **Rise in Oil prices** - Oil prices are on the rise since the onset of the war in Ukraine.
  - This will increase the prices of petrol and diesel in India resulting in an increase in the cost of transportation.
  - This further leads to an increase in the prices of goods from agricultural produce, raw materials for the factories and finished products leading to inflation.
  - This makes it difficult for the producers to repay their loans as inflation impacts both the demand and profitability of producers.
- **Weakening of Rupee** - As the exchange rate is affected, importers now should spend more rupees for the same dollar value of imports than earlier.
- **Widening current account deficit (CAD)** - The growth of imports at a faster rate than exports causes the widening of the CAD.
  - The widening of CAD will further weaken the rupee compared to dollars.
- **Inflation** - Increase in inflation which is already over the RBI's upper tolerance limit of 6% will result in an increase in the interest rates.
  - More interest rate means less profit for the manufacturers and retailers.
  - This will further hurt the ability of small and medium enterprises to repay already existing loans.

### **Conclusion**

In the **Financial Stability Report** for December 2021, the RBI cautioned that the Gross Non-Performing Asset Ratio for commercial banks would increase to 9.5% under severe stress by September 2022 from 6.9% at the same time last year (2021). This will impact the credit ecosystem in India, thereby affecting the state of the Indian economy.

## **26. Textile Industry in India**

### **Context**

South Asia became a major player in the global textiles and clothing market with the onset of the third wave of global production.

## Textile industry in Bangladesh

- Bangladesh overtook India in exports in the past decade as **Indian labour costs** resulted in products becoming 20% more expensive.
- Bangladesh joined the league in the 1980s, owing to the outbreak of the civil war in Sri Lanka.
- **Lower production costs and free trade agreements** with western buyers are what favour Bangladesh, which falls third in the line as a global exporter.
- Bangladesh has been ahead of time **in adopting technology**.
- Bangladesh also **concentrates on cotton products**, specialising in the low-value and mid-market price segment.

## Where does India stand?

- The progress of India and Pakistan **in readymade garments** is recent when compared to their established presence in textiles.
- **India holds a 4% share** of the U.S.\$840 billion global textile and apparel market, and is in fifth position.
- India has been successful in developing backward links, with the aid of the **Technical Upgradation Fund Scheme (TUFS)**, in the cotton and technical textiles industry.
- However, India is yet to move into man-made fibres as factories still operate in a seasonal fashion.

## Challenges ahead

### 1] Fourth Industrial revolution and robotic automation

- The Fourth Industrial Revolution (4IR) has been shifting focus from production machinery to integrating technology in the entire production life cycle.
- The production cycle incorporates all digital information and automation including robotics, artificial intelligence (AI), virtual reality, 3D printing, etc.
- Robotic automation exemplifies production efficiency, especially in areas such as cutting and colour accuracy.
- The Asian Development Bank anticipates the challenges of **job losses and disruption, inequality and political instability, concentration of market power** by global giants and more vulnerability to cyberattacks.
- With a 7% unemployment rate, India faces the challenge of job creation in the wake of increased automation.
- The World Bank expects this trend to accelerate in the post-COVID-19 market.
- The 4IR may result in unemployment or poor employment generation, primarily affecting a low skill workforce.

## 2] Sustainability challenge

- Sustainability is also an important consideration for foreign buyers.
- Bangladesh's readymade garments initiated 'green manufacturing' practices to help conserve energy, water, and resources.
- Textile and apparel effluents account for **17%-20% of all water pollution**.
- The Indian government is committed to promoting sustainability through project sustainable resolution.

## 3] Labour issues

- Access to affordable labour continues to be an advantage for south Asia.
- In addition, a country such as India with a very high number of scientists and engineers could lead, as is evident in the areas of drones, AI and blockchain.
- India's potential lies in its resources, infrastructure, technology, demographic dividend and policy framework.
- The creation of a **Centre for the Fourth Industrial Revolution** is indicative of India's intent.

## Way forward

- **Digitalisation and automation** in areas such as design, prototyping, and production are key in order to stay abreast, and in controlling production quality and timely delivery.
- **Sustainable practices** such as regenerative organic farming (that focuses on soil health, animal welfare, and social fairness), sustainable manufacturing energy (renewable sources of energy are used) and circularity are being adopted.
- **Tax exemptions** or reductions in imported technology, accessibility to **financial incentives**, maintaining political stability and establishing good trade relations are some of the fundamental forms of support the industry needs from governments.
- The U.S. trade war on China owing to human rights violations along with its economic bottlenecks, opens doors for India and Pakistan as they have strong production bases.
- Similar to China, India has a big supply – from raw material to garments.
- Bangladesh has also risen as a top exporter in a cost competitive global market.
- India's proposed investments of US\$1.4 billion and the establishment of all-in-one textile parks are expected to increase employment and ease of trade.
- India extended **tax rebates in apparel export till 2024**, with the twin goals of competitiveness and policy stability.

- Labour law reforms, additional incentives, income tax relaxations, duty reductions for man-made fibre, etc. are other notable moves.
- Newer approaches in the areas of compliance, transparency, occupational safety, sustainable production, etc. are inevitable changes in store for South Asia to sustain and grow business.
- Finally, there is a need for governments' proactive support in infrastructure, capital, liquidity and incentivisation.

