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# Violence in Manipur

Violence between **Manipur's Kuki tribe** and the majority **Meitei** community continued to rage in several parts of Manipur for many days.

## Reasons Behind The Violence In Manipur

- **Manipur was boiling since February 2023**
  - Manipur has been restive since February when the state government launched an eviction drive seen as targeting a specific tribal group.
  - The drive led to protests but not on the scale of the one seen recently.
- **High Court's order as a trigger point**
  - The recent protests were triggered by the Manipur High Court's direction to the State to pursue a 10-year-old recommendation to grant Scheduled Tribe (ST) status to the non-tribal Meitei community.
  - The Court's order has brought the historical tensions between the valley-dwelling Meitei community and the state's hill tribes to a boil.
- **Violence started**
  - A 'tribal solidarity march' was organised by the All-Tribal Students' Union of Manipur (ATSUM) against the order of the High Court.
  - Violent clashes broke out at various places in Manipur during the course of this march.

## Meitei Community Wants ST Status

- There has been an organised push in support of this demand since 2012, led by the Scheduled Tribes Demand Committee of Manipur (STDCM).
- **Recognised as tribe before merger with India**
  - In their plea before the High Court, it was argued that the Meitei community was recognised as a tribe before the merger of the princely state of Manipur with the Union of India in 1949.
  - It lost its identity as a tribe after the merger.
- **Need to preserve tradition and culture**
  - The demand for ST status arose from the need to preserve the community, and save the ancestral land, tradition, culture and language of the Meiteis.
  - As per the arguments forwarded by the community in the court:

### Major communities residing in Manipur

- The State is like a football stadium with the **Imphal Valley** representing the playfield at the centre and the **surrounding hills** the galleries.
- The valley, which comprises about 10% of Manipur's landmass, is dominated by the non-tribal Meitei who account for more than 64% of the population of the State.
  - This area yields 40 of the State's 60 MLAs.
- The hills comprising 90% of the geographical area are inhabited by more than 35% recognised tribes.
  - This area sends only 20 MLAs to the Assembly.

- Tangkhul is the most dominant of the Naga tribes of Manipur living mostly in **Ukhrul district**
- They are profoundly active in many **notable professions** like doctors, engineers, professors, IAS officers etc
- **Christianity** is their only religion
- Some major festivals celebrated by the community are **Luiru Phanit (seed sowing festival)**, **Yarra (Youth festival)**, **Mangkhap Phanit**, **Shirui Lily festival** etc



- The community has been victimised without any constitutional safeguards to date.
- The Meitei/Meetei have been gradually marginalised in their ancestral land.
- Their population which was 59% of the total population of Manipur in 1951 has now been reduced to 44% as per 2011 Census data.

### Tribal Groups Opposing ST Status for Meiteis

- The tribal groups say the Meiteis have a demographic and political advantage besides being more advanced than them academically and in other aspects.
  - The Meiteis are a dominant group controlling the state and its apparatuses.
  - Hence, the claim that Meiteis need ST status to protect their culture and identity is self-defeating.
- They feel the ST status to the Meiteis would lead to loss of job opportunities and allow them to acquire land in the hills and push the tribals out.
- The Manipuri language of the Meiteis is included in the Eighth Schedule of the Constitution.
- Sections of the Meitei community — which are predominantly Hindu — are already classified under Scheduled Castes (SC) or Other Backward Classes (OBC).

### Other Reasons For The Conflict Rocking Manipur

- **Government's crusade against drugs**
  - The anti-drug drive began with destroying poppy fields and the theory that illegal settlers from Myanmar are behind clearing forests and government lands to grow opium and cannabis.
  - These settlers are ethnically related to the Kuki-Zomi people of Manipur.
- **Eviction protests**
  - The first violent protest in March was against the eviction of the residents of a Kuki village.
  - Kuki groups have claimed that the survey and eviction is a violation of Article 371C, which confers some administrative autonomy to the tribal-dominated hill areas of Manipur.

### DEMAND FOR A KUKI HOMELAND

Recently, Manipur's 10 Kuki-Zomi MLAs demanded a separate administration under the Constitution.

#### Background

- The demand for a separate Kukiland dates back to the late 1980s, when the first and largest of the **Kuki-Zomi insurgent groups**, the Kuki National Organisation (KNO), came into being.
  - The demand has surfaced periodically ever since.
- In 2012, it became increasingly clear that the demand for a separate Telangana state would be accepted.
- At that time, an organisation called the Kuki State Demand Committee (KSDC) announced a movement for Kukiland.



#### Demand

- The KSDC claimed 12,958 sq km, more than 60% of Manipur's 22,000 sq km area, for Kukis and Kukiland.
- The territory of Kukiland included:
  - the Sadar Hills (which surround the Imphal valley on three sides),
  - the Kuki-dominated Churachandpur district, Chandel, which has a mix of Kuki and Naga populations, and

- parts of Naga-dominated Tamenglong and Ukhrul.
- Unlike the Naga demand for a separate country, Kukis are only seeking a separate state within the Indian Union.

### SHOOT AT SIGHT ORDERS IN VIOLENCE-HIT MANIPUR

With the situation worsening in violence-hit Manipur, the state government had authorised all District Magistrates to issue **shoot at sight orders in extreme cases**.

#### Legal Provisions Allowing Issuance Of Shoot-At-Sight Orders

- **CrPC, 1973**
  - Such orders may be passed under the statutory powers related to the arrest or prevention of offences or for disbanding unlawful assemblies under Sections 41-60 and Sections 149-152 of the CrPC, 1973.
    - Section 46 (2) of the CrPC enables the use of force in the course of arresting a person.
  - Section 144 of the CrPC enables the use of wide powers while dealing with urgent cases of apprehended danger or nuisance through the issuance of orders.
    - The executive usually relies on the powers conferred on it by Section 144 to issue shoot-at-sight orders.
- **Section 3(a) of the Armed Forces Special Powers Act, 1958**
  - It empowers the armed forces to use force in “disturbed areas”.
- **Provisions of the Indian Penal Code (IPC) 1860**
  - E.g., Section 81 and Section 76 of the IPC.




## India's New Parliament Building

India celebrated the inauguration of its new Parliament building in its 75<sup>th</sup> year of independence. Built by Indians, this new building embodies the culture, pride and spirit of whole nation.

The Old Parliament Building	
<b>Shifting the Capital</b>	The capital was shifted to Delhi from Calcutta in 1911.
<b>Architects</b>	Edwin Lutyens and Herbert Baker
<b>Foundation</b>	<b>It was laid by HRH Prince Arthur, the Duke of Connaught</b> on February 12, 1921
<b>Construction</b>	<ul style="list-style-type: none"> <li>● In the 1919 plan for the construction of the Parliament, it was decided to have a <b>council house</b>, comprising:           <ul style="list-style-type: none"> <li>✓ Legislative Assembly Chamber (which later became the Lok Sabha),</li> <li>✓ Council of States Chamber (which is now the Rajya Sabha) and</li> <li>✓ Chamber of Princes (later became Library Hall).</li> </ul> </li> </ul>

**THE BUILDING**

Six years after the foundation stone was laid in 1921, the Parliament building — then called Council House — was inaugurated in 1927. The building, with a diameter of 570 feet, was built at a cost of ₹83 lakh



**THE STRUCTURE**

The building has a colonnade of 144 columns, each 27 feet high. These columns stand on a base of red sandstone which is 22 feet high.

**THE CHAMBERS**

The building has three legislative chambers and a library where the Constituent Assembly met and framed the Constitution of India. The dome of the library, now called Central Hall, has a span of 100 feet.

**TEMPORARY OFFICES**

After independence, the Federal Court (Supreme Court) and the Federal Public Service Commission (now the UPSC) worked out of the Parliament building till their respective offices became ready.

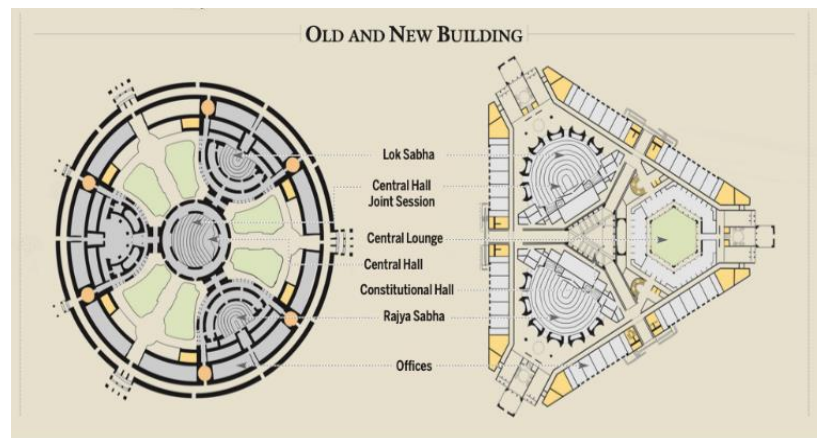
**FROM GROUND UP**

For the building, 3,75,000 cubic feet of stone was quarried from Dholpur in Rajasthan and brought to Delhi by train. A circular track laid around the building brought the stone closer to the building site.

	<ul style="list-style-type: none"> <li>It took 6 years to complete from 1921-1927.</li> </ul>	
<b>Architecture</b>	<ul style="list-style-type: none"> <li>In 1919, Lutyens and Baker settled on a circular shape for the Parliament inspired by the circular shape of the Chausath Yogini temple at Mitawli village in Madhya Pradesh's Morena.</li> <li>A few Indian elements, such as jaalis (a latticed carving depicting objects like flowers and other patterns) and chhatris (a domed roof atop a pavilion-like structure) were added to it.</li> </ul>	
<b>Material used</b>	It has 144 cream sandstone pillars measuring 27 feet each.	
<b>Inauguration</b>	It was inaugurated in 1927 by then Governor General of India Lord Irwin.	

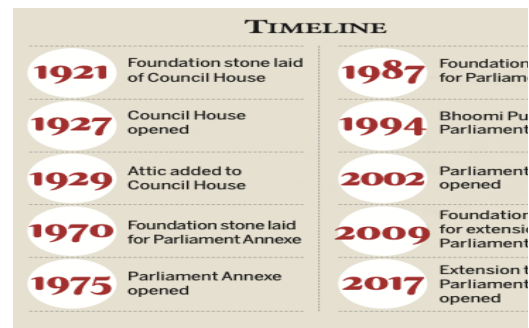
### About The New Building

- Its construction was announced in 2019 and the project was named Central Vista Redevelopment Project.
- The plan included construction of a new parliament and residences of Prime minister and Vice-President along with 10 building blocks to accommodate all government ministries and departments.
- It was piloted by the Ministry of Housing and Urban Affairs.



### Need

- Due to absence of its design records, all new constructions and modifications were done in an ad-hoc manner.
- The building has been showing signs of distress and over-utilization and is not able to meet the current requirements in terms of space, amenities and technology.



### Major Issues Being Faced In Old Parliament

#### 1. Narrow Seating Space for MPs and Inadequate Workspace -

- The old building was never designed to accommodate a bicameral legislature for a full-fledged democracy.
- The number of Lok Sabha seats are likely to increase substantially post 2026 when the freeze on total number of seats ends.
- The seating arrangements are cramped and cumbersome, with no desks beyond the second row. During Joint Sessions, the problem of limited seats amplifies. This poses a huge security risk.

2. **Distressed Infrastructure and Obsolete Communication Structures** - Addition of services like water supply lines, sewer lines, air conditioning, fire-fighting, CCTV, Audio Video system, which were not part of the originally structure, have led to seepages and destroyed the overall aesthetics of the building.
3. **Safety Concerns**- There are structural concerns as it was built when Delhi was in Seismic Zone-II, currently it is in Seismic Zone-IV. Fire safety is a major concern too.
4. **Inadequate Workspace**- With increasing demand for workspaces and to accommodate ever increasing space requirements, inner service corridors were converted into offices and sub-partitions were created within existing workspaces, leading to cramped offices.

### Features of New Building

- **Built-up Area**- It is built alongside the old building and has a built-up area of 65000 sq. It is designed in triangular shape to ensure maximum space utilization.
- **Seating Capacity**- It has larger Lok Sabha Hall (based on the peacock theme) and Rajya Sabha hall (based on the lotus theme) with a capacity of up to 888 seats and 384 seats respectively. The Lok Sabha may accommodate up to 1,272 seats for joint parliamentary sessions. Two members will be able to sit side by side on each bench in the Lok Sabha and the Rajya Sabha Chambers. Each seat will be equipped with digital systems and touch screens.
- **Constitutional Hall**- It consists of a Constitutional Hall where the journey of Indian democracy has been documented.
- **Office Space**- There will be 92 rooms for the use of the Council of Ministers as offices. These ultra-modern office spaces will be secure, efficient, and equipped with latest communications technology. There will also be 6 large committee rooms with latest audio-visual equipment.
- **Environment Friendly**- This “Platinum-rated Green Building” embodies India’s commitment towards environmental sustainability. It features rainwater harvesting and water recycling systems.
- **Divyang Friendly**- It will be divyang friendly as people with disabilities will be able to move around freely.
- **Facilities for MPs**- A Central Lounge that will complement the open courtyard (with a Banyan tree) will be a place for members to interact with each other. There will also be a dining hall and library.
- **Earthquake Safe**- The building is earthquake safe.
- **Materials from across the India**- For construction, sandstone was brought from Sarmathura in Dholpur and granite from Lakha village in Jaisalmer, Rajasthan. Similarly, the wood used in the decor is from Nagpur and craftsmen from Mumbai have led the wooden architecture design. Bhadohi weavers from Uttar Pradesh have made the traditional hand-knotted carpets for the building.
- **Gandhi Statue**- The 16-foot-tall bronze statue of Mahatma Gandhi made by Padma Bhushan-awardee sculptor Ram V Sutar (Who built ‘Statue of Unity’) will remain on the lawn between the old and new buildings.
- **National symbols**- The building is replete with national symbols, including the national emblem — the Lion Capital of Ashoka — that weighs 9,500 kg and is 6.5 metres in height, and is visible from a distance. At the entrance, the Ashoka chakra and the words ‘Satyameva Jayate’ have been carved in stone.
- **Entrances**- The building has three ceremonial entrances on three sides for the President, the Vice-President, the Lok Sabha Speaker and the Prime Minister.
- **Sengol (A golden sceptre)**- It was given to Jawaharlal Nehru on the eve of Independence to mark the transfer of power from the British. It has been placed near the Speaker’s podium by the Prime Minister.
- **Going digital**- All records including house proceedings, questions and other business are being digitized. Besides, tablets and iPads will become a norm.
- **Galleries**- Consisting of-

- **'Shilp'** exhibiting textile installations from across India, along with pottery items made from the mitti of all Indian states.
- **'Sthapatya'** exhibiting the iconic monuments of India, including those from the different states and UTs and yoga asanas.
- **Vaastu Shastra-** Auspicious animals as guardian statues are exhibited at the entrances, based on their importance in Indian culture and vastu shastra. These include the elephant, the horse, the eagle, the swan, and mythical creatures Shardula and makara.
- **Foucault pendulum-** Inside the new Parliament building, there is a Foucault pendulum that showcases the rotation of the Earth. Named after the renowned French physicist Léon Foucault, this pendulum takes precisely 49 hours, 59 minutes, and 18 seconds to complete a full rotation at the latitude of the Parliament location.



## Government of National Capital Territory of Delhi (Amendment) Ordinance, 2023

President promulgated the *Government of National Capital Territory of Delhi (Amendment) Ordinance, 2023* and created a new statutory authority – the National Capital Civil Service Authority (NCCSA).

### About The Government of National Capital Territory of Delhi (Amendment) Ordinance, 2023

- It seeks to amend the Government of National Capital Territory (NCT) of Delhi Act, 1991 and establish National Capital Civil Service Authority (NCCSA) which will be headed by the Chief Minister of Delhi, with the Chief Secretary and Principal Home Secretary of Delhi being the other two members.
- The NCCSA will *make recommendations to the LG regarding* transfer, posting and vigilance matters of all Group A officers and DANICS officers posted in Delhi. These decisions will be based on majority of votes of the members present and voting.
  - ✓ The officers in Delhi, Andaman and Nicobar Island Civil Service (DANICS) form part of the administration in UTs of Delhi, Andaman and Nicobar, Lakshadweep, Daman and Diu and Dadra and Nagar Haveli.
- The final authority to pass orders related to these recommendations will lie in the hands of the Lieutenant Governor (L-G). He can also ask for material relevant to officers before taking a decision.
- If the L-G differs with the recommendation made, he may return the recommendation to the Authority for reconsideration by the Authority with reasons recorded in writing.
- In case of difference of opinion, the decision of L-G will be final.
- There is no specific provision in the ordinance regarding the transfer posting, discipline etc of Group B and Group C officers, which seems to indicate that the elected government of Delhi would continue to have control over these officers.

### Why Was The Ordinance Amended?

To negate the Supreme Court judgment that empowered the Delhi government to make laws (except Land, Police and Public Order) and wield control over bureaucrats deputed to the Delhi government.

#### Background

- A 2015 notification by the Union Home Ministry department stated that the L-G of Delhi shall exercise control over *services*.
- This was challenged by the Delhi Government in Delhi High Court which upheld the notification in 2017.



- The case was then referred to a larger constitution bench by a two-judge Bench of Supreme Court.
- In 2018, a five-judge Constitution Bench headed by former CJI Dipak Misra (which decided the larger questions on this issue), ruled in the favor of the Delhi Government and laid down the law that governs the relationship between Delhi and the Centre.
- The specific issue related to ‘services’ was decided by a two-judge Bench (part of larger 5-judge bench). This two-judge bench delivered a split verdict in 2019. This split verdict then went to a three-judge Bench and eventually a five-judge Constitution Bench, which recently delivered its verdict.

#### Main Issue

- The main issue is the scope of legislative and executive powers of the Centre and NCTD with respect to the term services.
- The court had to interpret Article 239AA(3)(a) related to special provisions with respect to Delhi.
  - ✓ Article 239AA(3)(a) states that subject to the provisions of this constitution, the legislative assembly of Delhi is empowered to make laws for the whole or any part of the National Capital Territory with respect to any of the matters enumerated in the State list (List II) or in the Concurrent list (List III) in so far as any such matter is applicable to Union territories except on the subjects of police, public order, and land.
  - ✓ According to its provisions, in the case of difference of opinion between the L-G and his Ministers, the L-G shall refer the matter to the President and act according to his decision. If the decision is pending in any case where the matter, in his opinion, is urgent then the L-G may take the decision he deems necessary.
  - ✓ This article (A239AA) was inserted by the 69th Amendment Act, 1991, on the recommendations of the S Balakrishnan Committee set up in 1987 to look into Delhi’s demand for statehood.