## Conclusion

Ensuring government support for financial incentives, upgrading technologies and reskilling labour are key challenges.

## 27. Indigenisation in defence technologies, manufacturing will ensure India's strategic autonomy

### Context

Given its successive abstentions during votes on Ukraine in the UN Security Council and elsewhere, New Delhi has attracted criticism and even reproach from many quarters. While India's abstentions may be hard to justify on moral grounds, they are certainly rooted in "realpolitik".

### Reasons for India's stance

- There is irrefutable logic in the argument that safeguarding the **source of 60-70 per cent of its military hardware** constitutes a prime national interest for India.
- Any interruption in the supply of Russian arms or spares could have a devastating impact on our defence posture vis-à-vis the China-Pak axis.
- Even after diversification of sources, India remains trapped in the Russian bear's jaws, **jeopardising the credibility of its "strategic autonomy"**.

### Implications of India's position

- The stance adopted by India has placed it amongst a minority of nations, alongside China and Pakistan.
- Seen widely as pro-Russian, this posture is **likely to affect India's international standing** and bears reflection.

### Suggestion

- The answers to India's agonising dilemma lie in two drastic imperatives, which must receive the closest attention of decision-makers. They are:

- The “de-Russification of the armed forces” and the genuine “indigenisation of India’s defence technological and industrial base (DTIB)”.
- Russia’s military-industrial complex, in oligarch hands, has been struggling against inefficiency, poor quality control and deficient customer support.
- It is time to initiate a process of progressive “de-Russification” of Indian armed forces; not to switch sources, but of becoming self-reliant.
- It may be uplifting to see battle-tanks, warships and jet-fighters held up as examples of self-reliance, but what is never mentioned is that **vital sub-systems** like engines, guns, missiles, radars, fire-control computers, gear-boxes and transmission are either imported or assembled under foreign licences.
- Atmanirbhart requires selective identification of vital military technologies in which we are deficient and demands the initiation of well-funded, time-bound, mission-mode projects to develop (or acquire) the “know-how” as well as “know-why” of these technologies.

## Conclusion

Having failed for 75 years after independence to attain a degree of self-reliance in military hardware that would have undergirded our “strategic autonomy,” it is time for India to zero in on the reasons why we have failed, where peer-nations like China, South Korea, Israel, Taiwan and even Singapore have succeeded spectacularly.

## 28. What is the NPPA’s role in fixing drug prices?

Consumers may have to pay more for medicines and medical devices if the National Pharmaceutical Pricing Authority (NPPA) allows a price hike of over 10% in the drugs and devices listed under the National List of Essential Medicines (NLEM), this coming month.

### Who regulates Drugs prices?

- The NPPA was set up in 1997 to fix/revise prices of controlled bulk drugs and formulations and to enforce price and availability of the medicines in the country, under the Drugs (Prices Control) Order, 1995-2013.
- Its mandate is:
  1. To implement and enforce the provisions of the DPCO in accordance with the powers delegated to it
  2. To deal with all legal matters arising out of the decisions of the NPPA
  3. To monitor the availability of drugs, identify shortages and to take remedial steps

- The NPPA is also mandated to collect/maintain data on production, exports and imports, market share of individual companies, profitability of companies etc., for bulk drugs and formulations and undertake and/ or sponsor relevant studies in respect of pricing of drugs/ pharmaceuticals.

### **How does the pricing mechanism work?**

- Prices of Scheduled Drugs are allowed an increase each year by the drug regulator in line with the Wholesale Price Index (WPI) and the annual change is controlled and rarely crosses 5%.
- But the pharmaceutical players pointed out that over the past few years, input costs have flared up.
- The hike has been a long-standing demand by the pharma industry lobby.
- All medicines under the NLEM are under price regulation.

### **How are the prices determined?**

- The ceiling price of a scheduled drug is determined by first working out the simple average of price to retailer in respect of all branded and generic versions of that particular drug formulation.
- It should have a market share of more than or equal to 1%, and then adding a notional retailer margin of 16% to it.
- The ceiling price fixed/revised by the NPPA is notified in the Gazette of India (Extraordinary) from time to time.

### **When are the prices revised?**

- Prices are revised when there is a rise in the price of bulk drugs, raw materials, cost of transport, freight rates, utilities like fuel, power, diesel, and changes in taxes and duties.
- The cost rises for imported medicines with escalation in insurance and freight prices, and depreciation of the rupee.
- The annual hike in the prices of drugs listed in the NLEM is based on the WPI.
- The NLEM lists drugs used to treat fever, infection, heart disease, hypertension, anaemia etc and includes commonly used medicines like paracetamol, azithromycin etc.

### **Why are inputs costs high?**

- One of the challenges is that 60%-70% of the country's medicine needs are dependent on China.
- WPI is dependent on price rise in a basket of a range of goods that are not directly linked with the items that go into the cost of medicines.