#### Centre’s Argument

- The 2018 SC ruling didn’t consider two crucial phrases of the article 239AA(3)(a)-
  - i. *“Insofar as any such matter is applicable to union territories”*
  - ii. *“Subject to the provisions of this Constitution.”*
- No Union Territory has power over services therefore, Delhi too could not exercise such power and could only legislate on issues that other Union Territories are explicitly allowed to legislate upon.
- The legislative power of Delhi can extend to **an entry** only when that entry is clearly and unequivocally applicable to union territories as a class.

#### Supreme Court’s Verdict

- It concluded that Delhi has a special constitutional status under Article 239AA and is a Sui Generis (unique) model which is not like any other Union Territory.
- It termed the phrase *“in so far as any such matter is applicable to union territory”*-inconsequential stating that various entries in the state list and concurrent list mention the word state, and not union territory (UT) as there was no concept of UTs when the Constitution was enacted.
- It vested the Delhi government with the legislative and executive power over **Entry 41** (services) such as Indian administrative services, or joint cadre of services and not over services related to public order, police and land.

#### Critical Analysis

- Article 239AA(3)(b) empowers the Parliament to make laws with respect to any matter for Delhi. This results in an asymmetric federal model tilted heavily in Centre’s favour.
- The SC in its 2018 verdict on this issue stated that the ideas of pragmatic federalism and collaborative federalism will fall to ground if the Union has overriding executive powers even in matters for which the Delhi Legislative Assembly has legislative powers.
- This ordinance strikes at the root of the Supreme Court’s 2018 decision which clearly stated that the Union cannot override the powers of the state riding roughshod over pragmatic and collaborative federalism.
- It has created a full-blown constitutional crisis and the parliament should not allow it to become an act.

- Also, the Supreme court must react to this ordinance, if it doesn't then it would indicate that-
  1. It has failed to check the abuse of ordinance power of the Union government.
  2. It is silently agreeing on the disenfranchisement of millions of Delhi citizens.
- But if the SC does react then it would result in a full-blown war between the executive and the judiciary.

### Extra Mile

#### Govt's Power to Promulgate, Repromulgate Ordinances

- **Promulgation-** Article 123 of the Constitution which deals with the Power of President to promulgate Ordinances during recess of Parliament states that if at any time when the Parliament is not in session, the President can promulgate an ordinance due to unavoidable circumstances that require him to take immediate action.
  - ✓ Article 213 deals with the powers of the Governor of a state to promulgate ordinances during recess of State Legislature.
- Ordinance has the same force and effect as an Act of Parliament but the government is required to bring an Ordinance before Parliament for ratification.
- It lapses-
  - ✓ At the expiration of six weeks from the reassembly of Parliament, if the government fails to introduce it for ratification.
  - ✓ If the President withdraws it.
  - ✓ If both the houses of the parliament pass resolutions disapproving the law.

\*\*Rejection of an ordinance implies the government has lost majority.

\*\*If an Ordinance makes a law that Parliament is not competent to enact under the Constitution, it shall be considered void.

- The decision to bring an ordinance rest with the council of Ministers as the President acts on their aid and advice.
- The President may return the recommendation of the Cabinet for reconsideration but if it is sent back (with or without reconsideration), the President must promulgate it.
- **Validity:** An Ordinance is valid for six weeks from the date on which the next session starts. If the two Houses start their sessions on different dates, the date of the house starting later is be considered.
- **Repromulgation-** The government can repromulgate an ordinance if it lapses due to any reason.

#### Related Judgements

1. ***Dr D C Wadhwa and Ors v. State of Bihar and Ors, 1986***-In this case, the power of the Governor to repromulgate various Ordinances in Bihar was challenged, after 69 ordinances out of 256 enacted between 1967 and 1981 were repromulgated several times and kept alive with the permission of the President. The Supreme Court in its judgement held that-
  - An Ordinance promulgated by the Governor to meet an emergency shall cease to be in operation at the expiration of six weeks from the reassembly of the Legislature.
  - For repromulgation, the government must go before the Legislature first as it's entrusted with law-making functions by the constitution.
2. ***Krishna Kumar Singh and Another v. State of Bihar, 1998***- This case dealt with the re-promulgation of an Ordinance several times by the Bihar Government without placing it before the legislature. The SC held that repeated re-promulgations without bringing an Ordinance to the legislature usurps the functions of the legislature and is unconstitutional. The court termed it 'a fraud on constitutional power'.
3. ***Kumar Singh vs State of Bihar (2017)***: A seven-judge Bench of the SC held that the satisfaction of the

President under Article 123 is not immune from judicial scrutiny; not a parallel source of law-making or an independent legislative authority.

### Extra Mile: Alderman

The Supreme Court recently reviewed a case where the Delhi government challenged the Lieutenant-Governor's appointment of Aldermen.

#### Background

- The Delhi Municipal Corporation Act, 1957 allows **nomination** of ten people (over the age of 25) having special knowledge or experience in municipal administration to the corporation by the administrator (the Lieutenant Governor). They are meant to assist the house in taking decisions of public importance.
- In January 2023, Delhi's L-G nominated 10 aldermen all from BJP. This led to two controversies-
- Two of the ten nominated members were deemed unfit based on technical qualifications.
- Appointment of aldermen (all from BJP) by the L-G is being seen as an attempt by the BJP to continue exercising power in the MCD, despite its election loss to Aam Aadmi Party (AAP).
- The AAP party challenged this decision of L-G in court alleging that procedural norms were violated during the appointment of these aldermen.

#### About Alderman

- **Etymology**- The word 'alderman' comes from the English words "old" and "man". Initially, it referred to elders of a clan or tribe but later evolved to denote the king's viceroys, regardless of age. By the 12th century CE, it began to be associated with municipal governments and used to describe officers of municipal bodies. This usage continues to the present day.
- **Powers**- They do not have any voting rights in **mayoral elections** but play an important role in *Standing Committee elections, MCD in-house and ward committee meetings*. They are a part of a group which effectively controls the MCD's purse strings.



## The PoSH Act

A recent investigation done by a government committee headed by M.C. Mary Kom to look into allegations against the President of Wrestling Federation of India (WFI) revealed that more than half of India's 30 national sports federations don't have an Internal Complaints Committee (ICC) which is a legal requirement under the Prevention of Sexual Harassment (PoSH) Act, 2013.

- The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act/PoSH Act, which came into force in 2013 **applies to all public and private sector organisations throughout India.**
- **The court issued some key directions to the Centre, states and UTs:**
  - **To undertake a time-bound exercise** to verify whether all Ministries, Departments, Government organisations, authorities, PSUs, institutions, bodies, **have ICCs.**
  - **The information regarding the constitution and composition** of these committees are to be made readily available on the website of the concerned authority.
  - **Immediate and effective steps by the authorities** to "familiarise" committee members with their duties and the manner in which an inquiry ought to be conducted.
  - The bench directed the **National Legal Services Authority and State Legal Services Authorities** to organise awareness programmes to sensitise employers, employees and adolescent groups.

## How Was PoSH Act Formed?

- **SC 1997 guidelines/Vishakha Guidelines:** While hearing pleas filed against the crime, the SC noted the **absence of any law** that guarantee against “sexual harassment at workplaces”.
  - The apex court laid down a set of guidelines **to fill the statutory vacuum** till a law could be enacted.
- **The Court drew its guidelines from:**
  - **Article 15** (protection against discrimination on grounds only of religion, race, caste, sex, and place of birth) of the Indian constitution.
  - **International Conventions and norms** such as the General Recommendations of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), which India ratified in 1993.
- **The PoSH Bill:** It was introduced by the **Women and Child Development Ministry** in 2007. It went through several amendments and came into force on **December 9, 2013**, after being enacted by the Parliament.

## Key Provisions of PoSH Act

- **Defines sexual harassment:** To include **unwelcome acts** such as physical, verbal/non-verbal conduct - a demand or request for sexual favours, making sexually coloured remarks, showing pornography, etc.
- **Lists down five circumstances that would constitute sexual harassment:**
  - Implied or explicit promise of preferential treatment in employment
  - Implied or explicit threat of detrimental treatment in employment
  - Implied or explicit threat about present or future employment status
  - Interference with work or creating an intimidating or offensive or hostile work environment and
  - Humiliating treatment likely to affect health or safety.

- **Defines an employee (not just in accordance with the company law):** All women employees, whether employed regularly, temporarily, contractually, on an ad hoc or daily wage basis, as apprentices or interns, can seek redressal to sexual harassment in the workplace.
- **Expands the definition of ‘workplace’:** Beyond traditional offices to include all

### Internal Complaints Committee (ICC) and Local Committees (LC)

- The law requires any **employer with more than 10 employees** to form an ICC, where a formal sexual harassment complaint can be filed by a woman. ICC has powers similar to those of a civil court in respect of summoning and examining any person on oath, and requiring the discovery and production of documents.
- **Composition of ICC:** It is required to consist of a **minimum of four members** (at least half of whom should be women):
  - A Presiding Officer who **has to be a woman** employed at a senior level at the workplace.
  - Two Members from amongst employees and who have had experience in social work or have legal knowledge.
  - One **“External Member”** from NGOs to pre-empt any undue pressure from senior levels.
- The MoWCD introduced (in 2017) an online platform - **SHe-Box** - that directs complaints to the employer or organisation’s ICC.
- Besides, the Act mandates **every district in the country to create a LC** to receive complaints from women working in **firms with less than 10 employees and from the informal sector, including domestic workers, etc.**

### Role of ICCs and LCs:

- These two bodies have to **conduct inquiries** in line with the POSH Act and comply with the **“principles of natural justice”** stated in the Rules of the Act.
- There are two ways to resolve the issue by the committee -
  - **“Through conciliation”** between the complainant and the respondent (**which cannot be a financial settlement**), or
  - **Committees could initiate an inquiry**, taking appropriate action based on what it finds.

kinds of organisations across sectors, even non-traditional workplaces (for example, telecommuting) and places visited by employees for work.

• Post COVID, the POSH Act recognizes **home as a workplace** as it is the “place visited by the employee arising out of during the course of employment” due to increasing sexual harassment cases while working remotely.

• Stalking, sharing of inappropriate images and videos, Zoom bombing, sexist or derogatory WhatsApp messages, pressurizing lady employees to come on video calls were some of the many ways of harassment when working from home.

Thus, PoSH made it obligatory for the organizations to redress the grievance of employees facing sexual harassment when working from home.

#### ● **Applicability**

- ✓ Every Public/Private establishment that carries out any commercial, vocational, educational, entertainment, industrial or financial activities in India.
- ✓ Organized and Unorganized Sectors
- ✓ Non-Governmental Organizations.

#### **Procedure for Complaint Against Sexual Harassment At Workplace**

- An aggrieved female **has three months** from the date of the tragedy to make a written complaint with the ICC.
  - According to the SC, the time limit can be extended if the lady is unable to submit the complaint owing to mitigating circumstances.
- Before initiating an investigation, the committee can try to resolve the matter through **mediation** between the women and the responder.
  - If a settlement is reached, **no further investigation will be launched**.
- If the proposed conciliation does not provide any results, a **fresh investigation** (to be concluded in 90 days) will be launched.
  - While directing the investigation, the Committee has the same authority as a **civil court**.
- If the ICC determines that the claim against the defendant is **false**, the **woman may be fired**.
- If the complaint is **proven**, the committee will recommend to the District Officer that sexual harassment be considered as improper conduct in accordance with the Act and the victim woman should be **compensated**.
- Any individual who is harmed by the ICC guidelines, **may file an appeal** with the court (HC) within 90 days of their implementation.

#### **Duties of The Employer**

- **An employer has to file an annual audit** report with the district officer about the number of sexual harassment complaints filed and actions taken at the end of the year.
- An employer is duty-bound to organise **regular workshops and awareness programmes** to educate employees about the Act, and conduct orientation and programmes for ICC members.
- If the employer fails to constitute an ICC or does not abide by any other provision, **they must pay a fine of up to ₹50,000, which increases for a repeat offence**.

#### **Hurdles to The Act's Implementation**

- **The law is largely inaccessible to women workers in the informal sector:** As more than 80% of India's women workers are employed in the informal sector.
- **Huge underreporting:** Due to the power dynamics of organisations, fear of professional repercussions (loss of employment), concrete evidence is often lacking.

- **Lacunae in the constitution of ICCs:** 16 out of the 30 national sports federations in the country had not constituted an ICC to date.
- **Improper composition of ICCs:** ICCs either had an inadequate number of members or lacked a mandatory external member.
- **Lack of clarity in the law:** About how to conduct such inquiries, lack of awareness in women employees about who to approach in case of facing harassment, etc.
- **The Act does not satisfactorily address accountability,** not specifying who is in charge of ensuring that workplaces comply with the Act, and who can be held responsible if its provisions are not followed.
- **The government maintains no centralised data** regarding cases of harassment of women at workplaces.

### Way Forward

- **Awareness and Training:** Conduct regular awareness sessions and training programs to educate employees, employers, and members of ICC about the provisions of the PoSH Act, the process of filing complaints, and the consequences of sexual harassment. This will help in creating a culture of respect and prevention.
- **Prompt Investigation:** Once a complaint is received, ensure a prompt and fair investigation. The ICC should conduct a thorough and impartial inquiry, respecting the principles of natural justice. *Maintain confidentiality throughout the process* and provide regular updates to the complainant and the accused.
- **Support and Counseling** to the complainant to help them cope with the emotional and psychological impact of the incident. Make resources available for both the complainant and the accused
- **Regular Monitoring and Review:** Continuously monitor the implementation of the PoSH Act within the organization.
- **Encourage a Culture of Respect:** Foster a work environment that promotes gender equality, diversity, and inclusion. Encourage open communication, respect for boundaries, and a zero-tolerance policy towards sexual harassment. Promote a culture where individuals feel safe and empowered to report incidents without fear of repercussions.



## Divorce Under Article 142

Recently, a five-judge Constitution Bench of the Supreme Court ruled that it can exercise its plenary power to do “complete justice” under **Article 142(1)** of the Constitution to grant divorce directly without referring the parties to a **family court on the grounds of irretrievable breakdown of marriage**.

### What is the Current Procedure for Getting a Divorce in India?

Divorce in India is primarily governed by personal laws, which vary depending on an individual's religion.

- The Hindu Marriage Act, 1955 governs Hindu marriages (Includes Jain, Buddhist and Sikh religion), while the Muslim Personal Law (Shariat) Application Act, 1937 applies to Muslims.
- Additionally, other laws such as the **Special Marriage Act, 1954**, and the **Indian Divorce Act, 1869** apply to inter-faith marriages and Christian marriages, respectively.
- Under The Hindu Marriage Act (1955), both parties seeking divorce have to wait between 6 to 18 months from the date on which they presented their petition to obtain the divorce decree.
- The six-month period is given so that the parties have ample time to withdraw their plea.

### Can the Process Happen More Quickly in Certain Cases?

- In circumstances of exceptional hardship, a divorce petition may be allowed (by the HMA) even before the

lapse of **one year** since marriage.

- The mandatory six-month waiting period can also be waived by filing an exemption application before a family court.
- If the parties wish to opt for a divorce more expeditiously, they can approach the SC under Article 142 for the dissolution of their marriage.

### Background w.r.t. the Supreme Court Judgment

- A case (*Shilpa Sailesh vs Varun Sreenivasan*) was filed in the Supreme Court in the year 2014. The parties in this case sought a divorce under Article 142.
  - ✓ **Article 142** empowers the Supreme Court to pass an order to do complete justice in a matter pending before it. The order is legally enforceable throughout the Indian territory until parliament makes suitable law on it or until provision in that behalf is so made, in such manner as the President may by order prescribe.
- The parties were granted divorce by the apex court using its powers under Article 142. But the case was kept pending to decide the following issues-
  - Determine what rules should be followed while dissolving marriages directly under Article 142 without referring the parties to the Family Court.
  - Should article 142 extend to all divorce cases? If yes, should it be used depending on the facts of each case?
- For this, the court appointed senior advocates as amicus curiae and the case was transferred to Constitution Bench in 2016.

### Key Issues Dealt With

#### Scope and Ambit of The SC's Powers Under Art. 142 (1)

- While article 142 gives the SC sweeping powers, its scope and extent has been defined through various judgments of SC. For example-
  - ***Prem Chand Garg vs Excise Commissioner, U.P., 1962***- In this case, the majority opinion laid down that an order to do complete justice must not only be consistent with the fundamental rights guaranteed by the Constitution, but it cannot even be inconsistent with the substantive provisions of the relevant statutory laws.
  - ***Union Carbide Corporation vs Union of India, 1991*** - In this Bhopal gas tragedy case, the SC underlined the wide scope of Article 142(1), which confers power at an entirely different level and of a different quality.
- In the present case, the SC while granting divorce to the parties said that it can depart from procedure as well as existing substantive laws only if the decision to exercise the power under Article 142(1) is based on considerations of fundamental general and specific public policy.
  - ✓ **Fundamental General Conditions of Public Policy**- It refers to the fundamental rights, secularism, federalism, and other basic features of the Constitution.
  - ✓ **Specific Public Policy**- It means some express pre-eminence prohibition in any substantive law, and not stipulations and requirements to a particular statutory scheme.

#### Setting Aside Section 13B of Hindu Marriage Act (HMA)

- Section 13B allows divorce by mutual consent. Under this rule, the couple seeking divorce must together file a petition to the district court on the grounds that-
  - ✓ They have been living separately for a period of one year or more.
  - ✓ They have not been able to live together.
  - ✓ They have mutually agreed to dissolve the marriage.

**\*\* The petition for divorce by mutual consent can only be filed after one year of marriage. But, Section 14 allows the petition sooner in case of exceptional hardship.**

- Section 13B (2) mandates that the parties cannot move a second motion before the court before the completion of six months of the first petition and not later than eighteen months after the said date, if the petition is not withdrawn in the meantime.
- The mandatory six-month wait is intended to give the parties time to withdraw their plea.
- A waiver of this six-month waiting period can be sought in an exemption application filed before the family court.
- Thereafter, after hearing the parties and being satisfied from its inquiry, the court passes a decree of divorce declaring the marriage to be dissolved with effect from the date of the decree.
- This process of obtaining a decree of divorce is often time-consuming and lengthy owing to many similar cases pending before family courts.