## 29. Russia's offer of cheaper oil is tempting, but India must be cautious

### Context

With oil above \$100, the government now has to spend twice as much to import oil as it did earlier. Russia has offered to sell oil at lower prices to India. It is a hard temptation for India to resist. But one that comes with profound and long-lasting consequences.

### Issues in buying oil from Russia

#### 1] Impact on India's export due to threat of the secondary sanction by the US

- The demise of the Soviet Union made it easier for India to abandon the Soviet-influenced ideology of a planned economy and veer towards the American version of a market economy.
- Now, in the reverse ideological direction, Russia's offer of cheaper oil has hidden and direct costs that India will have to deliberate upon.
- Whenever global crude oil prices have risen above \$100 in the past, India was able to cushion that shock primarily through growth in exports.
- When oil prices were similarly high, exports rose to nearly 25 per cent of nominal GDP, which helped India withstand the shock.
- However, exports now have fallen dramatically to 18 per cent of GDP, which must be revived.
- The US is India's biggest export market.
- The US has already cautioned India about abetting Russia by buying Russian oil.
- It remains to be seen if the **US will impose secondary sanctions against India** for buying discounted Russian oil, but that threat looms large.

#### 2] Cascading de-dollarisation

- With US sanctions against Russia, it will insist on payment in rubles.
- If India is forced to accept trading in rubles with Russia, then it is very likely that China, which is India's second-largest trading partner, may also insist on payments in Chinese yuan.
- Saudi Arabia may also insist on trading in a currency other than the US dollar.
- This cascading "de-dollarisation" phenomenon will further irk and antagonise the US, since it weakens the dollar's status as the world's reserve currency.
- If India is forced to purchase Russian oil in rubles and potentially trade in yuan with China and others, **it can catapult India into the centre of a geo-economic war** that it can ill afford.



## Opportunity for India

- The Russia-Ukraine conflict can be an opportunity for India to step up and capture global market share in goods and services.
- There is already talk of India capitalising on wheat exports, albeit a tiny share of India's overall exports, as a fallout of global sanctions against Russian wheat.

## Conclusion

Exports remain India's biggest hope for a long-term sustainable economic recovery with ample job creation. India cannot risk being isolated in future global trade for near-term discounted oil deals with Russia.

### 30. A blow to equitable access to essential medicines

#### Context

At the height of the COVID-19 pandemic in October 2020, India and South Africa had tabled a proposal seeking a temporary waiver on COVID-19 related products from the TRIPS. Nearly 18 months later, 164 members of the WTO could not find common ground on the "waiver proposal".

#### How will the waiver help?

- The application and enforcement of intellectual property rights (IPRs) are affecting the timely provisioning of affordable medical products to patients.
- Therefore, India and South Africa argued that therefore, argued that "rapid scaling up of manufacturing globally" was "an obvious crucial solution to address the timely availability and affordability of medical products to all countries in need", and for doing so, IPRs must **be waived for at least three years**.

#### The EU solution

- The EU had proposed in a submission in June 2021 that "[c]ompulsory licences are a perfectly legitimate tool that governments may wish to use in the context of a pandemic".
- India and South Africa, the movers of the "waiver proposal", are among the four countries that found a "compromise outcome".
- **Only vaccines are included:** The solution is a severely truncated version of the "waiver proposal" in terms of product coverage, **as only vaccines are included**.

- Generally, patent laws, including that of India's, **allow for the grant of compulsory licences** if patent holders charge high prices on the proprietary medicines in exercise of their monopoly rights.
- Moreover, such licences can usually be granted if efforts in obtaining voluntary licences from the patent holders have failed.
- The EU proposal states there that in case of a medical urgency, as is the case now, this condition will be waived.
- The proposal also provides that WTO members would be able to issue compulsory licences even if they do not currently have the provisions to issue them under their national patent laws.
- Compulsory licences can even be granted using executive orders, emergency decrees, and judicial or administrative orders.

## Issues with the EU solution

### 1] Eligible member criteria

- The waiver solution can be used only by an “eligible member”, defined as a “developing country member” of the WTO that “had exported **less than 10 percent of world exports of COVID-19 vaccine doses in 2021**”.
- This means that Bangladesh, which is still a least developed country, but has a growing pharmaceutical industry, is also excluded.
- **Restricting China:** The eligibility condition seems to have been introduced to limit China's expansion in the global vaccine market.
- **No concern for India:** At the current juncture, India does not have to be concerned with the export restriction clause, as its share in global exports of vaccines was **2.4% as on January 31**.

### 2] Export restrictions in the form of eligibility criteria

- While introducing the above-mentioned export restriction, the solution proposes to waive the obligation under **Article 31(f) of the TRIPS Agreement**.
- Article 31(f) provides that the compulsory licences issued by any WTO member must be used “predominantly for the supply of the domestic market”.
- But while they have proposed removal of **Article 31(f)**, solution includes a more stringent export restriction in the form of the eligibility criteria mentioned above.

### 3] Further conditions

- The proposed condition of listing all patents covered under the compulsory licences is not a requirement under the TRIPS Agreement.

- Similarly, there is no obligation to notify the details of licensee, the quantity and export destination under the TRIPS provisions.
- But the EU proposal text **proposes mandatory notification**.