**Granting Divorce on the Grounds of Complete and Irretrievable Breakdown of Marriage**

- The court clarified that grant of divorce on the ground of irretrievable breakdown of marriage is not a matter of right, but a discretion which is to be exercised with great care and caution.
- For this matter, the court laid down some factors to be determined before granting a divorce. They are-
  - ✓ The period that the parties had cohabited after marriage;
  - ✓ Time when the parties had last cohabited;
  - ✓ Nature of allegations made by the parties against each other and their family members;
  - ✓ Orders passed in the legal proceedings from time to time;
  - ✓ Cumulative impact on the personal relationship;
  - ✓ Whether, and how many attempts were made to settle the disputes by a court or through mediation, and when the last attempt was made.
  - ✓ Sufficiently long period of separation- anything above six years or more.
- The court emphasized on evaluating the above factors based on-
  - ✓ Economic and social status of the parties including their educational qualifications;
  - ✓ whether they have any children, if yes then their age;
  - ✓ whether the spouse and children are dependents.

Significance of the Ruling	Implications of the Ruling
1. It will give way to a larger public and personal interest of the parties in ending the litigations, and the pain and sorrow <b>bypassing</b> a formal decree of divorce. 2. It will save the parties from the prolong agony of the marriage in case of no reconciliation. 3. <i>It grants legitimacy to the grounds of “irretrievable breakdown of marriage” beyond the statutory provisions under the 1955 Hindu Marriage Act (HMA). Till date, there is still <b>no codified law for irretrievable breakdown of marriage under HMA</b></i>	1. People will think that they can directly approach the SC for divorce bypassing the six-month waiting period for reconciliation. 2. Number of applications seeking divorce on the similar grounds will increase. 3. Writ petition can be filed under Article 32 of the Constitution of India to seek quick relief on the ground of irretrievable breakdown.



## Fault Theory and Accusatorial Principle of Divorce

- The Bench emphasized on the need to **move away** from *fault theory* and *accusatorial principle of divorce*.
  - ✓ Defined under Section 13 (1) of HMA, these theories prescribe divorce on grounds where one of the spouses can be held guilty of certain misdeeds.
  - ✓ Under HMA 1955, there are **7 fault grounds** for divorce: **adultery, cruelty, desertion, conversion, insanity, leprosy, venereal disease, and sanyasa**.
  - ✓ There are 4 grounds on which the wife can sue alone: rape, sodomy, bestiality, non-resumption of cohabitation after maintenance order, and decree for maintenance.
- According to the court, even two perfectly gentle and pleasant individuals having incompatible and clashing personalities can have a miserable married life. *A fault theory makes it worse when the marriage is irretrievably broken down and dead.*
- As per the court, these rules must be set aside, *to do complete justice without breaching the self-imposed restraint applicable* when this court exercises power under Article 142(1).

## About The Hindu Marriage Act, 1955

<b>What</b>	It is an Act of Parliament to protect the legal rights of Hindu brides and grooms who are joined by the holy bond of marriage.
<b>Goal</b>	To update and codify the law governing marriage between Hindus. It also contains law regarding divorce and separation.
<b>Features</b>	
<ol style="list-style-type: none"> <li><b>1. Forbidding bigamy:</b> One cannot get married to someone else without divorcing their spouse first. Bigamy attracts penalty in accordance with Sections 494 and 495 of the Indian Penal Code, 1860.</li> <li><b>2. Marriageable age prescribed:</b> The bridegroom must be at least 21 years old and the bride must be at least 18 years old when they get married. If a marriage is not carried out, it is void and has no legal standing.</li> <li><b>3. Protect marriage:</b> The restitution of conjugal rights is provided for in Section 9 of the 1955 Act. The main idea behind this feature is that a spouse has the right to cohabit to safeguard their union and preserve its sanctity.</li> <li><b>4. Focus on the mental stability:</b> A person's marriage will be null and void if they were mentally unfit when they were hitched.</li> </ol>	
<b>Applicability</b>	<ul style="list-style-type: none"> <li>• To anyone who practices Hinduism in any of its manifestations, including Virashaivas, Lingayats, and adherents of the Brahmo, Prarthana, or Arya Samaj;</li> <li>• To anyone who practices Buddhism, Jainism, or Sikhism as a religion;</li> <li>• To all such persons domiciled in the country who are not Muslims, Christians, Parsis, or Jews.</li> </ul>
<b>Essentials for a Valid Marriage</b>	
<ul style="list-style-type: none"> <li>• Both the parties to the marriage should be Hindu and the parties to the marriage should not suffer from unsoundness of mind, mental disorder, or insanity.</li> <li>• The marriage should be monogamous and Parties have attained marriageable age.</li> <li>• The marriage should be solemnized in accordance with the customary rites and ceremonies.</li> </ul>	
<b>Annulment</b>	<p>Any marriage is voidable and subject to annulment due to:</p> <ul style="list-style-type: none"> <li>• Failure to consummate the union due to impotence (complete or partial).</li> <li>• Violation of the valid consent, mental illness condition.</li> <li>• Respondent's pregnancy by someone other than the petitioner at the time of the union.</li> </ul>

<b>Divorce Conditions</b>	<ul style="list-style-type: none"> <li>• Continuous period of desertion lasting two years or longer.</li> <li>• Conversion to a faith other than Hinduism.</li> <li>• Adultery, cruelty, presumption of death</li> <li>• Mental aberration, venereal illness, and leprosy.</li> <li>• If a husband marries a second time after starting their first marriage or if he has committed rape, sodomy, or bestiality.</li> </ul>
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## Fixing PC- PNDT Act

The Delhi High Court recently highlighted the need to review the **Pre-Conception and Pre-Natal Diagnostic Technique Act (PC-PNDT)** for its effective implementation.

### Background

The judgement came in response to a plea moved by a man seeking quashing of an FIR registered against him under various sections of PC & PNDT Act.

### About the PC & PNDT Act

<b>What?</b>	It is an act of Parliament to prohibit sex selection, before or after conception, and for regulation of pre-natal diagnostic techniques for detecting genetic abnormalities or metabolic disorders or chromosomal abnormalities or certain congenital malformations or sex-linked disorders and for the prevention of their misuse for sex determination leading to female foeticide.
<b>When?</b>	It was first enacted in 1994 as Prenatal Diagnostic Techniques Act but after undergoing various amendments it finally became Pre-Conception and Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) (PCPNDT) Act in 2004.
<b>Objective</b>	Restricting pre-birth sex assurance and to save the girl child.

### Provisions

- No place including a registered Genetic Clinic can be used for pre-natal diagnostic techniques except-
  - ✓ for the purpose of detecting any abnormality in the fetus.
  - ✓ if the woman-
    - is above 35 years of age
    - undergone two or more miscarriages
    - if she and her husband have a family history of some genetic disease.
- A written consent from the patient is mandatory before undergoing an ultrasound.
- The person conducting the ultrasound and any other persons are prohibited from the revealing the gender of the fetus.

### Central Supervisory Board

#### The Act establishes a board to-

- Advise the central government on policy matters relating to use of pre-natal diagnostic and sex-selection techniques and against their misuse.
- Review and monitor implementation of the act.
- Create public awareness against the practice of pre-conception sex selection and pre- natal determination of

sex of fetus leading to female foeticide.

- Lay down code of conduct to be observed by persons working at genetic counselling centers, genetic laboratories and genetic clinics;
- Oversee the performance of various bodies constituted under the act and take appropriate steps to ensure its proper and effective implementation.

#### **Appropriate Authority**

- The act provides for appointing a 3-member appropriate authority at the state/UT level within 3 months of the act coming into force. The members include-
  - (i) an officer of or above the rank of the Joint Director of Health and Family Welfare- Chairperson
  - (ii) an eminent woman representing women's organization
  - (iii) an officer of Law Department
- Functions-
  - To grant, suspend or cancel registration of a genetic clinic or a lab.
  - To enforce standards prescribed for genetic clinics and labs.
  - To investigate complaints of breach of the provisions of this act and take immediate action.
  - To seek and consider the advice of the advisory committee.
- Powers-
  - Summon any person in possession of any information relating to violation of the provisions of this act.
  - Production of any document or material object.
  - Issuing search warrant for any place suspected to be indulging in sex pre-natal sex determination.

#### **Offences & Penalties**

1. Advertisement relating to pre-natal determination of sex is prohibited and punishable with imprisonment up to three years and with fine up to ten thousand rupees.
  2. Any registered medical practitioner with a clinic who contravenes any of the provisions of this Act is punishable with imprisonment up to three years and with fine up to ten thousand rupees and on any subsequent conviction, imprisonment extending to five years and with fine extending to fifty thousand rupees.
  3. Suspension of registration of the medical practitioner on framing of charges by the court and removal of name from the register of the Council for a period of five years for the first offence on conviction and permanently for the subsequent offence.
- Every offence under this Act shall be cognizable, non-bailable and non-compoundable.

#### **Concerns Raised by the Court**

- **Raids and Seizures**- The court noted that there is no need to involve the police in raids, seizure, etc. As per the PC-PNDT Act as far as possible, the practicality of this aspect needs to be reconsidered as such action must be as per the CrPC for conducting raids at facilities/clinics.
- **Investigation and Arrest**- The Appropriate Authorities have the power to investigate complaints, suspend the convict and summon any person but do not have the power to arrest.
- **Lower Rate of Conviction** as it is incredibly difficult to prohibit prenatal diagnosis of sex.

#### **Previous Judgements**

- **Centre For Enquiry into Health and Allied Themes (CEHAT) v. Union of India & Others, 2003**- the petitioners appealed to the court for effective implementation of PNDT Act, 1994 as it failed in achieving its goal of preventing female foeticide. The court while giving its judgement warned the Centre and state governments to effectively comply with the mandates of the Act and clarified to the appropriate authorities that it was

empowered to take criminal action against violators. It made way for amending the act to Pre-conception and Pre-natal Diagnostic Techniques (Prohibition of Sex Selection) Act, 2004.

- **Vinod Soni & Anr. v. Union of India, 2005**- the constitutional validity of PC-PNDT Act was challenged on the grounds of violation of Article 14 and 21. It was dismissed by the Bombay High Court and the act was held constitutionally valid.
- **Voluntary Health Association of Punjab v. Union of India, 2015**- It was filed to examine the steps taken by the state governments to address the problem of sex-selective abortion in India. The court issued directions to map out unregistered clinics to ensure they did not purchase ultra-sonography machines, seize illegally sold ultrasonography machines, and hold workshops to inform communities about the Act’s obligations.
- In a significant judgement of 2019, the supreme court upheld the provision of PC-PNDT Act, 1994 which ‘criminalises non-maintenance of medical records by obstetricians and gynaecologists and suspends their medical license indefinitely.

### About Female Foeticide

Causes	Consequences
<ol style="list-style-type: none"> <li>1. Patriarchal system of society</li> <li>2. Desire of son in the family</li> <li>3. Dowry system</li> <li>4. Fear of family lineage coming to an end</li> <li>5. Increasing crimes against women creates a fear in the mind of parents for daughters</li> <li>6. Lack of education</li> </ol>	<ol style="list-style-type: none"> <li>1. Skewed sex ration- sex ratio as per 2021 census is 943 females per thousand males.</li> <li>2. Rise in women trafficking cases.</li> <li>3. Increased cases of assault and rapes.</li> </ol>
<b>Prevalent Laws against Female Foeticide</b>	
<ol style="list-style-type: none"> <li>1. <b>Medical Termination of Pregnancy Act, 1971</b>- made abortion legit in almost all states of the country.</li> <li>2. <b>Pre-Conception and Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) (PCPNDT) Act, 2004</b>- for prevention of prenatal sex screening and female foeticide.</li> </ol>	
<b>Government Initiatives</b>	
<ol style="list-style-type: none"> <li>1. <b>Beti Bachao, Beti Padhao Abhiyan</b>- Launched in 2015, it aims to address disparity in the sex ratio across the nation by Preventing foeticide-biased abortion and post-natal discrimination against daughter and ensuring holistic growth and protection of the girl child.</li> <li>2. <b>Sukanya Samridhhi Yojana</b>- Launched in 2015, this Scheme offers incentives to save money for future use by female children in families.</li> <li>3. <b>The National Plan of Action for Children, 2016</b>: It identifies the elimination of gender-biased sex selection as one of the key priority areas for children’s rights and well-being.</li> <li>4. <b>Ladli Scheme</b>- A cash incentive scheme initiated by the Haryana Government provides a payout of Rs. 5000 annually for a period of 5 years to families with a second girl child born on or after 20th August 2015.</li> <li>5. <b>Karnataka Bhagyashree Scheme</b>- To promote the birth of girl child among families below the poverty line. Under the scheme, health insurance cover up to a maximum of Rs. 25,000, is provided to the girl child, annually.</li> </ol>	

### Conclusion

The restrictions on ultrasound preventing the medical practitioners from accessing a valuable imaging modality, have not translated into the social change intended by the PCPNDT Act. It requires a solution as complex as the problem of female foeticide.



# Washington Declaration

- In April 2023, South Korean President Yoon Suk Yeol arrived in the U.S. to commemorate the 70th anniversary of U.S.-South Korea bilateral relations.
  - The successful launch of North Korea's *Hwasong-8 solid-fuel ICBM* seems to have triggered the U.S. visit of the South Korean President.
    - ICBM is considered as a vital component for nuclear weapons delivery.
- A highlight of the visit was the signing of the “**Washington Declaration**” as a nuclear deterrence strategy.

## Key Highlights Of The Washington Declaration

- **The agreement outlines cooperation towards deterrence**
  - As per the agreement:
    - an American nuclear ballistic submarine would be deployed in the Korean peninsula;
    - a nuclear consultative group would be formed to formulate principles of joint response tactics;
    - South Korea would receive Intel from the U.S. regarding nuclear advancements; and
    - U.S. will strengthen South Korea's nuclear deterrence capabilities through joint military training programs and an annual intergovernmental simulation.
- **It reaffirmed the non-proliferation Treaty**
  - South Korea would not venture into the creation of its own independent nuclear capabilities.
  - It would instead focus on deterrence measures through an alliance-based approach.

## What Is The Significance Of This Agreement?

- **Advocates for nuclear deterrence policy in the region**
  - The Washington Declaration advocates for nuclear deterrence policy in the region, aiming to balance power dynamics against North Korea.
- **Prohibits South Korea to develop its own nuclear capabilities**
  - The declaration does not allow South Korea to develop their own nuclear arsenal as it would hinder the prolonged efforts of controlling nuclear production in the world.
- **Aligns with the larger goal of non-proliferation**
  - The assurance that the U.S. and its nuclear weapons would protect its allies by being responsible for maintaining stability in the region aligns with the larger goal of non-proliferation.

## Challenges

- **Physical deployment of the arsenal is a direct threat**
  - While the aim is to defuse the threat, physical deployment of the arsenal can be deemed as a direct threat by opposing actors.
  - Security experts fear that it can be used as leverage to act aggressively.
- **South Koreans prefer their own deterrence**
  - The South Korean public are sceptic about U.S. support. With an aggressive North Korea in the neighbourhood, they would prefer their own deterrence.
- **Interests of the larger power (U.S.) takes precedence**

- The agreement mandates the U.S. President as the only sole authority to use the nuclear arsenal of the U.S. in the event of a nuclear confrontation.
- While the existence of the agreement is based on the security needs of South Korea, the policy reflects big power politics where the interests of the larger power (U.S.) take precedence.

### Conflict Between North and South Korea

- Since the beginning of the 20th century, Korea had been a part of the Japanese empire, and after World War II it fell to the Americans and the Soviets.
  - In other words, after WW II, USA and USSR were to decide what should be done with their enemy's (Japan's) imperial possessions.
- In August 1945, **Korean peninsula was divided in half along the 38th parallel**. The Russians occupied the area north of the line and the United States occupied the area to its south.
- In 1950, North Korea invaded South Korea, starting the **three-year Korean War**. As a result, American troops had entered the war on South Korea's behalf.
  - As far as American officials were concerned, it was a war against the forces of international communism itself.
- Finally, in July 1953, the Korean War came to an end by signing of the **armistice agreement in 1953**.
- Since the signing of the armistice agreement, North and South Korea have been divided by a 4km wide demilitarised zone stretching 250km.



## De-dollarisation: The Race To Attain The Status Of Global Reserve Currency

- In April 2023, while facing criminal charges, former US President Donald Trump had warned that US Dollar is crashing and will soon no longer be the world standard.
- His warning came amid rising interest in countries to go towards de-dollarisation.

### What is De-dollarisation?

- It refers to the process wherein countries tend to reduce their reliance on the US dollar as a reserve currency, medium of exchange, and also a unit of account.
  - **Reserve currency** is the foreign currency held by central banks to facilitate international transactions, stabilise exchange rates and bolster financial confidence.
- The attempts to dethrone the dollar as the global reserve currency have picked up pace in the aftermath of Russia's invasion of Ukraine last year.

### What Gives The US Dollar The Power In International Trade

- **Historical Factors**

- The US dollar began replacing pound sterling as international reserve currency in the 1920s since the country emerged from the First World War unscathed.
- The Bretton Woods system cemented the dollar's position further after World War II.
- Since the US emerged stronger after the Second World War, the 1944 agreement established a **post-war international monetary system** that allowed the US dollar to become the world's primary reserve currency globally.
- **Reserve Currency Status**
  - The central banks around the world hold US dollars as a reserve to support their own currencies and to conduct international transactions.
  - This gives the US dollar a strong global demand, making it a widely accepted currency in international trade.
- **Stability and Liquidity:**
  - The US dollar is considered a stable and liquid currency.
- **Size of the US economy:**
  - The US economy is the largest in the world, with a GDP of over \$23 trillion.
  - This means that the US dollar is widely used in international transactions and trade due to the large volume of US goods and services that are traded.
- **Network Effects:**
  - The US dollar has a strong network effect, as it is widely used in global financial markets, and is the default currency for many commodity prices, such as oil.
  - This makes it convenient for businesses and individuals to use the US dollar in international transactions, creating a self-reinforcing cycle.

### Why Was The Call For De-Dollarisation Renewed?

- **Geo-political events and search for alternatives**
  - Iran and Russia (for invading Ukraine) were disconnected from the international dollar-trading systems like SWIFT.
  - The U.S. imposed several sanctions that restricted the use of the U.S. dollar to purchase oil and other goods from Russia.
  - This has been seen by many countries as an **attempt to weaponize the dollar**.
- **Overreliance on the US dollar**
  - As the world becomes more and more interconnected, the need for a stable and equitable financial system became paramount.
  - Hence, the overreliance on the US dollar as a reserve currency has to some extent led to vulnerabilities and imbalances in the global economy.
- **Growing economic power of emerging market**
  - The growing economic power of emerging markets and their desire for a more diversified and resilient financial architecture has renewed the call for de-dollarisation.

### Challenges Towards De-dollarisation

- **Potential impact on global financial stability**
  - As countries reduce their reliance on the US dollar, adjustments in the composition of global reserve assets may lead to shifts in capital flows and changes in asset prices.

- These fluctuations could create financial instability, particularly in emerging markets and countries with substantial dollar-denominated debt.

- **Creating a viable alternative to the US dollar**

- Creating a viable alternative to

the US dollar presents a formidable challenge to achieve the requisite degree of stability, liquidity, and acceptability.

- Currently, no single currency fully meets these criteria, although the euro and the Chinese yuan have made strides in this regard.

- **Increased volatility in currency exchange rates**

- It could result in increased volatility in currency exchange rates, particularly during the initial phases of transition.
- Hence, de-dollarisation will have potential costs for developing countries.

### Conclusion

- De-dollarisation presents opportunities for a more diversified and resilient global financial system.
- However, it also poses significant challenges that must be carefully managed to ensure the preservation of global financial stability and sustained economic growth.
- Hence, developing countries like India should adopt a prudent and measured approach towards de-dollarisation.



## Global Digital System To Face Pandemic Challenges

Union Health Minister of India proposed the convergence of all digital initiatives through a **global initiative on digital health** housed at the World Health Organisation (WHO) headquarters. He made this proposal while addressing the G7 health ministers' meeting in Japan.

### Need For Such Initiative

- As on April 2023, only 34% of the populations in low- and middle-income countries have access to Covid-19 vaccines as compared to 73% in high income countries.

### Global Efforts Towards De-dollarisation

**Countries all over the world**

- China, Russia and Brazil have been among the expanding list of nations that have embarked upon the path of de-dollarisation.
- In January 2023, Iran and Russia announced that they will jointly issue a new cryptocurrency backed by gold, to serve as a payment method in foreign trade.
- In March 2023, China and Brazil reached an agreement to settle trades in each other's currencies.
- Similarly, Argentina said it will pay for Chinese imports in yuan instead of US dollars in order to preserve its dwindling foreign reserves.

**India moves away from the dollar**

- India has also started making efforts to reduce its dependence on the dollar.
- It started moving towards *paying in rupees for oil imports from Russia*.
- In July 2022, the RBI through a circular allowed *international payment settlements for imports and exports to be made in rupees*.
- Due to the efforts of the Government of India, so far *banks of 19 countries* including the UK, New Zealand, Germany, Malaysia, Israel, Russia and the United Arab Emirates have been permitted to make settlements in rupees



- The Covid pandemic exposed the fault lines in the existing system. Hence, a more robust and inclusive system is needed.
- This initiative will help move from Silos to Systems with collaboration of all countries for enhanced coverage and quality of healthcare services.

### DIGITAL HEALTH

- Digital health refers to the use of technology, such as mobile devices, software applications, and other digital tools, to improve health and healthcare delivery.
- Basically, it is a multidisciplinary concept that includes intersection between technology and healthcare.
- India's CoWIN, UNICEF's RapidPro and FamilyConnect etc. are few notable examples of digital health initiatives.
  - The real-time information platform, RapidPro, is a core solution in UNICEF's digital health portfolio.
  - UNICEF's FamilyConnect sends targeted life cycle-based messages via SMS to pregnant women, new mothers, heads of households etc.

#### Why Is Digital Health Important?

- **Empowers patients**
  - Digital tools are giving providers a more holistic view of patient health through access to data and giving patients more control over their health.
  - Hence, it empowers patients to make better-informed decisions about their own health.
    - E.g., wearable devices can monitor vital signs and provide real-time feedback to patients and clinicians.
- **Treatment of disease**
  - Digital health tools provide new options for facilitating prevention, early diagnosis of life-threatening diseases, and management of chronic conditions outside of traditional health care settings.
- **Other benefits**
  - Reduce inefficiencies; Improve access; Reduce costs; Increase quality, and Make medicine more personalized for patients.
- **Support overall universal health coverage targets**
  - Digital health is a great enabler in delivery of healthcare services and has the potential to support overall universal health coverage targets.
    - This is because it can ensure availability, accessibility and affordability, and equity of health services.
    - For example, telemedicine allows patients to connect with healthcare providers remotely.

#### What Are The Challenges Of Digital Health?

- **Equitable access**
  - Universalization of digital health and enabling of equitable access to healthcare services across the world, particularly for low- and middle-income countries is challenging.
  - The issue of accessibility becomes more daunting against the backdrop of low digital literacy and low-level of internet penetration.
- **Ethical Challenges related to privacy, security and data ownership**
  - The increasing digitization of healthcare and the growth of mobile and IoT devices as data collection tools raises many ethical issues.
  - One commonly recurring theme relates to the exact nature of the role of consumer tech companies,

such as Amazon, Apple etc. who have all entered the digital health domain.

- Such companies offer solutions for collecting, storing and analysing health data which raises issues relating to **privacy, data protection and informed consent**.
- Analysts also raise ethical concerns relating to data ownership.
- **Ethical challenges related to regularisation of digital health technologies**
  - The growth of apps and technologies developed for a consumer market blurs the lines between what are medical and non-medical devices.
  - Hence, it raises ethical challenges relating to how to regularize such technologies.
- **Data management**
  - Due to the massive amounts of data collected from a variety of systems that store and code data differently, data interoperability is an ongoing challenge.

### India Leads The Way- Digital Health Initiatives Driving Change

- **Ayushman Bharat Digital Mission (ABDM)**
  - It will eventually connect the digital health solutions of hospitals across the country.
  - This will not only make the processes of hospitals simplified but also will increase ease of living.
- **CoWIN**
  - The Covid Vaccine Intelligence Network (CoWIN) system has provided the technological backbone to India's Covid-19 vaccination programme, which has administered more than 220 crore doses, so far.
- **Tele-MANAS: Tele Mental Health Assistance and Networking Across States**
  - It aims to provide free telemental health services, including counselling, integrated medical and psychosocial interventions through video consultations.
- **Ni-kshay 2.0 Portal**
  - This digital health tool has enabled the community across the country to register as **Ni-kshay Mitra** and helped them in adopting TB patients in their preferred geography.
- **Health Technology Assessment (HTA)**
  - It provides evidence to decide the choice of technology for the best possible healthcare to address public health challenges at different levels.

### Conclusion

- Some of the key features of the digital interventions launched by the Government of India are inclusiveness, multilingual platforms, scalability, and interoperability.
- India is leading the way in providing digital healthcare solution to its citizen and to the world.

[For detailed discussion on G7, refer the topic "48th G7 Summit" from The Recitals - June 2022 edition]



## SCO Members Adopted Proposal On Digital Public Infra

- Inter-governmental body Shanghai Cooperation Organization members have unanimously adopted India's proposal for developing **Digital Public Infrastructure**.
- The proposal includes platforms such as Aadhaar, United Payments Interface (UPI), and DigiLocker.

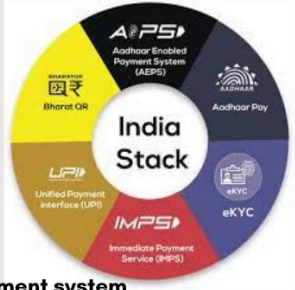
- This was done during a recently held meeting of **Digital Ministers of SCO member**. The meeting was **chaired by India**.

### Benefits of DPI

- **Promotion of economic activities and support to inclusive growth**
  - Countries are using DPI to implement widespread adoption of digital payments, data-sharing infrastructures, and growing their e-commerce sector.
  - It has the potential to transform economies and support inclusive growth.
    - E.g., Aadhar, UPI, and Jan Dhan were instrumental in promoting financial inclusion in India.
- **To address common challenges as outlined in the Sustainable Development Goals**
  - DPI can drive forward global efforts to address our common challenges as outlined in the 17 Sustainable Development Goals — everything from advancing gender equality to restoring our natural world.
  - E.g., **Data in Climate Resilient Agriculture, or DiCRA, program in India**.
    - It makes climate data accessible — providing instant information on where, when, and what to plant, thereby boosting livelihoods and enhancing food security.
- **Efficient service delivery**
  - Like health, education, or social protection systems or even public parks and libraries, societies need infrastructure to function.
  - That is also true for DPI. Citizens can access public services 24 hours a day at their fingertips.
- **Support during COVID-19 crisis**
  - Countries that used digital databases to extend social assistance programs such as cash transfers during the COVID-19 pandemic were able to reach more than half of their populations on average.
  - E.g., India was able to vaccinate one billion people within a matter of months due to an existing digital vaccination registration system known as **CoWIN**.

## Digital Public Infrastructure (DPI)

- DPI refers to platforms such as identification (ID), payment and data exchange systems that help countries deliver vital services to their people.
- Put simply, DPIs *mediate the flow of people, money and information*.
- In this context, the following three sets become the foundation for developing an effective DPI ecosystem:
  - First, the flow of people through a digital ID System
  - Second, the flow of money through a real-time fast payment system
  - And third, the flow of personal information through a consent-based data sharing system to actualise the benefits of DPIs and to empower the citizen with a real ability to control data.



The diagram illustrates the 'India Stack' as a central hub with three main components: Aadhaar Enabled Payment System (AEPoS), Unified Payment Interface (UPI), and Immediate Payment Service (IMPS). It also includes icons for Aadhaar QR, Aadhaar Play, and eKYC.

### India and DPI

- The concept of digital public infrastructure has been pioneered by India and is a current global leader in developing DPI.
- India, through **India Stack** (India Stack is the moniker for a set of open APIs and digital public goods), became the first country to develop all three foundational DPIs:
  - **digital identity** (Aadhar);
  - **real-time fast payment** (UPI)
  - **platform to safely share personal data without compromising privacy** (Account Aggregator built on the Data Empowerment Protection Architecture or DEPA).
    - DEPA is a joint public-private effort for an improved data governance approach.
    - It creates a digital framework that allows users to share their data on their own terms through a third-party entity, Consent Mangers.

- Other components of Indian DPI include:
  - **DigiYatra** -Biometric Enabled Seamless Travel (BEST) experience based on a Facial Recognition System (FRS).
  - **DigiLocker** - a platform used for storing document and verifying credentials.
  - **Open Network for Digital Commerce (ONDC)** - An alternative e-commerce platform promoting open networks for exchange of goods and services.

### Challenges Faced by DPI

- **Data Colonisation**
  - There is a disturbing trend of the weaponisation of data and technology. This is resulting in a loss of sovereignty and privacy.
- **Financing models for developing DPI**
  - To develop sustainable financing models for developing DPI for the world is a major challenge.
- **Global standards for the development of DPI**
  - Currently, there is no uniform standard across the world for the development of DPIs.

### Nalanda Varsity To Have SCO Chair On Shared Buddhist Heritage

- Nalanda University will soon have a SCO chair on Shared Buddhist Heritage.
  - Set up in 2010 by Nalanda University Act as an **International Institution of National Importance**.
  - The university is supported by 17 countries, including Australia, China, Korea, Singapore and Japan.
- The chair aims to promote research in Buddhist Studies & allied fields, and to encourage collaborations between institutes of higher learning in India and SCO member states.
- This is supported by the Centre as part of its efforts to reinforce India as a key player in Buddhism.

[For detailed discussion about SCO, refer the topic **"21st Meeting of SCO Council of Heads of Government"** from The Recital – November 2022]



## Quad Summit 2023

- PM of Australia, PM of India, PM of Japan, and President of the United State met for the **third in-person Quad Leaders' Summit**.
- This summit was hosted by Prime Minister Albanese (Australia) on the side-lines of the ongoing G-7 Summit in Hiroshima.
  - This summit was scheduled to be held in Sydney (Australia) on May 24.
  - However, it was cancelled after US President announced his postponement of the visit due to debt ceiling negotiations in Washington.
  - Hence, the leaders decided to meet on the side-lines of 49<sup>th</sup> G7 Summit in Hiroshima.

### Key Highlights Of Quad Summit 2023

- **Statements Released**
  - The leaders issued a **joint vision statement** titled **'Enduring Partners for Indo-Pacific'**.
    - The statement expressed the resolve of the Quad leaders to act as a "force for good" to find common solutions for region-wide benefit.

- They also issued three other statements setting out **Quad Principles on**:
  - clean energy supply chains,
  - cybersecurity and secure software, and
  - critical and emerging technology standards.
- The **Quad International Standards Cooperation Network** and the **Quad Principles on Critical and Emerging Technology Standards** were released.
  - This reflected the support of Quad leaders for industry-led, consensus-based multi-stakeholder approaches to the development of technology standards.
- **India to host next Quad summit**
  - PM Modi announced that the next Quad leaders' meeting would be held in India in 2024.
- **Explicitly expressed their deep concern over the Ukraine war**
  - Participating leaders, **for the first time**, explicitly expressed their deep concern over the war raging in Ukraine.
- **Did not directly refer to Russia's actions**
  - Quad countries recognised its serious impacts on the global economic system including on food, fuel and energy security and critical supply chains.
  - However, they did not directly refer to Russia's actions, understood to be in deference to India's divergent stand on the issue.
- **On Indo-Pacific region**
  - The leaders recommitted themselves to maintain and strengthen stability in the Indo-Pacific region according to international law.
    - In his address at the summit, PM Modi described the Indo-Pacific region as an engine of global trade, innovation, and development.
  - The statement did not refer directly to China, but made pointed references to upholding peace and stability in the Indo-Pacific maritime domain.
- **Quad Health Security Partnership**
  - The Quad leaders announced they would now pursue a broader "Quad Health Security Partnership" rather than the earlier Quad Vaccine Partnership for COVID-19 vaccines.
    - Announced in March 2021, the Quad Vaccine Partnership aimed to donate 1.2 billion doses of COVID-19 vaccines to the Indo-Pacific by the end of 2022.
    - Under this partnership, **India would produce vaccine doses**, the United States would finance dose production, and Australia and Japan would aid in vaccine manufacturing, distribution, and financing efforts.
- **Issue of Terrorism**
  - With specific references to the 2008 Mumbai attack and the 2016 Pathankot airbase attack, they committed to:
    - pursuing terrorist designations at the UN Security Council, and
    - strengthening cooperation through a new Working Group on Counterterrorism.
  - The new Working Group on Counterterrorism was announced during the Quad Foreign Ministers' Meeting in March 2023.
- **New undersea cable infrastructure partnership**

- Quad leaders also announced a new undersea cable infrastructure partnership to build networks across the region.
- **Maritime domain**
  - The Quad leaders emphasised the importance of adherence to international law and the maintenance of freedom of navigation and overflight.
  - They noted progress on the **Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA)** to help curb illicit maritime activities, illegal fishing, and humanitarian disasters.
    - In May 2022, U.S. President Joe Biden announced IPMDA, an initiative with regional partners and allies to promote a free and open Pacific.
    - The IPMDA intends to connect regional partners and allies with American technologies to provide greater maritime situational awareness in real-time.
- **Quad Investors Network (QUIN)**
  - The leaders welcomed the *launch of the private sector-led Quad Investors Network (QUIN)*.
  - QUIN aims to facilitate investments in strategic technologies, including clean energy, semiconductors, critical minerals, and quantum.

[For detailed discussion about Quad and its evolution, refer the topic **“Quad Leaders Summit 2022”** from The Recitals – May 2022]

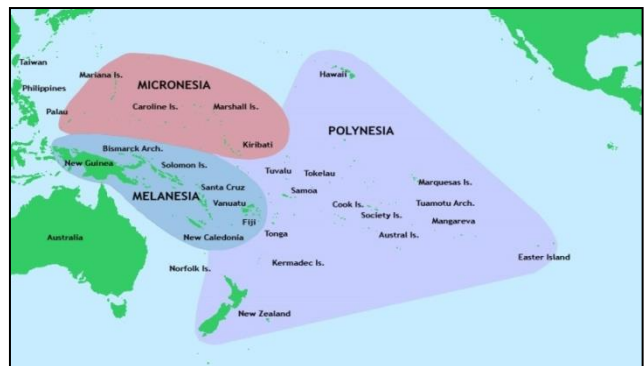


## Third Forum For India Pacific Islands Cooperation (FIPIC) Summit

- Recently, PM Modi paid his maiden visit to Papua New Guinea where he co-hosted the 3<sup>rd</sup> FIPIC summit.
  - His visit to Papua New Guinea highlights the growing strategic significance of the Pacific Island nations that has also received attention from China.
    - In 2022, China signed a security agreement with the Solomon Islands.
- During this visit, PM Modi conferred with the:
  - **highest honour of Fiji** - the Companion of the Order of Fiji;
  - **highest award of Papua New Guinea** - the Grand Companion of the Order of Logohu (GCL).

### About Pacific Island Nations

- Islands of the Pacific Ocean are commonly named as Pacific Island Nations.
- As shown in the map, Pacific Island Nations consist of three major groups of islands named as Polynesia, Micronesia and Melanesia.
  - North of the Equator and east of the Philippines are the islands of **Micronesia**.
  - The great arc of islands located north and east of Australia and south of the Equator is called **Melanesia**.
  - In the eastern Pacific, largely enclosed within a huge triangle formed by the Hawaiian Islands to the north, New Zealand to the southwest, and Easter Island (Rapa Nui) far to the east, are the islands **of Polynesia**.



## Challenges Faced By Pacific Island Nations

- **Geographical disadvantage**
  - **Scattered Islands** –makes logistics a challenge.
  - **Small Land Area** – It affects the mass production.
  - **Remoteness** - The Pacific Islands are located far from major markets, creating problems in communication, human interaction and transportation costs.
- **Climate change:**
  - These nations are virtual global laboratories for the earliest impacts of climate change.
  - World Bank research has estimated the average annual cost to small island states from natural disasters is equivalent to almost two percent of GDP.
  - However, in the cases of Tonga and Samoa, these damages have reached between 20 and 30 percent of GDP.
- **Socio-economic challenges:**
  - Due to small economies and limited formal sector employment in the Pacific, it will be difficult to meet this growing demand for employment.
  - Years of mismanagement and poor policy have led to ecological and energy calamities across the region.
- **Security and Governance related challenges:**
  - Vast coastline along with the presence of large EEZ necessitates for capacity building in Coastal security and EEZ management.
  - Numerous maritime disputes on the periphery of Pacific, especially in South China Sea and East China Sea, threatens the maritime security of these nations.

## Significance of Pacific Island Nations for India

- **Geopolitical**
  - The Pacific Island Nations are strategically located in the Pacific Ocean, connecting Asia with the Americas.
- **Geostrategic**
  - The Pacific has for long been an area of geostrategic interest for countries such as the US, Japan, China, Russia et.
  - India cannot afford to ignore this region if it wants to become a global leader.
  - India considers the region as part of its Indo-Pacific vision, which emphasizes a free, open, and inclusive order.
- **Economic Cooperation:**
  - India seeks to expand economic cooperation with Pacific Island Nations.
    - Indian economic footprint in this region is low. The total annual trade between the Indian and Pacific Island countries hovers around \$300 million.
    - The largest country for bilateral trade in this regard is Papua New Guinea because of oil and gas.
  - These nations possess vast maritime resources, including fisheries, minerals, and energy reserves.
- **Maritime Security:**
  - Ensuring maritime security in the Indo-Pacific is a shared interest for India and Pacific Island Nations.