#### 4] Transfer of know-how is not ensured

- According to the EU, when compulsory licences are granted, the “patent holder receives adequate remuneration”, but “[t]ransfer of know-how is not ensured”.
- This demerit of compulsory licences would make it difficult to scale up production of COVID-19 vaccines, medicines, and medical devices in the developing world, thus constraining their availability at affordable prices.

### Conclusion

It must be said that by accepting the “compromise outcome”, India and South Africa could jeopardise their high moral ground. Consequently, the global community would lose an important opportunity to ensure that vaccines and medicines are accessible to all.

## 31. Make trade deals for Make in India

### Context

It will be a good idea to look at the intent, reality, and other ramifications of India’s trade agreements, especially in regard to goods.

### Why PTAs matters

- Amongst the existing **Preferential Trade Agreements (PTAs)**, the most commonly used by exporters and importers, are the agreements with the **ASEAN region, South Korea, Japan, and South Asian countries**.
- It is noteworthy that **India has significant trade deficits with three of the aforementioned regions**.
- Another factor to note is that three of these regions have **significant manufacturing capacity** and investment in their own territories.
- Thus, India’s ongoing initiatives in trade agreements must consider whether such deals strengthen imports into India or incentivize investment.
- This is all the more important as the Centre has laid out schemes like **Phased Manufacturing Programs (PMPs)** and **Production Linked Incentives (PLIs)** to encourage investment in Make in India.

## How existing trade agreements affect Phased Manufacturing Programs(PMP)

- **How does it work?** Under the PMP, **calibrated reductions in customs duty rates** on inputs and intermediate goods have been provided along with higher duty rates on finished products.
- However, considering that many of the finished products are **covered by zero duty rates under existing trade agreements** with some regions or countries, manufacturers with existing facilities in such countries may not have a compelling reason to move manufacturing to India.
- Similar benefits exist under other agreements and **may inhibit the uptake of the PMPs** by multinational manufacturing entities.

## Production Linked Incentives and trade agreements

- Under PLIs, based on a **threshold level of capital investment and incremental production**, subsidies are to be given to approved applicants.
- Such schemes cover **15 product categories as of now**.
- In some cases, the attraction of incentives could score over the benefits of importing goods under low or nil rates of duty under PTAs.

## Suggestions:

- The PLIs could become even more attractive if it is **combined with certain pre-existing special governmental schemes** that reduce costs and conserve cash flow.
- While the application window for most of the PLI schemes has closed, **a few may be extended and depending on the success of current schemes, more could follow**.
- **Improving trade governance:** PTAs are **governed by written agreements between nation states** or groups of nation states and domestic laws of the signatories.
- Contrary to a violation of a multilateral or plurilateral agreement entered into under the aegis of the WTO, enforcement mechanisms external to the parties, do not exist for PTAs.
- The committed benefits could be allowed or disallowed by customs rules (for example the CAROTAR in India) and customs officials, conditional upon certifications and validations.
- Mechanisms exist in the FTAs themselves to solve such matters, but in a situation where entities of different sizes and economic power attempt to resolve such issues, the resolutions may not be acceptable to all parties.
- Better governance mechanisms are needed.

## Conclusion

It is expected that a holistic view, keeping in mind the government's schemes on investment and trade governance, would inform future negotiations as well as a review of existing trade agreements of India.

## 32. Sovereign green bond (SGB)

### Context

The other two major budget announcements pertain to the issuance of sovereign green bonds and a central bank digital currency. While geopolitical turbulence might make the current moment inopportune for experimentation, the government seems firm on both the proposals and they will most probably be rolled out.

### Sovereign green bond (SGB): how it is different from a traditional bond

- The sovereign green bond is a novel idea.
- It will be a part of the government's borrowing programme.
- The gross borrowing programme of the government is pegged at **Rs 14.95 lakh crore**.
- The SGB (sovereign green bond) raised will be part of the aggregate borrowing programme and has to be used for projects which are **ESG (environment, social and governance) compliant**.
- Hence, if the bond is being used to finance a power project or road, or in case it is used to finance revenue expenditure, **it has to be ESG compliant**.
- If they succeed at the central level, green bonds can be replicated by states.

### Challenges for SGB

- **Pricing challenge:** As these bonds are different from G-secs (government securities), they may have to provide a better return as all ESG compliant companies have to make special investments that will push up costs.
- **Low-interest rate:** Further, given the low-interest rates prevailing today – real returns on deposits are negative – the SGBs can be issued as tax-free bonds, open to the public.
- This will evince a lot of interest given that these are government-issued bonds.
- The RBI and the government have been trying to get **retail investors** to participate in the government's borrowing programme, and **this move will expedite the process**.