## Initiatives Taken By India So Far

- **Forum for India-Pacific Island Cooperation (FIPIC):**

- FIPIC was launched during PM Modi's visit to Fiji in November 2014.
- It was established as a platform for dialogue and cooperation with 14 Pacific Island countries.
- FIPIC includes **14 of the island countries** – Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu.
- So far, two meetings of FIPIC were held - in November 2014 in Fiji and August 2015 in Jaipur.
- **Development Assistance**
  - These include:
    - setting up of a special USD one million fund for adapting to climate change and clean energy,
    - **Pan Pacific Islands e-network** to improve digital connectivity,
    - extending visa on arrival at Indian airports for all the 14 Pacific Island countries,
    - cooperation in space technology applications for improving the quality of life of the islands, and
    - training to diplomats from Pacific Island countries.
  - India has already trained many rural women from eight island countries as solar engineers.
- **India as Development Partner of PICs**
  - During the 3<sup>rd</sup> FIPIC summit, PM Modi highlighted some of the development works done by India in the region. These included:
    - Convention Center in Palau; Waste management project in Nauru; Seeds for cyclone-affected farmers in Fiji And solar light project in Kiribati.
  - The **Sustainable Coastal and Ocean Research Institute (SCORI)** has been established at the University of the South Pacific in Fiji with the help of India.
    - SCORI entails building up a network of marine biology research stations in various island nations in the Pacific Ocean to collaborate on research and capacity building with institutions in India.
- **Increased Space Cooperation**
  - During the 3<sup>rd</sup> FIPIC summit, PM Modi expressed his happiness that the launch of the website for space technology is taking place for national and human development.
  - Through this, respective PICs can download remote sensing data of their countries from the Indian satellite network.
  - It can then be utilised for the preparation of respective national development plans.

### Challenges In Front Of India

- Indian **diplomatic representation in the region is weak**. India only has representation in Fiji (mostly because of the Indian diaspora) and Papua New Guinea (because of trade and minerals).
- Projects and activities promised by India to PIF countries need to be matched by delivery and implementation.
- Strong presence of China in this region is another challenge. China has significantly expanded its foothold in the region, from increasing business and trade ties to setting up diplomatic missions in each of these countries.

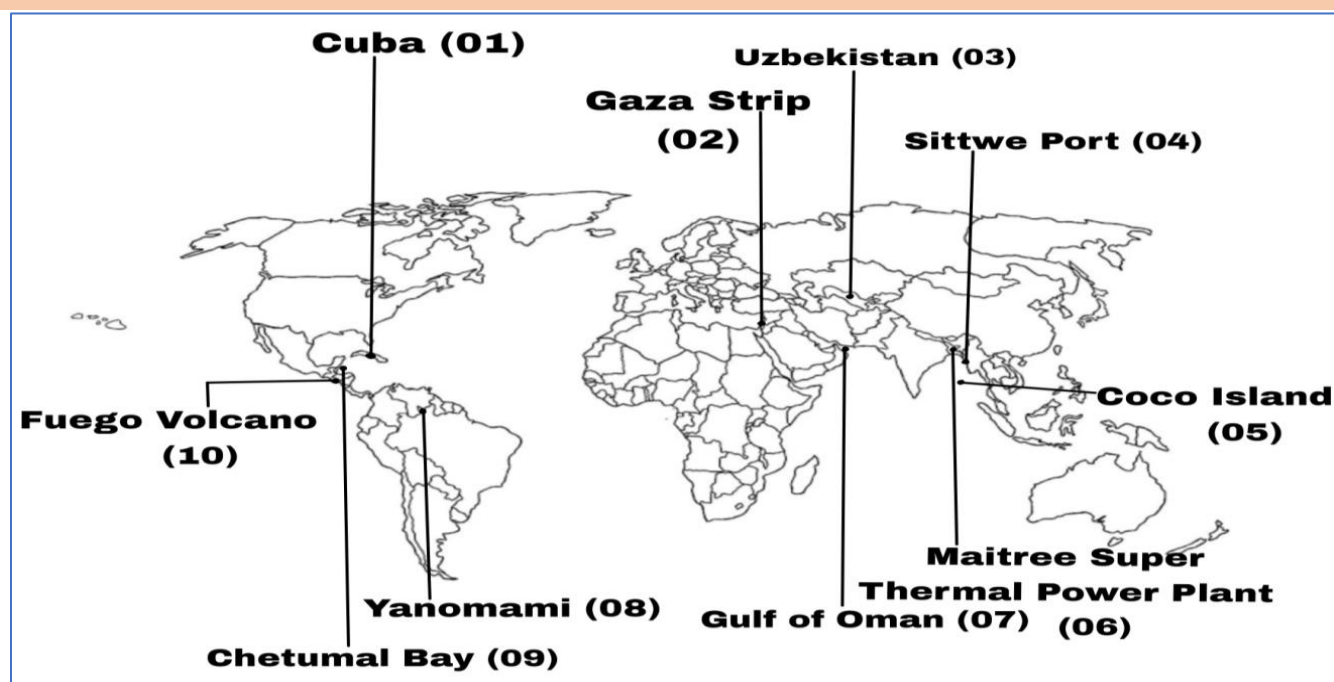
### Conclusion

- India and Pacific Island Nations are like family members who meet only rarely at large, loud family reunions, never getting the time to truly get to know each other.
- The time has come to move beyond occasional meetings in order to cement an ever-lasting relationship.



## MAPS: PLACES IN NEWS

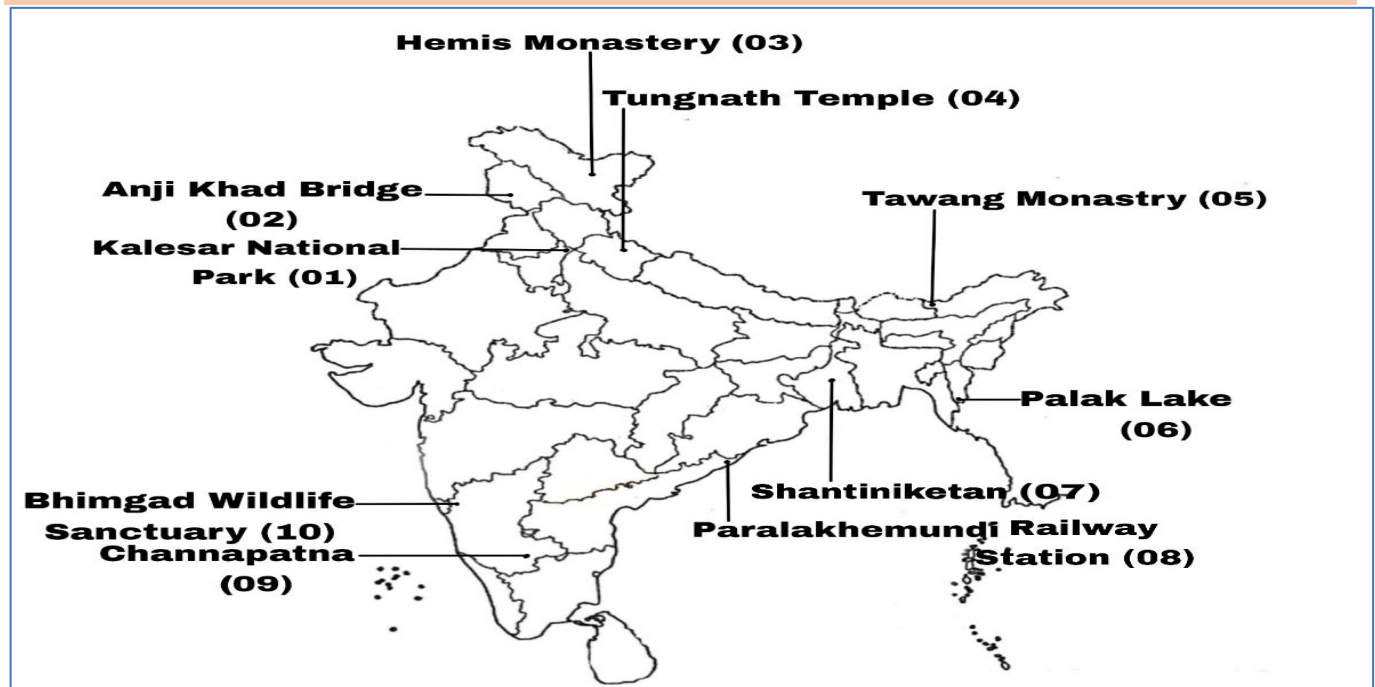
### International Places In News



01	<b>Cuba</b>	Cuba's National Assembly has confirmed President Miguel Diaz-Canel for a new five-year term. It is an island country located where the northern Caribbean Sea, Gulf of Mexico, and Atlantic Ocean meet. Havana is the largest city and capital.
02	<b>Gaza Strip</b>	The air strikes by Israel in the Gaza strip have killed 13 Palestinians. The Gaza Strip is a Palestinian enclave on the eastern coast of the Mediterranean Sea. It borders Egypt and Israel. The territories of Gaza and the West Bank are separated from each other by Israeli territory.
03	<b>Uzbekistan</b>	Uzbekistan holds referendum on new Constitution that puts human rights at forefront. It is a doubly landlocked country (a landlocked country completely surrounded by other landlocked countries). It is surrounded by five landlocked countries which are Kazakhstan, Kyrgyzstan, Tajikistan, Afghanistan and Turkmenistan. Its capital and largest city is Tashkent.
04	<b>Sittwe Port</b>	India and Myanmar jointly inaugurated the Sittwe Port. It is a deepwater port constructed by India in Myanmar, on the Bay of Bengal. Situated at the mouth of the Kaladan River. It is being financed by India as part of the Kaladan Multi-Modal Transit Transport Project.
05	<b>Coco Islands</b>	There have been reports on questionable infrastructure upgrades in the Cocoa Islands. They are a small group of islands located in the Bay of Bengal. Great Coco Island, the largest in the group, lies just 55 km from India's strategic Andaman and Nicobar Islands. They are part of the Yangon Region of Myanmar. They are <b>geologically an extended division of the Arakan Mountains</b> or Rakhine Mountains.
06	<b>Maitree Super Thermal Power Plant</b>	NTPC has marked its first overseas capacity addition, beginning with Maitree Super Thermal Power Plant (MSTPP). It is located in Bangladesh. The project is being built by Bharat Heavy Electricals Limited (BHEL) in collaboration with the Bangladesh-India Friendship Power Company Pvt Ltd.

07	<b>Gulf of Oman</b>	Iran's navy seized a Marshall Islands-flagged oil tanker in the Gulf of Oman. It is also known as the Gulf of Makran. It forms the only entrance to the Persian Gulf from the Indian Ocean. It connects the Arabian Sea with the Strait of Hormuz. It is bordered by Pakistan, Iran, United Arab Emirates and by Oman.
08	<b>Yanomami</b>	Brazilian government has promised to speed up the expulsion of illegal miners in the Yanomami. It is the largest Indigenous land in Brazil, covering an area of about 96,000 square kilometers in the Amazon rainforest. It has been a subject of interest for illegal gold miners for decades.
09	<b>Chetumal Bay</b>	World's 2 <sup>nd</sup> -deepest blue hole discovered in Chetumal Bay. It is a large bay of the western Caribbean Sea on the southern coast of the Yucatan Peninsula. It is located in northern Belize and south-eastern Mexico.
10	<b>Fuego volcano</b>	Guatemalan authorities evacuated over a thousand people and closed a road as the Fuego volcano erupted. It is an active stratovolcano in Guatemala. It is famous for being almost constantly active at a low level.

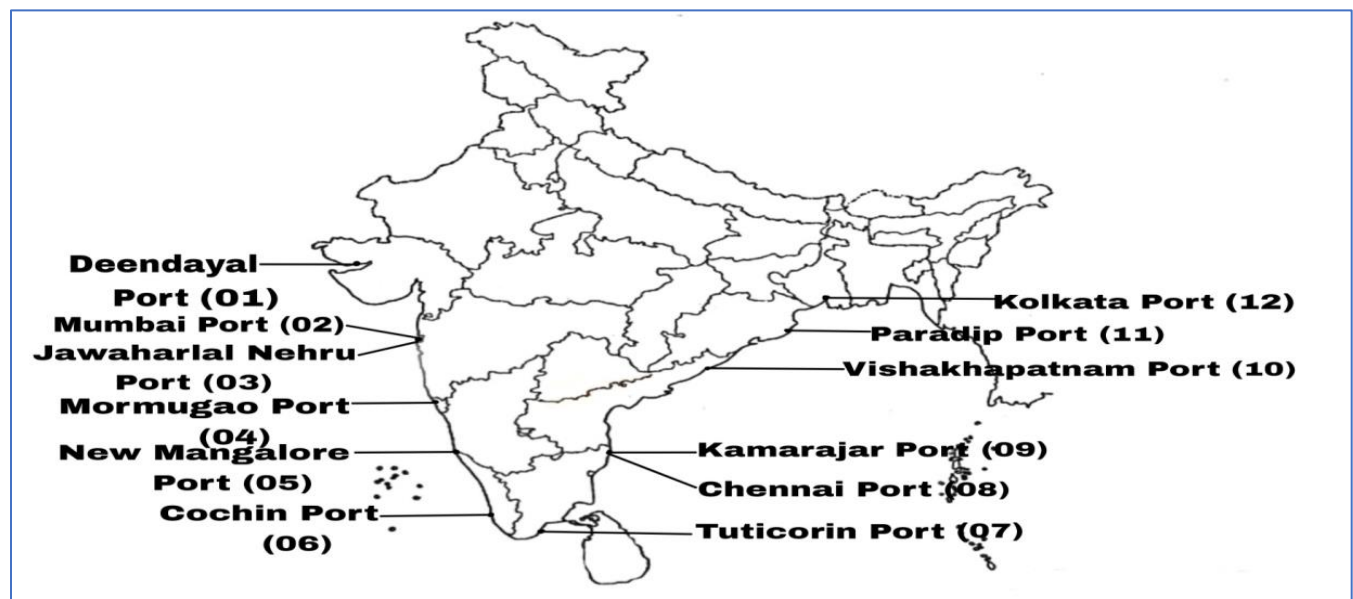
### National Places In News



01	<b>Kalesar National Park</b>	Haryana forest department has launched efforts to trace pug marks of a tiger that was caught in a camera trap at Kalesar National Park. It is situated in the foot hills of Shiwalik ranges in Haryana. It is adjacent to Simbalbara National Park in the Himachal. It houses many threatened animals like Leopard, Ghoral, Barking deer, Sambar, Chital, Python, King Cobra, Monitor lizard etc
02	<b>Anji Khad Bridge</b>	All 96 cables on the Anji Khad bridge, have been fully installed. It is an under-construction rail bridge in Jammu & Kashmir. It connects Katra and Reasi. It is constructed over the Anji River, a tributary of the Chenab River. It will be the first cable-stayed railway bridge in the country.
03	<b>Hemis Monastery</b>	Delegates of G20 visited the Hemis Monastery. It is a Buddhist monastery located in Leh City. It belongs to the Drukpa lineage of Buddhism. It is also famous for its 2-day religious ceremony known as the Hemis Festival. It was established by the Ladakhi King Sengge Namgyal.

04	<b>Tungnath Temple</b>	The central government issued a notification declaring the temple of Tungnath as a monument of national importance. It is located in Rudraprayag, Uttarakhand. It is the highest Shiva temple in the world. It is the third of the five Panchkedars of Uttarakhand. The temple is believed to have been built by <b>Adi Shankaracharya</b>
05	<b>Tawang Monastery</b>	Tawang Monastery expressed its discontent over China renaming different places in Arunachal Pradesh. It is located in Arunachal Pradesh. It is the largest monastery in India and the 2 <sup>nd</sup> largest in the world after the Potala Palace in Lhasa, Tibet. It belongs to the Gelug school of Mahayana Buddhism. Torgya is the famous festival celebrated in Monastery.
06	<b>Palak Lake</b>	As part of the mass mobilization of public participation in the Lifestyle for the Environment (LiFE), a Nature walk was organized along the Palak Lake. It is the largest and biggest lake in Mizoram. The lake is a major component of the Palak Wildlife Sanctuary.
07	<b>Shantiniketan</b>	Shantiniketan has been recommended for inclusion in UNESCO's World Heritage List. Popularly known as a university town, it is located in West Bengal. The area is flanked on two sides by rivers Ajay and Kopai. It was established by Maharshi Devendranath Tagore, and later expanded by his son, Rabindranath Tagore.
08	<b>Paralakhemundi railway station</b>	The Indian Railways has embarked on a project to renovate the historic Paralakhemundi railway station. It holds significant historical value as one of India's oldest stations and the 1 <sup>st</sup> in Odisha. It was conceptualized by Maharaja Goura Chandra Gajapati Narayan Deo II.
09	<b>Channapatna</b>	Toy manufacturers in Channapatna applauded the Government's decision to prohibit the import of toys from China. It is a city in Karnataka. The city is known for its wooden toys. The origin of these toys is believed to date back to the reign of Tipu Sultan, who invited artisans from Persia to train local artisans. These toys have been given the Geographical Indication tag.
10	<b>Bhimgad Wildlife Sanctuary</b>	Two forest guards have been suspended for failing to prevent encroachment in the Bhimgad Wildlife Sanctuary. It is located in the Western Ghats, Karnataka. It was declared as a wildlife sanctuary in 2011. It forms the headwaters of a number of rivers like Tillari, Malaprabha and Mhadei.