## Central bank digital currency (CBDC) and challenges

- For launching such a currency, the RBI has to address certain fundamental questions.
- 1] **Will it replace currency:** Is a CBDC going to replace currency at some point in the future?
- One must remember that there are several sections in India that are not conversant with technology.
- 2] **How will it be different from digital payments:** If it is going to coexist with currency, how different will it be for the public from the digital payments that are being made today?
- Will people need to choose between a mobile wallet and a CBDC wallet?
- 3] **Security of owner's information:** any issuance of CBDC on a voluntary basis also raises a question on the security of the owner's information.
- CBDC has to be clear on the issue of confidentiality as it is bound to be a matter of concern.
- 4] **The future of the banking system:** If people have to be incentivised to move voluntarily to the CBDC, the cash exchanged must earn interest or else all money will go to bank accounts where a minimal interest rate can be earned.
- Will we require savings bank accounts with commercial banks in case all cash goes to the RBI?
- Will we then require ATMs for cash withdrawal? Will bank tellers become redundant? Will we need logistics companies that handle cash?
- These finer issues need to be addressed by the RBI as the widespread use of CBDC will progressively lead to lesser need for banks.
- 5] **Issue of security:** Any financial system that runs on technology can be hacked.
- It has to be foolproof and power failure resistant.
- There is a real danger of cyber fraud increasing as the **majority of the population is not tech-savvy**.
- Similarly, there is always **downtime for bank servers** when banking transactions cannot be carried on.
- This cannot be allowed to be the case with CBDC as it has to be available on a 24 x 7 basis.

## Conclusion

The arguments for CBDC are compelling on the grounds of keeping up with the central banks of other countries, and the possibilities of taking advantage of new technologies like blockchain. But before embarking on these measures, it might be useful to keep in mind the issues flagged above.

### 33. Exports in India

India's annual goods exports crossed the \$400-billion mark for the first time ever.

The achievement of \$400 billion in merchandise exports represents a growth of over 21 per cent from \$330 billion achieved in FY2019 prior to the Covid-19 pandemic.

#### How did India achieve this?

- The milestone was achieved due to increase in shipments of merchandise, including engineering products, apparel and garments, gems and jewellery and petroleum products.
- The agriculture sector too had recorded its highest-ever export during 2021-22 with the help of export of rice, marine products, wheat, spices and sugar.

#### Reasons behind the surge

- One of the major reasons for jump in exports is rise in pent up demand, which had fallen as the Covid pandemic forced nations to remain under strict lockdown, thereby impacting global trade.
- Beside, boost in domestic manufacturing due to production-linked incentive (PLI) schemes and implementation of some interim trade pacts have also led to surge in exports.
- The Centre implemented a series of steps to promote exports of both goods and services and that includes the introduction of Refund of Duties and Taxes on Exported Products (RoDTEP) and Rebate of State and Central Levies and Taxes (RoSCTL) Schemes.

#### External factors

- One of the key factors driving the surge in exports is pent up demand that was not met during major waves of the Covid-19 pandemic.
- Expansionary monetary policy by developed economies in response to the economic impact of the pandemic has also boosted demand for Indian exports.

#### Where has been the increase in imports?

- While exports have grown sharply, merchandise imports have grown even faster reaching \$550 billion in the first 11 months of the fiscal.

- It has seen sharp growth in imports of crude oil, coal, gold, electronics and chemicals.
- Rising prices of commodities including crude oil and coal have played a significant role in adding to India's import bill and taking the trade deficit for the first 11 months to a record high of \$176 billion.

### Why exports are important?

- Exports are one of the fundamental drivers of growth for any economy.
- It can influence a country's GDP, exchange rate, level of inflation as well as interest rates.
- A robust export data is beneficial as it leads to increase in job opportunities, enhances foreign currency reserves, boosts manufacturing and also increases government's revenue collection.
- It is also a good means by which a country can bring itself out of the recession phase.
- Besides, it also plays a key role in strengthening the domestic manufacturing units by scaling up their quality to make India made products compete and stand out against global peers.

## 34. Forging a social contract for data

### Context

The Draft India Data Accessibility and Use Policy 2022 released in February for public consultation, is silent on the norms, rules, and mechanisms to bring to fruition its vision.

### Aims of the policy

- The Draft Policy aims for harnessing public sector data for **informed decision-making**, citizen-centric delivery of public services, and **economy-wide digital innovation**.
- It seeks to maximise access to and use of quality non-personal data (NPD) available with the public sector, overcoming a number of historical bottlenecks.
- This **GovTech 3.0 approach** – to unlock the valuable resource of public sector data – does upgrade the OGD vision of the **National Data Sharing and Accessibility Policy (NDSAP)**, 2012.
- It seeks to harness **data-based intelligence** for governance and economic development.



## What is lacking in the draft policy?

- **Lacking in norms and rules:** The Draft Policy is silent on the norms, rules, and mechanisms to bring to fruition its vision of data-supported social transformation.
- **Ignores the canons of RTI:** Any attempt to promote meaningful citizen engagement with data **cannot afford to ignore the canons of the Right to Information (RTI)**, and hence, the need for certain citizen data sets with personal identifiers to be in the public domain, towards making proactive disclosure meaningful.
- The unfinished task of the NDSAP in bringing coherence between restrictions on the availability of sensitive personal information in the public domain and India's RTI, therefore, has been lost sight of.
- **Risks to group privacy:** With respect to government-to-government data sharing for **citizen-centric service delivery**, the Draft Policy highlights that approved data inventories will be federated into a **government-wide, searchable database**.
- But even in the case of anonymised citizen data sets (that is no longer personal data), downstream processing can pose serious risks to group privacy.
- **Lack of data trusteeship framework:** The Draft Policy adheres to the NDSAP paradigm of treating government agencies as 'owners' of the data sets they have collected and compiled instead of **shifting to the trusteeship paradigm** recommended by the 2020 Report of the MEITY Committee of Experts on non-personal data governance.
- The lack of a data trusteeship framework gives government agencies unilateral privileges to determine the terms of data licensing.

## Suggestions

- Taking on board a trusteeship-based approach, the proposed Draft Policy must pay attention to data quality, and ensure that licensing frameworks and any associated costs do not pose an **impediment to data accessibility** for non-commercial purposes.
- **Create common and interoperable data spaces:** In the current context, where the most valuable data resources are held by the private sector, it is increasingly evident to policymakers that socioeconomic innovation depends on the state's ability to catalyse wide-ranging data-sharing from both public and private sector actors across various sectors.
- The European Union, for instance, has focused on the creation of common, interoperable data spaces to encourage voluntary data-sharing in specific domains such as health, energy and agriculture.

- **Mandatory data sharing arrangement:** Creating the right conditions for voluntary data-sharing is a necessary, but not sufficient, condition for democratising data innovation.
- In this regard, the data stewardship model for high-value data sets proposed by the MEITY's Committee of Experts in their Report on Non-Personal Data Governance (2020) is instructive.
- In this model, a government/ not-for-profit organisation may request the **Non-Personal Data Authority or NPDA** for the creation of a high-value data set (only non-personal data) in a particular sector, demonstrating the specific public interest purpose.
- Once such a request is approved by the NPDA, the data trustee has the right to request data-sharing from all major custodians of data sets corresponding to the high-value data set category in question – both public and private.

## Conclusion

- What we need is a **new social contract for data** whereby:
  - a) the social commons of data are governed as an inappropriable commons that belong to all citizens;
  - b) the government is the custodian or trustee with fiduciary responsibility to promote data use for public good; and
  - c) democratisation of data value is ensured through accountable institutional mechanisms for data governance.

## 35. Noise Pollution in India

The city of Moradabad in Uttar Pradesh is the second-most noise polluted city globally, according to a recent report title Frontier 2022 by the United Nations Environment Programme (UNEP).

### What is Noise Pollution?

- Noise pollution, also known as environmental noise or sound pollution, is the propagation of noise with ranging impacts on the activity of human or animal life, most of them harmful to a degree.
- It is generally defined as regular exposure to elevated sound levels that may lead to adverse effects in humans or other living organisms.
- The source of outdoor noise worldwide is mainly caused by machines, transport, and propagation systems.
- Poor urban planning may give rise to noise disintegration or pollution, side-by-side industrial and residential buildings can result in noise pollution in the residential areas.

- Some of the main sources of noise in residential areas include loud music, transportation (traffic, rail, airplanes, etc.), maintenance, construction, electrical generators, wind turbines, explosions, and people etc.

### **Defining Noise Pollution**

- Sounds with a frequency over 70 db are considered harmful to health.
- The World Health Organization (WHO) had recommended a 55 db standard for residential areas in the 1999 guidelines, while for traffic and business sectors, the limit was 70 db.
- The WHO set the limit of noise pollution on the road at 53 db in 2018, taking into account health safety.

### **Noise Pollution in India**

- The report identifies 13 noise polluted cities in south Asia. Five of these, including Moradabad, are in India, which have recorded alarming levels of noise pollution:
  1. Kolkata (89 db)
  2. Asansol (89 db)
  3. Jaipur (84 db)
  4. Delhi (83 db)
- The noise pollution figures given in the report relate to daytime traffic or vehicles.
- Moradabad has recorded noise pollution of a maximum of 114 decibels (db). The Frontier 2022 report mentions a total of 61 cities.

### **Case in the neighborhood**

- The highest noise pollution of 119 db has been recorded in Dhaka, the capital of Bangladesh.
- At third place is Pakistan's capital Islamabad, where the noise pollution level has been recorded at 105 db.

### **Hazards created**

- High levels of noise pollution affect human health and well-being by having an effect on sleep.
- This has a bad effect on the communication of many animal species living in the area and their ability to hear.
- Regular exposure for eight hours a day to 85 decibels of sound can permanently eliminate the ability to hear.

- Not only that, exposure to relatively low noise pollution for long periods in cities can harm physical and mental health.

## 36. Self reliance in Agriculture

### Context

For the Amrit Kaal (next 25 years) that the government has announced, we need to be self-reliant not just in missiles (defence equipment) but also in meals (food).

### What does self-reliance in food mean?

- Its true meaning lies in specialising in commodities in which we have a **comparative advantage**, export them, and import those in which we don't have a significant comparative advantage.
- Self-reliance in food does not mean that we have to produce everything ourselves at home, irrespective of the cost.
- If some protection is needed for new areas to develop (infant industry argument), that may be okay.
- But one should not aspire to be self-sufficient behind high tariff walls.