### Major Ports In India



01	<b>Deendayal Port</b>	It is also known as kandla port. It is a sea port situated in the Kandla Creek and is 90 kms from the mouth of the Gulf Of Kachch in Gujarat. It was constructed in the 1950s as the chief seaport serving western India. It is a protected natural harbour. It is <b>hub for major imports like petroleum, chemicals and iron</b>
02	<b>Mumbai Port</b>	It is centrally located on the west coast in Maharashtra. The port is mainly used for bulk cargo. It was used by the Maratha Navy, as well as the British and Portuguese colonial navies.
03	<b>Jawaharlal Nehru Port</b>	It is also known as Nhava Sheva Port. It is the 2nd largest container port in India after Mundra Port (Gujarat). It is situated on the eastern shore of the Arabian Sea in Maharashtra. This port can be accessed through Thane Creek. The port is the terminal of Western Dedicated Freight Corridor. The mega coastal economic zone (Mega CEZ) will be developed here.
04	<b>Mormugao Port</b>	It is located on the coast of Goa, in the southern part of the mouth of the Zuari River. This. During World War II, it was the site of Operation Creek, which resulted in the bombing of a German merchant ship. Mormugao Port Trust (MPT) is strategically located to cater to the needs of the coal requirement of steel and power plants in the hinterland in Karnataka.
05	<b>New Mangalore Port</b>	It is a small water all-weather port located on the Western Seacoast of Arabian Sea in Karnataka. It is the deepest inner harbour on the west coast. It is the only major port of Karnataka and the seventh largest port in India.
06	<b>Cochin Port</b>	It is a major port on the Arabian Sea in Kochi, Kerala. It is the first transshipment port in India. The International Container Transshipment Terminal (ICTT), part of the Cochin Port, is the largest container transshipment facility in India. The port lies on two islands in the Lake of Kochi: Willingdon Island and Vallarpadam
07	<b>Tuticorin Port</b>	It is located in Tuticorin, Tamil Nadu. At present it is known as the V.O.Chidambaranar Port. It is an artificial port. With its massive size, it takes the 2 <sup>nd</sup> place in the list of the largest ports in India. It is located in the Gulf of Mannar and has SriLanka on the South East along with India on the west.
08	<b>Chennai Port</b>	It is an artificial and all-weather port with wet docks. Located in Chennai, Tamil Nadu. It was formerly known as Madras Port, is the second-largest container port of India, behind Mumbai's Nhava Sheva (JNPT). It is Situated at the coromandel coast in South-East India
09	<b>Kamarajar Port</b>	It is located on the Coromandel Coast about 24 km north of Chennai, Tamil Nadu. It is the only corporatized major port in India and is registered as a company. The port was declared as a major port under the Indian Ports Act, 1908 in March 1999.
10	<b>Visakhapatnam Port</b>	It is the only major port in Andhra Pradesh. It is the third largest state-owned port in India by cargo volume and the largest on the east coast. It is situated between the ports of Chennai and Kolkata in the Bay of Bengal.
11	<b>Paradip Port</b>	It is a natural, deep-water port on the East coast in Jagatsinghpur district of Odisha. It is situated at confluence of the Mahanadi river and the Bay of Bengal. It was commissioned in 1966 as a mono commodity port for export of iron ore.
12	<b>Kolkata Port</b>	It is officially known as Syama Prasad Mookerjee Port. It is the only riverine major port of India, located in Kolkata, West Bengal. It is the oldest operating port in India and was constructed by the British East India Company in 1870.

# SOCIAL ISSUES

## NITI Aayog's State Health Index

- According to the NITI Aayog's annual '**State Health Index**' (5th edition) for the Covid year of 2020-21, the three southern states of **Kerala, Tamil Nadu and Telangana** emerged as the top performers among the 'larger states'.
- The NITI Aayog shared the report - **Healthy States Progressive India Report on the Ranks of States and Union Territories** - with the Health Ministry.

## The State Health Index

- It was launched by the **NITI Aayog in 2017** to measure the performance of states and UTs on a weighted composite score incorporating 24 health performance indicators clubbed under **three domains**.

health outcomes

governance and  
information

key inputs and  
processes

- The Aayog brings out the index (annually) in collaboration with the **Union Health Ministry and World Bank**.
- **The objective of this index** is to not just look at the states' historical performance but also their incremental performance.
- **The index encourages healthy competition** and cross-learning among States and UTs and nudges states/UTs towards building robust health systems and improving service delivery through their **policymaking and resource allocation**.
- As a result, **the MoHFW (Ministry of Health and Family Welfare) had linked the index to incentives under the National Health Mission**.
  - This has been instrumental in shifting the focus from budget spending and inputs to outputs and outcomes.
- This index is an example of both **competitive and cooperative federalism**.

## Domains And Indicators of Index

- **The 'Health outcomes'** include indicators like *neonatal mortality rate, total fertility rate, sex ratio at birth, immunisation coverage, proportion of institutional deliveries, etc.*
- **The 'Key inputs/processes'** is a measure of health infrastructure available, including proportion of functional 24X7 primary healthcare centres, etc.
- **The 'Governance and Information' domain** includes average occupancy of three key posts at state level, average occupancy of the chief medical officer, days taken for fund transfer, etc.

## Highlights of The 5th Edition of State Health Index

- **Overall performance among the 19 larger states:**
  - **Top performers:** Kerala, Tamil Nadu, and Telangana have secured the top three positions in terms.
  - **Worst performer:** Bihar, UP and MP occupy the bottom three positions, ranking 19th, 18th, and 17th, respectively.
  - **Incremental performance from 2019-20 to 2020-21:** Rajasthan, Uttarakhand, and Odisha have emerged as the top three performers among the larger states.
- **In the category of smaller states:** Tripura has demonstrated the best overall performance, followed by Sikkim and Goa. On the other hand, Arunachal Pradesh, Nagaland and Manipur occupy the bottom three positions.
- **Among the UTs:** Lakshadweep has secured the top position in terms of overall performance, while Delhi has been placed at the bottom.

## Model Prisons Act

The Ministry of Home Affairs (MHA) announced that it has finalised the preparation of the Model Prisons Act, 2023. The act will replace the current 130-year-old law i.e., Prisons Act, 1894.

### Rationale Behind Bringing A New Model Act

#### • Attempt to shift the focus

- The focus of the existing 130-year-old colonial law was **retributive deterrence**.

- It used punishment or the threat of punishment as a means to deter individuals from committing crimes.

- It focused on keeping criminals in custody and enforcing discipline and order in

prisons, leaving no provision for reform and rehabilitation of prisoners.

- The new act aims to shift the focus of incarceration from “retributive deterrence” to “reform and rehabilitation”.

#### • Killings and gang violence within prisons

- The Model Prisons Act, 2023, is being introduced following the spate of killings and gang violence within prisons.
- One such incident was the killing of 33-year-old TilluTajpuriya, who was allegedly stabbed to death by members of a rival gang inside Tihar jail.

#### • The presence of a criminal nexus operating from inside prisons

- In November 2022, the National Investigation Agency (NIA) asked the Union Home Ministry to shift several dreaded gangsters lodged in north India’s prisons to those in the southern states.
- The NIA’s request to move nearly 25 gangsters was driven by the presence of a criminal nexus operating from inside prisons in Delhi, Punjab, Haryana, and Rajasthan.

### Key Highlights Of The New Provisions Being Proposed

#### • Aims to encourage good conduct

- The Model Act seeks to create provisions for the grant of parole, furlough, and remission to prisoners to encourage good conduct.

#### • Intends to bring about attitudinal change towards prisoners

- The new Act also intends to bring about attitudinal change towards prisoners and initiate vocational training and skill development for prisoners for their reintegration into society.

#### • Seeks to bring about transparency in prison management

- It includes provisions for security assessment and segregation of prisoners.

- Additionally, it aims to provide separate accommodation for women and transgender inmates, ensure the physical and mental well-being of prisoners.

#### • Other provisions

### Prisons Act 1894

- It defines prison and demarcates prisoners into 3 different categories according to the nature of their crimes.

- These categories were - “criminal prisoner”, “convicted criminal prisoner” and “civil prisoner”.

- It dealt with provisions for accommodation, food, clothing, bedding segregation, and the discipline of prisoners, including solitary confinement.

- It also laid down provisions for the prisoners’ employment, health, and visits.

- However, the act had **no provisions for reformation or rehabilitation**.

- The act **permitted whipping**, provided that the number of stripes shall not exceed thirty, albeit for only male prisoners.



- Individual sentence planning;
- Grievance-redressal;
- Prison development board and use of technology in prison administration;
- Protecting society from criminal activities of hardened criminals and habitual offenders.
- Establishing high-security jails and open, semi-open jails.
- New measures for prisoners to video conference with courts have also been introduced.
  - However, if a prisoner is using prohibited items like mobile phones in jail, they will be punished for it.

### Is The Model Prisons Act, 2023 Binding On States?

- **Constitutional Provision**
  - As per the provisions of the Constitution, **‘prisons’ and ‘persons detained therein’ fall under the State List.**
  - Hence, the responsibility of prison management and administration solely vests with the state government, which alone is competent to make appropriate legislative provisions in this regard.
- **Supporting Role Played by the Centre**
  - Owing to the critical role played by ‘efficient prison management’ in the criminal justice system, the Centre finds it crucial to support the States and UTs in this regard.
  - The Ministry of Home Affairs had clarified while announcing the 2023 Act that it may serve as a guiding document for the States so that they may benefit from its adoption in their jurisdictions.


### Update NPR to Enumerate Self During Next Census

- According to a collection of reports released by the Union Home Minister, self-enumeration for Census will be provided to only those households that have updated the National Population Register (NPR) online.
- These reports were released at the inauguration of a new Census building in Delhi.
- If citizens want to exercise the right to fill the Census form on their own rather than through government enumerators, they will have to first update their National Population Register (NPR) details online.

## Census in India

**About Census**

- Population Census provides basic statistics on state of human resources, demography, culture and economic structure at local, regional and national level.
  - Beginning in the year 1872, when the first census was conducted non-synchronously, the census enumeration exercise in India is carried out in every 10 years.
- The first synchronous census was taken under British rule in 1881, by W.C. Plowden, Census Commissioner of India.
- The responsibility of conducting the decadal census rests with the Office of the Registrar General and Census Commissioner of India, Ministry of Home Affairs.



**2021 Census**

- The Census enumeration, which was scheduled to take place in 2021, has been postponed indefinitely due to Covid-19 pandemic.
  - The government has not announced when the next Census will be held, with a January, 2023 notification ruling out the exercise at least till September.
- When it is conducted, it will be the 16th in series and 8th after independence.
- Also, it will be the first digital Census giving citizens an opportunity to “self-enumerate”.

### Key Highlights

- **Web-based self-enumeration (SE) portal developed**
  - The Office of the Registrar General of India (ORGI), which conducts the Census, has developed a “self-enumeration (SE)” portal.

- This portal is presently available in English only.
- **Mobile-friendly portal yet to be launched**
  - The yet-to-be-launched mobile-friendly portal will allow users to register the mobile number in the NPR database, self-enumerate and fill the details under House-listing Operations.
- **Benefits**
  - With this, respondents can update the details of their family members online without the help of an enumerator.
  - This will ensure privacy and will also help to reduce financial and administrative burden incurred in collection of field data.
- **Legal/Constitutional Basis of Census**
  - Population census is listed in **Union List (entry 69)** of Seventh Schedule in Indian Constitution.
  - Census is conducted under the provisions of the **Census Act, 1948**.

*{For more details about NPR, Refer The recitals –Nov 22}*

### **National Medical Commission: Guidelines In Medical Admission For The Disabled**

- The National Medical Commission (NMC) is currently developing new guidelines that will be used to determine whether candidates with disabilities can enroll in medical programs and if they can avail benefit of quotas.
- A 16-member expert panel was set up after the Delhi High Court directed the NMC to explore the possibility of candidates with disability pursuing some disciplines (if not all) of medical education.

#### **Existing Guidelines of NMC**

It says that anyone with more than 40% disability will be eligible for medical course and quota if their disability can be brought below the 40% mark with aids.

#### **Recommendations of The Panel**

- It ranges from a -
  - **“Progressive outlook”** for those with mental illness - suggesting that anyone who can complete all course requirements be allowed to study medicine
  - To **“extremely restrictive”** requirements for locomotor disabilities, suggesting wheelchair-bound people or those using two crutches be disqualified.

#### **Inclusive Recommendations**

- The panel recommended that **everyone** should be allowed to pursue a medical course, and those with a **disability of more than 40% be allowed to compete for the 5% seats under the quota for persons with disabilities.**
- When it comes to **locomotor disabilities** - disability of bones, joints or muscles that restrict the movement of limbs - the committee suggested that students will be allowed if they are able to perform activities.
- These recommendations are in line with disability guidelines that are followed in **countries such as the UK**.

#### **Concerns**

- Despite the mandate, much of the recommendations **do not talk of advancements in assistive devices or treatments.**
- **Lack of objective method** to establish that disability is equal to or more than 40%.

*{For more about National Medical Commission (NMC) refer The Recitals- Jan2023}*



## Vaping Ban Violations

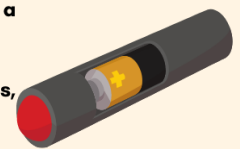
- In light of e-cigarettes easily being available online and at tobacco shops despite a ban, the Union Health Ministry has issued a public notice for stricter implementation of the Act.
  - The act prohibits manufacture, sale and advertisements of electronic cigarettes.
- With e-cigarettes easily available online and at tobacco shops despite a ban, the Union Health Ministry has issued a public notice for stricter implementation of the Prohibition of Electronic Cigarettes Act, 2019.
- Despite heavy penalties and imprisonment, e-cigarettes are widely available across a range of sources, including tobacco vendors, general stores, and online providers.
- The ministry has directed all stakeholders not to directly or indirectly indulge in selling/ distribution/storage of e-cigarettes.
- It also asked them not to advertise electronic cigarettes or take part in an advertisement that directly or indirectly promotes the use of electronic cigarettes.

## About Prohibition of Electronic Cigarettes Act, 2019

- The Act may be called the Prohibition of Electronic Cigarettes (Production, Manufacture, Import, Export, Transport, Sale, Distribution, Storage and Advertisement) Act, 2019.
- The Act gives the Union government the power over the electronic cigarettes industry.
- The Act defines “**electronic cigarette**” as an **electronic device that heats a substance, with or without nicotine and flavours, to create an aerosol for inhalation.**
- From the date of the commencement of this Act, it prohibits any person from producing, manufacturing, importing, exporting, advertising, transporting, selling or distributing electronic cigarettes in India.
- If anyone is found guilty of the above mentioned activities w.r.t. e-cigarettes then he/she shall be **punishable with imprisonment for a term which may extend to one year or with fine which may extend to one lakh rupees, or with both.**

## About Electronic Cigarettes:

- In simple terms, e-cigarette is a device that has the shape of a cigarette, cigar, or pen and **does not contain tobacco.**
- It uses a battery and contains a solution of nicotine, flavourings, and other chemicals, some of which may be harmful.
- When electronic cigarettes are used, the nicotine solution turns into a mist that can be inhaled into the lungs.
- The amount of nicotine in individual e-cigarettes can vary.
- It is **not yet known whether electronic cigarettes are safe or if they can be used to help smokers quit smoking.**

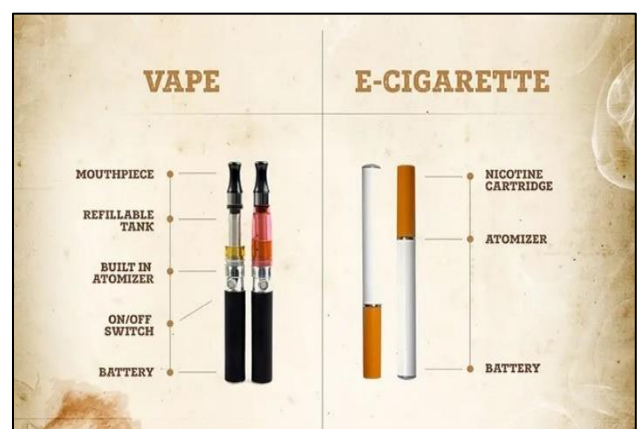


## Concerns w.r.t. E-Cigarettes

- Most e-cigarettes contain nicotine, which is addictive and toxic to developing fetuses.
- Nicotine exposure can also harm adolescent and young adult brain development, which continues into the early to mid-20s.
- E-cigarette aerosol can contain chemicals that are harmful to the lungs.

## Difference Between E-Cigarettes and Vape

- The terms vape pen and e-cigarette are often used interchangeably, especially by the media, but they are two distinctly different things.
- E-cigarettes, or electronic cigarettes, are devices that



look similar to traditional cigarettes.

- They generally consist of a one-piece unit that you use until it runs out and then throw it away.
- Vape pen, on the other hand, are the hugely popular devices that consist of a **rechargeable battery and refillable tank**.
  - Vape can be used again and again by refilling it with variety of e-liquid.

### **Govt Panel Recommends Overarching Agency to Grade Varsities, Including IITs**

- A committee, formed by the Union government, has recommended that the Indian Institutes of Technology (IITs) be brought under the ambit of a proposed Accreditation agency.
- So far, IITs have never been accredited by the **National Assessment and Accreditation Council (NAAC)**, which is the existing agency that grades India's colleges and universities.
- In November 2022, Central government had constituted a High-Level Committee, under the Chairmanship of **Dr. K. Radhakrishnan**.
- The committee was formed for strengthening the Assessment & Accreditation processes and preparing a road map for the National Accreditation Council envisioned in the National Education Policy, 2020.
- The committee recently submitted its report to the government.

### **Recommendations of Dr. K. Radhakrishnan Committee**

- The committee has recommended that the **IITs should be brought under the ambit of NAAC**.
  - Currently, *IITs follow their internal systems for periodic peer evaluation and assessment of programmes*.
- **Binary Accreditation System –**
  - Currently, NAAC follows an eight-point grading system under which institutes are rated A++, A+, A, B++, B+, B, C and D based on data submitted by institutes and their verification by expert teams during campus visits.
  - The committee has suggested that under the new system, institutes be certified as “**Accredited**” or “**Not Accredited** (for those who are far below the standards for accreditation)”.
  - A separate category of “**Awaiting Accreditation**” will cover institutes which are “close to the threshold level” or accreditation.
- The committee has also proposed that the **entire accreditation process be made less dependent on inspections by teams of experts** by adopting the mechanism of “crowdsourcing”.
  - The idea now is to get the inputs submitted by the institutes vetted by a “carefully chosen set of audience with diverse association with the concerned institutes”.
  - This set of audience may include students (including PhD and postdoctoral scholars), faculty, staff, alumni, official visitors such as selection committee members, employers of the students, etc.
- **National Accreditation Council (NAAC) –**
  - Lastly, the Radhakrishnan committee has proposed that instead of having separate bodies for accrediting *institutes and courses*, one overarching agency be set up.
  - The proposed **National Accreditation Council (NAAC)**, envisaged by the NEP, should also subsume the **National Institutional Ranking Framework (NIRF)**, which ranks higher education institutes.
  - The educational system should make transition to the proposed accreditation regime by December 2023.

*{For more about National Assessment and Accreditation Council (NAAC), refer The Recitals – Nov 22}*

## Practice Of Polygamy In India

According to the Assam government, an expert committee would be formed to examine the issue of practice of polygamy and will ban the practice through “legislative action”.