### Importance of agri-R&D

- What is it that gives a country an edge over others in attaining comparative advantage?
- There is ample literature to show that agri-R&D raises total factor productivity and makes agriculture more competitive globally.
- If India wants to be fully self-reliant in food, it is generally agreed that it must invest at least 1 per cent of its agri-GDP in agri-R&D.
- The **Economic Survey (2021-22)** explicitly highlighted the correlation between spending on agri-R&D and agricultural growth.
- **Low expenditure on agri-R&D:** But the budgets of both the Union government and the states put together reveal that this expenditure on agri-R&D and education hovers **around 0.6 per cent of agri-GDP**.
- This is way below the minimum cut off point of 1 per cent and government policy must urgently work towards raising this substantially.
- There are some global and local companies like Bayer, Syngenta, MAHYCO, Jain Irrigation, and Mahindra and Mahindra that spend a considerable amount of their turnover on R&D programmes and developing high-tech inputs.
- The USP of these companies is that they develop technology that increases productivity while addressing the **current challenges of limited net sown**

area, depleting water resources, vulnerability to climate change, and the need to produce nutrient-rich food.

### Way forward

- **Role of private sector:** The private sector need to come forward and help India attain supremacy in agri-R&D and innovation systems and a hub for exports and agri-technology.
- **Increase expenditure on Agri-R&D and education:** The need of the hour is to focus on increasing expenditure on ARE and other development projects, which can aid in the sustainable growth of the agriculture sector.
- India's **budget allocations** in the agri-food space should thrive on creating "more from less".
- There is a need to work on building long-term sustainable solutions that have an aggressive approach to implementing relevant policies and developing new ones.
- India's current budgetary allocation strategy and trends need to be reoriented to ensure that there is more room for R&D expenditure by the government.
- **Incentivise private companies for R&D:** In addition to this, the government should come out with policies that **incentivise private companies to expand their R&D programmes** and invest more financial resources on development projects, which have the potential to overcome the challenges of the current agrarian setup of India.

### Conclusion

If India wants to be fully self-reliant in food, it must focus on agri-R&D and increase allocation in the Budget.

### 37. DRDO's Corner-Shot Weapon System

A corner-shot weapon system (CSWS), designed and developed by the Defence Research and Development Organisation (DRDO), is at an advanced stage of being inducted by the Central Reserve Police Force (CRPF) and the Jammu and Kashmir police.

#### What is CSWS?

- The CSWS is a special purpose weapon designed by the Armament Research and Development Establishment (ARDE), Pune.
- It can engage targets located around the corners as the system bends and captures video feed thus saving soldiers from any surprise counter-attack and is best suited for urban, close quarter situations.

- It is equipped with weapon, camera, laser, infrared illuminator and torch in front portion, while display, electronics, battery and swivelling mechanism are located at rear portion.
- The body is made from high-grade aluminium alloy to make it lighter and durable.

### Key features

- Day-night firing capability, colour display, digital zoom, zeroing facility, hot keys, high power battery along with status display and compliance with JSS 5855 makes it a very potent system for security forces.
- It is very helpful in Counter Insurgency and Counter Terror (CI/CT) operations.
- This indigenously developed system has many superior features compared to its contemporary international systems and available for 9 mm GLOCK 17/19 and 1A1 Auto Pistol variant.

### 38. What is T-Cell Immunity?

A new study from Wuhan has studied the role of T-Cell Immunity against prolonged and severe COVID-19.

#### What are T-Cells?

- Like B cells, which produce antibodies, T cells are central players in the immune response to viral infection.
- For your immune system to fight off any kind of invader, such as a virus, you need a kind of white blood cell called a B cell, which makes antibodies, and a similar-looking white blood cell called a T cell.
- T cells can play different roles altogether.
- They can act as “killer cells”, attacking cells which have been infected with a virus or another kind of pathogen, or they can act as “helper cells” by supporting B cells to produce antibodies.

#### How do they function?

- Alongside antibodies, the immune system produces a battalion of T cells that can target viruses.
- Some of these, known as killer T cells (or CD8<sup>+</sup> T cells), seek out and destroy cells that are infected with the virus.

- Others, called helper T cells (or CD4<sup>+</sup> T cells) are important for various immune functions, including stimulating the production of antibodies and killer T cells.
- T cells do not prevent infection, because they kick into action only after a virus has infiltrated the body. But they are important for clearing an infection that has already started.
- In the case of COVID-19, killer T cells could mean the difference between a mild infection and a severe one that requires hospital treatment.

### **What did the latest research find?**

- The researchers found that neutralising antibodies were detectable even 12 months after infection in “most individuals”.
- It remained stable 6-12 months after initial infection in people younger than 60 years.
- The researchers found that “multifunctional T cell responses were detected for all SARS-CoV-2 viral proteins tested”.
- And most importantly, the magnitude of T cell responses did not show any difference immaterial of how severe the disease was.
- While the ability of antibodies to neutralise was nearly absent against the Beta variant, it was reduced in the case of the Delta variant.

### **Neutralizing antibodies**

- SARS-CoV-2-specific neutralising antibody and T cell responses were retained 12 months after initial infection.
- Neutralising antibodies to the D614G, Beta, and Delta were reduced compared with those for the original strain, and were diminished in general.
- Memory T cell responses to the original strain were not disrupted by new variants.
- The findings show that robust antibody and T cell immunity against SARS-CoV-2 is present in majority of recovered patients 12 months after moderate-to-critical infection.