### Practice of Polygamy In India

- **Meaning:**
  - Polygamy is the practice of having more than one married spouse (wife or husband).
  - Traditionally, polygamy - mainly the situation of a man having more than one wife - was practised widely in India.
- **Prevalence in India:**
  - According to the **National Family Health Survey-5** (2019-20), polygamy was 2.1% among Christians, 1.9% among Muslims, 1.3% among Hindus, and 1.6% among other religious groups.
  - The highest prevalence of **polygynous marriages** (marriage in which two or more women share a husband) was in the **Northeastern states** with tribal populations.
- **Laws Governing the practice:** The issue is governed **both by personal laws & Indian Penal Code (IPC)**.

### Personal Laws

- **Special Marriage Act 1954** requires that at the time of marriage neither party has a spouse living.
- **The Hindu Marriage Act 1955** outlawed the practice of a man having more than one wife.
  - However, despite bigamy being an offence, **the child born from the bigamous marriage would acquire the same rights** as a child from the first marriage under the law.
  - **Buddhists, Jains, and Sikhs** are also included under the Hindu Marriage Code.
- **The Parsi Marriage and Divorce Act 1936** had already outlawed bigamy.
- Marriage in Islam is governed by the **Shariat Act 1937**, which allows a Muslim man to have **four wives**.
  - To benefit from the Muslim personal law, many men from other religions would convert to Islam to have a second wife.
  - However, the Supreme Court (SC) held that **religious conversion for the sole purpose of committing bigamy is unconstitutional**.
  - This position was subsequently reiterated in the **2000 judgement in Lily Thomas v Union of India**.

### Indian Penal Code (IPC)

- **IPC Section 494** (“Marrying again during lifetime of husband or wife”) penalises bigamy or polygamy with imprisonment up to 7 years and fine.
- This provision **does not apply** -
  - **To a marriage** which has been declared void by a court.
  - If a spouse has been “continually absent” for the “space of seven years”.
  - For adulterous relationships that do not qualify as valid marriages under the law.
- **Section 495** of the IPC protects the rights of the second wife in case of a bigamous marriage.
  - Whoever commits the offence (under Section 494) and has concealed the fact of the former marriage from the person with whom the subsequent marriage is contracted, shall be punished with **imprisonment up to 10 years and fine**.

### Procedure of Filing a Complaint

- Generally, **the first wife files a complaint** that her husband has remarried.
- The court will have to look into **whether the husband has entered into a legally valid second marriage**.

- The SC reiterated the legal position that the standard of proof must be of marriage performed as per customs.

#### A Crucial Exception to Bigamy Law for Hindus:

- Goa follows its own code for personal laws. So, a Hindu man in the state has the right to bigamy under specific circumstances mentioned in the **Codes of Usages and Customs of Gentile Hindus of Goa**.
- These circumstances include a case where the wife fails to conceive by the age of 25 or if she fails to deliver a male child by the age of 30.
- However, as per the Goa government, the provision for Hindus is virtually “**redundant**” and no one has been given the benefit of it since 1910.

#### Poshan Bhi, Padhai Bhi

- The Union Ministry of Women and Child Development (MoWCD) launched the Centre’s flagship programme ‘Poshan Bhi, Padhai Bhi’, which will focus on **Early Childhood Care and Education (ECCE)** at **anganwadis** across the country.
- ECCE is an important component of **Mission Saksham Anganwadi and Poshan 2.0** envisaged under the **National Education Policy 2020**.

#### Mission Saksham Anganwadi and Poshan 2.0

- In Financial Year 2021-22, the Government of India restructured the ICDS and **POSHAN** (Prime Minister’s Overarching Scheme for Holistic Nourishment) **Abhiyaan** into **Saksham Anganwadi and POSHAN 2.0**
- It is an **Integrated Nutrition Support Programme** approved for implementation during the 15th Finance Commission period **2021-22 to 2025-26**.

#### Anganwadi Ecosystem in India

- Considering global evidence that **85% of brain development is achieved by the age of 6 years**, the Anganwadi eco-system becomes a critical access point for building the children’s base.
- Close to **13.9 lakh** operational Anganwadi centres across the country are providing **supplementary nutrition and early care and education to around 8 crore beneficiary children (under the age of 6 years)**.
  - This makes it the largest public provisioning of such services in the world.
- MoWCD has allocated **Rs 600 crore for the training of anganwadi workers to implement the ECCE**.
  - The **National Institute of Public Cooperation and Child Development (NIPCCD)** has been roped in for the training of Anganwadi workers.



- It seeks to **address the challenges of malnutrition** in children, adolescent girls, pregnant women and lactating mothers through -
  - A strategic shift in nutrition content and delivery and
  - Creation of a **convergent eco-system** to develop and promote practices that nurture health, wellness and immunity.
- **Components:**
  - **Nutrition Support through Supplementary Nutrition Programme (SNP)** for children (6 months to 6 years), pregnant women and lactating mothers (PWLM); and for Adolescent Girls (14 to 18 years) in Aspirational Districts and North Eastern Region (NER);
  - ECCE [3-6 years] and early stimulation for (0-3 years);
  - Anganwadi Infrastructure including modern, upgraded Saksham Anganwadi; and

- **Poshan Abhiyaan:** Launched in 2018, its focus is to lay emphasis on nutritional status of adolescent girls, pregnant women, lactating mothers and children from 0-6 years age.

### What is Poshan Bhi Padhai Bhi Programme?

- It is a path breaking ECCE program **to ensure that India has the world's largest, universal, high-quality pre-school network**, as suggested by the NEP 2020.
- The aim is not only to make anganwadicentres**nutrition hubs** but also **education-imparting centres** - providing at least two hours of high-quality preschool instruction on a daily basis.
- Under this, the government will target children's development in every domain mentioned in the **National Curriculum Framework**, viz., physical and motor development, cognitive development, socio-emotional-ethical development, etc.
- It will also ensure the **use of developmentally appropriate pedagogies** and emphasising the links with primary education as well as early childhood health and nutrition services.
- It will help build a **Jan Andolan**, to involve communities in strengthening the foundations of the country's future generations.

### Regulations for Tackling Misleading Ads and Claims

- The Advertisement Monitoring Committee at the **Food Safety and Standards Authority of India (FSSAI)** flagged 32 fresh cases of food business operators (FBOs) making misleading claims and advertisements.
- They were found to be in contravention of the Food Safety and Standards (Advertisements & Claims) Regulations, 2018.

### Observation in the Food Advertising Ecosystem in India

- FSSAI seeks that the advertisements and claims be **truthful, unambiguous, meaningful, not misleading and help consumers to comprehend the information provided.**
- **Claims must be scientifically substantiated by validated methods of characterising or quantifying the ingredient or substance that is the basis for the claim.**
- According to the Advertising Standards Council of India (ASCI), food advertising has been a **"fairly violative sector"**.
- Last month, an uproar ensued after allegations were made against health drink **Bournvita**.



### Some Misleading Words In the Food Advertising Ecosystem In India

- **Natural:** A food product can be referred to as 'natural' if it is a single food derived from a recognised natural source and has nothing added to it.
  - Therefore, **composite foods** - a mixture of plant and processed constituents, can be called 'made from natural ingredients' instead of 'natural'.
- **Fresh:** It can be used for products which are not processed in any manner other than washing, peeling, chilling, trimming, cutting or irradiation by ionising radiation (not exceeding 1 kGy {gamma radiation} to delay in ripening, killing of insects/pests, etc).
  - The regulations forbid the 'fresh' reference **if the processing endeavours to achieve an extension in the shelf-life** of the product (may instead use 'fresh frozen').
- **Pure and Original**
  - 'Pure' is to be used for **single-ingredient foods** to which nothing has been added and which are devoid of all avoidable contamination.
  - 'Original' is used to describe food products **made to a formulation, with a traceable origin** that has remained unchanged over time.

## ● Nutritional Claims

- Nutritional claims may either be about the specific contents of a product or comparisons with some other foodstuff.
- **Claims of equivalence** such as “contains the same of (nutrient) as a (food)” or “as much (nutrient) as a (food)” may be used in the labelling.
- According to the ASCI, **most complaints of misleading Ads were related to the nutrition of a product, its benefits and the ingredient mix** not being based on adequate evidence.

## Regulations for Tackling Misleading Ads and Claims

### ● Food Safety and Standards Act, 2006:

- **It prohibits product claims** suggesting suitability for prevention, alleviation, treatment or cure of a disease, disorder or particular psychological condition unless specifically permitted under the Act.
- Making deceptive claims or advertisements are **punishable offences** and may invite penalties of up to Rs 10 lakh apart from suspension/cancellation of licenses for repeated offences.

### ● The Food Safety and Standards (Advertisements & Claims) Regulations 2018: The focus of the regulation is to make the Companies accountable for their claims on food products and cater to the interest of customers.

### ● The Consumer Protection Act 2019: Under this, Central Consumer Protection Authority (CCPA) was set up as a regulatory body in relation to matters (such as wrong advertisements) affecting rights of consumers.

### ● The Programme and Advertising Codes: These are prescribed under the Cable Television Network Rules 1994 and underlines that advertisements must not give claims which are difficult to be proved.

## Way Ahead

- **FBOs must desist** from making any unscientific and/or exaggerated claims and advertisements to promote their product sales to avoid enforcement actions and in larger consumer interest.
- They must be in consonance with principles of **Good Clinical Practices (GCP)** and peer-reviewed or **published in a peer-reviewed scientific journal.**

## 10 Indian Languages To Get Technical-Term Dictionaries

The Commission for Scientific and Technical Terminology (CSTT) is aiming to create technical and scientific terminology in 10 Indian languages underrepresented in the learning landscape.

- The **CSTT will bring out what it calls fundamental (basic) dictionaries with 5,000 words per language**, in three to four months.

- These will be in digital, searchable format, and free of cost. About 1,000-2,000 copies will be printed in each language.

- The immediate focus is to cover 15 disciplines – journalism, public administration, chemistry, botany, zoology, psychology, physics, economics, etc.

### About Commission for Scientific and Technology Terminology (CSTT):

- It was established in 1961 under clause (4) of Article 344 of the Constitution of India.
- **Objective** - To evolve and define scientific and technical terms in Hindi and all Indian languages.
- Presently, CSTT is functioning under Department of Higher Education, Ministry of Education.
- It is headquartered in New Delhi.

### Functions of CSTT:

- Preparation and Publication of bilingual and trilingual glossaries involving English and Hindi and other Indian Languages.
- Identification of pan Indian terms; Preparation and publication of national terminology.
- Identification and publication of School Level Terminology and Departmental Glossaries; Preparation of Definitional Dictionaries and Encyclopaedias.
- Preparation of University level textbooks, monographs and journals; Grant-in-Aid to grant academies, textbook boards and university cells for University level books in regional languages.
- Propagation, expansion and critical review of terms coined and defined through training and orientation programmes, workshops, seminars etc.
- Providing necessary terminology to National Translation Mission.

- These will **enable textbook formulation at the middle- and senior-school as well as university levels.**
- The dictionaries will be distributed to State education boards, universities, engineering institutes, and the National Testing Agency

### **Achievements of CSTT**

- 22 State Granth Academies / State Text-Book Boards / Universities Cells, etc. are also associated with this Commission.
  - They produce University Level Text-Books / reference materials in Hindi and other Indian Languages with the use of standard terminology as evolved by the CSTT.
- Till date, **CSTT has standardized the terminology of about eight lakhs technical terms in different subjects and in different languages.**
- Besides this, CSTT has **published large number of Definitional Dictionaries**, Glossaries, Text-Books, Reference Materials and Monographs, Quarterly Journals.
  - ‘**Vigyan Garima Sindhu**’ and ‘**Gyan Garima Sindhu**’ are two prominent quarterly journals published by the CSTT.
- CSTT **regularly organizes workshops**, seminars, symposium, conferences, orientation and training programmes to increase the use and popularize the standard terminology of Hindi and other Indian languages.

### **Significance of Developing Dictionaries In Regional Languages**

- The move assumes importance as the **National Education Policy 2020 has espoused the use of regional languages as a medium of education** in both school and college.
- Following this, the government has taken several initiatives such as introducing engineering and medical courses in regional languages in several States.
- The **UGC has also said that it will soon release a road map to introduce undergraduate and postgraduate courses in regional languages** in all disciplines.
- In June, the Bar Council of India (BCI) also constituted a panel to formulate recommendations on how to introduce courses in regional languages in law colleges.

### **Eight Schedule of The Constitution**

- The Eighth Schedule to the Constitution lists the official languages of India.
- **Part XVII** of the constitution deals with the official languages in **Articles 343 to 351**.
- Although there are hundreds of languages spoken across the country, the eighth schedule recognises a total of **22 languages as the official languages.**
- These 22 languages are –
  - (1) Assamese, (2) Bengali, (3) Gujarati, (4) Hindi, (5) Kannada, (6) Kashmiri, (7) Konkani, (8) Malayalam, (9) Manipuri, (10) Marathi, (11) Nepali, (12) Oriya, (13) Punjabi, (14) Sanskrit, (15) Sindhi, (16) Tamil, (17) Telugu, (18) Urdu (19) Bodo, (20) Santhali, (21) Maithili and (22) Dogri.
  - Of these languages, **14 were initially included in the Constitution.**
  - Sindhi language was added in 1967.
  - Thereafter three more languages viz., Konkani, Manipuri and Nepali were included in 1992.
  - Subsequently Bodo, Dogri, Maithili and Santhali were added in 2004.
- At present, there are demands for inclusion of 38 more languages in the Eighth Schedule to the Constitution.
- However, there is **no fixed criteria** for any language to be considered for inclusion in the Eighth Schedule.

## Smart Cities Mission

- The Union Housing and Urban Affairs Ministry has extended the deadline of its Smart Cities Mission from June this year to June 2024.
- The deadline has been extended to enable all 100 smart cities to not only complete their projects but also document and disseminate the learnings from the mission.

## Smart Cities Mission

### About

- The Smart Cities Mission is an initiative of the **Union Housing and Urban Affairs Ministry**.
  - It was launched by Prime Minister Modi in June, 2015.
- Cities across the country were asked to submit proposals for projects to improve municipal services and to make their jurisdictions more liveable.
- Between January 2016 and June 2018 (when the last city, Shillong, was chosen), the Ministry selected 100 cities for the Mission over five rounds.
- The projects were supposed to be completed within five years of the selection of the city, but in 2021 the Ministry changed the deadline for all cities to June 2023.

### Objective

- To promote cities that provide core infrastructure, clean and sustainable environment and give a decent quality of life to their citizens through the application of 'smart solutions'.
- To drive economic growth and improve quality of life through comprehensive work on social, economic, physical and institutional pillars of the city.

### Funding

- The Mission is operated as a **Centrally Sponsored Scheme**.
- Central Government will give financial support to the extent of Rs. 48,000 crores over 5 years i.e., on an average Rs.100 crore per city per year.
- An equal amount on a matching basis is to be provided by the State/ULB.
- Additional resources are to be raised through convergence, from ULBs' own funds, grants under Finance Commission, innovative finance mechanisms such as Municipal Bonds, other government programs and borrowings.

## Fundamental Principles On Which The Concept Of Smart Cities Is Based

- There is no standard definition or template of a smart city.
- However, in the context of India, the six fundamental principles on which the concept of Smart Cities is based are given in the fig.



## What Is The Status Of The Projects Under The Mission?

- As on April 30, 2023, the cities had completed 5,700 projects or 72% of the total number of projects and 60% of the total value of the projects.
- 50 out of the 100 cities have completed 75% of the projects and would be able to complete the remaining works by June.





- Under the mission, 66 of the cities are small, with less than 1 million population and are implementing two-thirds of the projects.

### Govt. Revises Nutritional Standards In Its Food Safety Schemes For Kids

A decade after the National Food Security Act (NFSA) was enacted, the Central government has revised the nutritional standards of meals at schools and anganwadis.

- The *revised nutritional standards has augmented the proportion of calories and protein, while also mandating the inclusion of micronutrients in them.*
- The amendment has been done on the recommendations of an inter-ministerial committee.
- In its draft report, the inter-ministerial committee had recommended “urgent action”, citing the possible impact of the **Covid-19 pandemic** in worsening the “silent crisis” of under-nutrition.

### What Is Food Security

- The basic concept of food security globally is **to ensure that all people, at all times, should get access to the basic food for their active and healthy life.**
- Though the Indian Constitution does not have any explicit provision regarding right to food, the fundamental right to life enshrined in **Article 21** of the Constitution may be interpreted to include **right to live with human dignity, which may include the right to food and other basic necessities.**

### About National Food Security Act, 2013

- The issue of 'food security' at the household is continuously being addressed by the Government since long, through the Public Distribution System (PDS) & Targeted Public Distribution System (TPDS).
- However, the enactment of the National Food Security Act, (NFSA) 2013 in July, 2013 marks a **paradigm shift** in the approach to food security from **welfare to rights based approach.**
- The Act legally entitles up to **75% of the rural population** and **50% of the urban population** to receive subsidized foodgrains under TPDS
  - About **two thirds of the population** therefore is covered under the Act to receive highly subsidized foodgrains.
- As a step towards women empowerment, the eldest woman of the household of age 18 years or above is mandated to be the head of the household for the purpose of issuing of ration cards under the Act.
- **Coverage** The Act is being implemented in **all the States/UTs**, and on an all India basis, out of maximum coverage of 81.34 crore persons, **around 80 crore persons have been covered**
- In case of non-supply of the entitled quantities of foodgrains or meals to entitled persons under NFSA, such **persons shall be entitled to receive such food security allowance from the concerned State Government to be paid to each person.**
- **Responsibilities under NFSA –**
  - NFSA defines the joint responsibility of the Centre and State/UT Government.
  - While the Centre is responsible for allocation of required foodgrains to States/UTs, the States/UTs are responsible for effective implementation of the Act.
  - The **work of identification of eligible households is to be done by States/UTs.**

### Central Issue Price under NFSA

- The NFSA provides a **legal right** to persons belonging to “eligible households” to receive foodgrains at subsidised price— **rice at Rs 3/kg, wheat at Rs 2/kg and coarse grain at Rs 1/kg** — under the TPDS.
  - The Central government decided to provide **free foodgrains to about 81.35 crore beneficiaries under the NFSA for one year from January 1, 2023.**

- The term “eligible households” comprises two categories —
  - “Priority Households”, and families covered by the Antyodaya Anna Yojana (AAY).
  - **Priority households are entitled to receive 5 kg of foodgrains per person per month, whereas AAY households are entitled to 35 kg per month at the same prices.**
- Under Schedule-I of the Act, these subsidised prices were fixed for “a period of three years from the date of commencement of the Act”.
  - However, the government has yet not revised the subsidised prices.