### **Robustness of antibodies**

- The study reveals the durability and robustness of the T cell responses against variants, including Delta, even after one year of infection.
- Most importantly, the robust and longstanding T cell responses were seen in people who have not been reinfected or vaccinated.
- This would mean even in the absence of vaccination, a person who has been infected by the virus even one year ago would have robust immune responses.

- It would offer protection against disease progressing to a severe form requiring hospitalization.

### 39. Gahirmatha beach witnesses Arribada

About 2.45 lakh Olive Ridley sea turtles crawled ashore on the Nasi-II beach of the Gahirmatha Marine Sanctuary along the Odisha coast for laying eggs, marking one of the largest opening day arrivals of turtles at the site.

#### Olive Ridley Turtles

- The Olive Ridley Sea Turtle (*Lepidochelys olivacea*), also known as the Pacific ridley sea turtle, is a medium-sized species of sea turtle found in warm and tropical waters, primarily in the Pacific and Indian Oceans.
- In the Indian Ocean, the majority of olive ridleys nest in two or three large groups at Rushikulya rookery near Gahirmatha in Odisha.
- The coast of Odisha in India is the largest mass nesting site for the olive ridley, followed by the coasts of Mexico and Costa Rica.
- The species is listed as Vulnerable in the IUCN Red List, Appendix 1 in CITES, and Schedule 1 in Wildlife Protection Act, 1972.

#### Special feature: Mass nesting

- They are best known for their behavior of synchronized nesting in mass numbers, termed Arribadas.
- Interestingly, females return to the very same beach from where they first hatched, to lay their eggs.
- They lay their eggs in conical nests about one and a half feet deep which they laboriously dig with their hind flippers.
- They hatch in 45 to 60 days, depending on the temperature of the sand and atmosphere during the incubation period.

### 40. RBI cannot ignore inflation

#### Context

Despite being legally mandated to keep inflation in check, RBI has persisted with easy monetary policy, even as inflationary pressures have increased. We need to understand why, and what could be the repercussions.



## Inflation problem in India

- For most of the past two years, CPI (consumer price index) inflation has been hovering close to the **6 per cent upper threshold of the RBI's target band**.
- Inflation averaged 6.1 per cent during the pandemic period (April 2020 to June 2021), despite a massive collapse in aggregate demand.
- Then in January 2022, as food prices recovered, headline inflation once again crossed the upper threshold of the inflation targeting band.
- Inflationary pressures do not seem to be diminishing either. Instead, they continue to build up.
- The standard measure of inflation "in the pipeline" is WPI (wholesale price index) inflation, since **price increases at the wholesale level tend to translate into retail inflation** in due course.
- Russia's invasion of Ukraine has resulted in a sharp increase in global commodity prices, including prices of crude oil, edible oils, and fertilisers.
- Indian firms are already adapting to this situation, passing on commodity price increase to retail prices.

## Issues with RBI's stance

- Standard economics gives us a guide for how central banks should react in a situation like this.
- **Two conditions:** It says that **monetary policy should accommodate the first round of commodity price increase**, but only under certain conditions, notably that inflation is initially on target, and **expectations are firmly anchored**.
- But neither condition holds at present. Inflation is already too high, and so are expectations.
- An argument is nonetheless being made that monetary policy should not be tightened when inflation is driven by **supply-side factors, as it can adversely impact growth**.
- This is fallacious. When there are **supply constraints**, using easy monetary policy to boost demand is not going to boost output.
- And if firms are expecting high inflation, this will send things into a vicious spiral, as they will increase their prices even more in advance of any input price pressures.
- Surely the RBI is aware of all of this. So why is it still not acting on it?

## Why RBI is ignoring inflationary pressure?

- **Growth concerns:** The problem seems to be that governments all over the world are **worried about growth**.

- The US Federal Reserve has been slow to raise rates even as inflation has reached a four-decade high. The European Central Bank has been even slower to react.
- **Fiscal dominance in India:** In India, monetary policy also suffers from a **strong fiscal dominance**.
- As a result, not only is the RBI expected to support growth, it is also expected to **keep the government's borrowing costs in check**, which is in direct conflict with its inflation targeting objective.

### Implications of RBI ignoring inflationary pressure

- **Aggressive reduction in interest rates:** A decade ago, we were in a similar situation when RBI delayed its response because it was focusing on growth.
- When inflation subsequently took off, it reached double digits and the RBI had to raise interest rates aggressively to bring it down.
- That was a very painful adjustment.
- **Impact on credibility of the RBI:** In addition, if the RBI does allow inflation to take off, there will be long-lasting repercussions for its credibility.
- **Unanchored expectation:** if the public sees the RBI consistently ignoring inflation, expectations can rapidly get unanchored, and then it becomes very costly to bring it down.

### Conclusion

To conclude, inflation is best addressed by the central bank using monetary policy, not by the government adjusting taxes. The RBI needs to urgently revisit its inflation forecast and its monetary policy stance in order to avoid potentially painful adjustments down the road.