#### **What Are the Revised Nutritional Standards**

- The amendment has been made under Schedule-II of the NFS Act
  - Schedule-II of the Act fixes nutritional standards for nine groups, starting from children aged six months to one year and those in upper primary classes (VI-VIII).
- ***Three new categories have been created for undernourished children aged between six months to six years.***
- The nutritional standards for some existing categories such as *lower primary classes, and upper primary classes* have been revised.
  - For instance, under the previous norms, every child in **lower primary classes** was entitled to get 450 kilocalories (kcal) and 12 gm protein with midday meals.
  - Now, the protein quantity has been hiked to 15-20 gms, while fat (18-21 gms) and carbohydrates (70 gms) are part of the mix as well.
  - Standards for micronutrients have also been fixed: calcium 170 mg, zinc 2 mg; iron 3.5 mg; dietary folate 50 micrograms, Vitamin A 100 micrograms; Vitamin B6 0.43 micrograms; Vitamin B12 0.66 micrograms.

## RVNL Gets Navratna Status

- **Rail Vikas Nigam Limited (RVNL)**, a Central Public Sector Enterprises of Ministry of Railways, has been granted Navratna Status.

- RVNL was incorporated as a Public Sector Unit (PSU) in 2003, with the twin objectives of:

- Implementation of projects relating to creation and augmentation of capacities of rail infrastructure on fast-track basis; and
- Raising of extra budgetary resources for SPV projects.

- The company was granted Mini-Ratna status in September 2013.

### Functions of RVNL

- Undertaking project development and execution of works covering full project life cycle.
- Creating Project specific SPVs for individual works, if required.
- On completion of a Railway project by RVNL, the concerned Zonal Railway will undertake its operation and maintenance.

### Benefits of Navratna Status

- The grant of “Navratna” status to RVNL leads to enhanced delegation of powers, more operational freedom and financial autonomy which will give huge impetus to RVNL’s progress.
- The Navratna companies are granted financial independence to invest up to ₹1,000 crore without seeking approval from the central government.
- Navratna companies are also allowed to invest up to 15% of their net worth on a single project, or 30% of their net worth in a given year, subject to a cap of ₹1,000 crore.
- This increased financial freedom gives Navratna companies a competitive edge when competing globally.

### Eligibility criteria

- The CPSEs which are **Miniratna I, Schedule ‘A’** and have obtained excellent or very good MOU ratings in three of the last five years and have composite scores of 60 (out of a maximum score of 100) or above in the following six selected performance indicators:
  - Net profit to Net Worth;
  - Manpower cost to Total cost of production/ services;
  - Profit Before Depreciation Interest and Tax (PBDIT) to Capital employed;
  - Profit Before Interest and Tax (PBIT) to Turnover;
  - Earnings Per Share (EPS);
  - Inter sectoral performance.



## Bihan Mela

- Members of the Kondh tribe in **Odisha’s** Nayagarh district have added one more event to their calendar of festivals and celebrations.
- Called **Bihan Mela**, literally the **seed festival**, the event is participated by farmers from as many as 40 villages.
- Started in 2019, the event could not be held for two years because of the COVID-19 pandemic. The fair mimics a traditional market where farmers used to exchange seeds.
- Preparations begin as soon as farmers have harvested kharif crops, which includes both hybrid and indigenous varieties of paddy, millets, maize and sorghum.

- Women are in charge of this celebration by collecting seeds of local species and storing them in clay pots. On a specific day in December, they decorate the pots with red and white designs, set them in a bamboo basket, and carry it on their heads to the hamlet where the fair is held.
- Farmers in the region are mostly marginal and depend on the monsoon rains. In recent years, they have seen repeated crop failures either due to erratic rainfall or pest attacks.
- Since the Green Revolution, farmers in the region have abandoned native crops and varieties that are naturally resistant to pests and better suited to the region's climate.
- Even on hilltops, where families used to practice mixed cropping until recently, have shifted to monoculture cash crops like cashew.
- This has not only affected their food and nutritional security, but also degraded the soil and made the farmers more vulnerable to crop loss.
- The seed festival was thus introduced to help farmers return to their traditional ways of farming like mixed-cropping.

### Seed Bank

- To facilitate access to indigenous seeds, a seed bank was also set up. The bank works on a simple premise: collect and preserve indigenous seeds from across Kondh villages and lend those out to farmers.
- The farmers have to return double the quantity of seeds or two different seed varieties within the first year of cultivation.
- The bank, which was set up with just 12 varieties of paddy, now has 62 varieties of paddy, four varieties of millets, five varieties of pulses and eight vegetables.

### Kondh tribe

- The Kondhs are the **largest tribal group in the state of Odisha**. They are known for their rich cultural heritage, **martial traditions** and indigenous values, which are based on harmony with nature.
- Traditionally hunter-gatherers, they are divided into the hill-dwelling Khonds, and plain-dwelling Khonds for census purposes, but the Khonds themselves identify by their specific clans.
- Khonds usually hold large tracts of fertile land, but still practice hunting, gathering, and slash-and-burn agriculture in the forests as a symbol of their connection to, and as an assertion of their ownership of the forests wherein they dwell.
- Khonds speak the **Kui/Kuvi language** which is a **Dravidian language** and is written in the **Odia script**.



### Gum Arabic

- In the wake of the Sudan conflict, international consumer goods makers have stockpiled supplies of Gum Arabic.
- Depending on how long the conflict continues there may be ramifications for finished goods on the shelf – branded goods made by household names. It is estimated that the current stockpiles will run out in five-to-six months.
- Gum arabic (gum acacia, gum sudani) is a natural gum originally consisting of the hardened sap of two species of the Acacia tree.
- However, the term gum arabic does not actually indicate a particular botanical source.
- The gum is harvested commercially from wild trees, mostly in Sudan (80%) and throughout the Sahel, from Senegal to Somalia.

### Applications

- Gum arabic's mixture of polysaccharides and glycol-proteins gives it the properties of a glue and binder that is edible for humans.

- It is used in the food industry as a stabiliser, emulsifying agent, and thickening agent in icing, fillings, soft candy, chewing gum, and other confectionery, and to bind the sweeteners and flavourings in soft drinks.
- Therefore, companies like Pepsi and Coke, can't exist without having gum arabic in their formulations. Wine makers use it as a wine fining agent.
- For artists, it is the traditional binder in watercolor paint and in photography for gum printing.
- Lithographic printers employ it to keep the non-image areas of the plate receptive to water.
- This treatment also helps to stop oxidation of aluminium printing plates in the interval between processing of the plate and its use on a printing press.
- Pharmaceutical drugs and cosmetics also use the gum as a binder, emulsifier, and suspending agent or viscosity-increasing agent.
- It is an important ingredient in shoe polish and can be used in making homemade incense cones.
- It is also used as a lickable adhesive, for example on postage stamps, envelopes, and cigarette papers.

### India's Gold Reserves

- The **Reserve Bank of India's (RBI)** gold reserves touched 794.64 metric tonnes in fiscal 2023, an increase of **nearly 5 %** over fiscal 2022, when it held 760.42 metric tonnes of gold.
- The **RBI** bought 34.22 tonnes of gold in fiscal 2023; in fiscal 2022, it had accumulated 65.11 tonnes of gold.
- Between the fiscal year ended June 30, 2019 (the RBI used to follow the July-June accounting year then; this was changed to April-March starting 2020-21) and fiscal 2023, the RBI's gold reserves increased by 228.41 tonnes.
- The 794.64 tonnes of gold reserves in fiscal 2023 also included gold deposits of 56.32 tonnes.
- 437.22 tonnes of gold are held overseas in safe custody with the Bank of England and the Bank of International Settlements (BIS), and 301.10 tonnes of gold is held domestically.
- In value terms (USD), the share of gold in the total foreign exchange reserves increased from about 7 per cent at the end of March 2022 to about 7.81 per cent at the end of March 2023.

### Reasons For Purchasing Gold

- Experts believe that the RBI has been increasing its gold purchases over the last few years in order to **diversify its overall reserves**.
- This change in strategy, has been driven by negative interest rates in the past, the weakening of the dollar and growing geopolitical uncertainty.
- Central banks want security, safety, liquidity and return. Gold is a safe asset to have as it is liquid, has an international price which is transparent, and can be traded anytime. Due to this, central banks are buying gold.

### India's Gold Market

- **As per the World Gold Council report (released in January 2023):**
  - India is the **second largest gold jewellery consumer in the world**.
  - In 2021, India bought 611 tonnes of gold jewellery, second only to China (673 tonnes).
  - Gold jewellery exports in India have grown from US \$7.6 billion in 2015 to US \$12.4 billion in 2019.
  - **Rural India is the largest consumer of gold jewellery occupying 55-58 per cent of the market share, and the middle class is the primary gold consumer in India.**



### Scenario At Other Central Banks

- Many other central banks, including the Monetary Authority of Singapore (MAS), the People's Bank of China (PBoC) and the Central Bank of the Republic of Turkey have been buying gold.

- During 2022, the central banks from the Middle East, including Egypt, Qatar, Iraq, UAE, and Oman significantly boosted their gold reserves.
- In calendar year 2022, central banks around the world purchased 1,136 tonnes of gold, which was a record high.
- The two key drivers of central banks' decisions to hold gold are its performance during times of crisis, and its role as a long-term store of value.

### Impact of Gold on Economy

- **Business/employment opportunities:**
  - Gold is used as a raw material for jewellery fabrication and making coins. This in turn creates business opportunities, value addition and employment.
- **Current account deficit (CAD):**
  - India is the world's second-largest importer of gold, which contributes to the country's current account deficit.
  - The import of gold requires foreign currency, which puts pressure on the country's foreign exchange reserves.
  - It should be noted that the gold imports are also used for export of gold jewellery, it has the potential to mitigate the adverse impact of imports on CAD.
- **Inflation:**
  - Gold is often used as a hedge against inflation, which means that during times of high inflation, demand for gold increases. This can lead to an increase in the price of gold.
- **Savings and investments:**
  - Gold is considered a safe-haven asset and a store of value in India

### Financialization of Gold

- A report by NITI Aayog estimated that around 23,000-24,000 tons of gold lies unused with the households and religious institutions throughout the nation.
- It is with the view to monetise this unutilized gold that the Government introduced the **Gold Monetisation Scheme (GMS)** in the Union Budget, 2015.
  - The gold accumulated under the GMS was to be used productively and profitably, by banks through the Gold (Metal) Loan (GML).
  - GML was introduced as a low interest rate financial product for meeting inventory financing needs of the borrower.
- The Government had launched the **Sovereign Gold Bonds Scheme (SGBS)** in November, 2015.
  - It to reduce the demand for physical gold and shift a part of the gold imported every year for investment purpose into financial savings.

### National MSME Council

- The Ministry of Micro, Small and Medium Enterprises (MSME) organised the first meeting of the National MSME Council.
  - The event was organised under the Central Sector Scheme **Raising and Accelerating MSME Performance (RAMP).**
- The National MSME Council has been set up to work as an administrative and functional body to oversee inter-Central Ministerial/Departmental co-ordination, facilitate Centre State synergies and monitor progress on the reforms mandated in the MSME sector including the RAMP programme.

- RAMP is a World Bank-assisted central government program, launched in June 2022, with the outlay of Rs 6,062.45 crore.
- From the total corpus, Rs 3750 crore would be loaned by the World Bank and the remaining Rs 2312.45 crore would be contributed by the Union Government.
- RAMP aims to enhance **access to market and credit** by strengthening institutions, enhance centre-state partnerships, address issues of delayed payments and greening of MSMEs.
- It also aims to ramp up implementation capacity and MSME coverage in states, with impact enhancement of existing MSME schemes.

#### Fourth Positive Indigenisation List

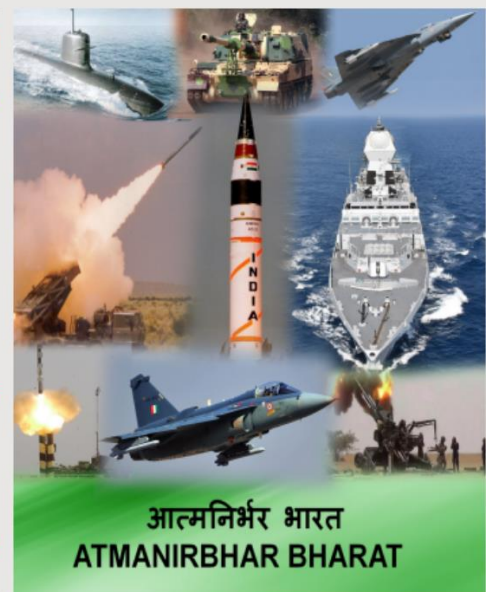
- The Ministry of Defence has approved the 4th Positive Indigenisation List (PIL) of 928 strategically-important Line Replacement Units (LRUs)/Sub-systems/Spares & Components, with import substitution value worth Rs 715 crore.
- The current list is in continuation to the previous three PILs which were published in December 2021, March 2022 and August 2022 respectively.
- These lists contain 2,500 items which are already indigenised and 1,238 items which will be indigenised within the given timelines.
- The **Defence Public Sector Undertakings (DPSUs)** will undertake indigenisation of these items through different routes under '**Make**' category and in-house development through the capabilities of MSMEs and private Indian industry.
- The industry may look for Expression of Interest (EoIs)/Request for Proposal (RFPs) on the **Srijan Portal** - especially designed for this purpose and may come forward to participate in large numbers.

#### Positive Indigenisation List

- The positive indigenisation list essentially lists items that the armed forces — Army, Navy, and Air Force — will procure only from domestic manufacturers. These manufacturers could be from the private sector or DPSUs.
- The Government has introduced a comprehensive revamped '**Make and Innovation**' procedure to reduce dependency on arms imports and promote indigenous manufacturing of defence equipment.
- The '**Make and Innovation**' procedure has been introduced in Defence Acquisition Procedure (DAP-20) to facilitate indigenous design and development of defence equipment through private

#### Defence Acquisition Procedure (DAP), 2020

- DAP 2020 came into effect from 2020 by replacing the **Defence Procurement Procedure (DPP)**.
- DAP, 2020 seeks to **empower the domestic defence industry** through the Make in India initiative with the eventual aim of turning India into a global manufacturing hub.
- DAP has provisions to **encourage FDI** to establish manufacturing hubs both for import substitution and exports, while protecting interests of Indian domestic industry.
- The DAP also places greater emphasis on **time-bound defence procurement processes** through the setting up of a project management unit and framing of realistic and verifiable GSQRs (general staff qualitative requirements).
- It also aims to improve **ease of doing business**, with emphasis on simplification, delegation and making the process industry friendly.



participation with both government funding and industry funding.

## Impact

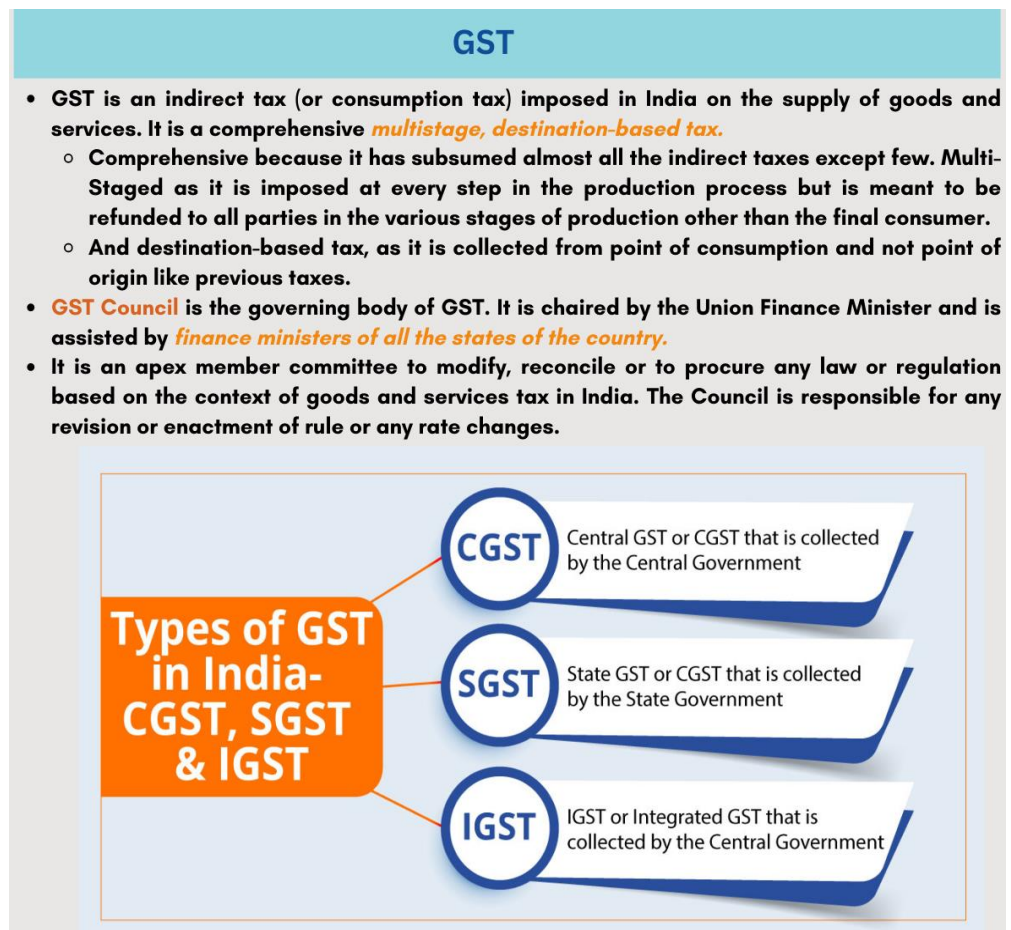
- The move will give further boost to indigenisation with active participation of public and private sector.
- It will facilitate an environment for Indian defence manufacturers to create world class infrastructure and assist in the government's 'Make in India' vision.
- It will also give a much-needed boost to domestic Research & Development by attracting fresh investment into technology and manufacturing capabilities.
- Provides an excellent opportunity for 'start-ups' and MSMEs to grow in the defence sector.
- Reduced dependence on imports in the defence sector and reduce large defence import expenditure.
- The boost in domestic manufacturing can also help the country to develop itself into an exporter of defence goods and help to restore the long-term economic growth.

## Changes In GST

- To increase compliance under the Goods and Services Tax (GST) regime, the government has decided to lower the threshold for businesses to generate e-invoice for business-to-business (B2B) transactions.
- It has also rolled out the automated return scrutiny module for GST returns in a backend application for central tax officers.

## Automated Return Scrutiny Module (ARSM)

- ARSM for GST returns will enable the officers to scrutinise GST returns of centre-administered taxpayers selected on the basis of data analytics and risks identified by the system.
- Discrepancies on account of risks associated with a return will be displayed to the tax officers.
- They will interact with the taxpayers through the GSTN common portal for communication of discrepancies noticed in returns.
- And subsequent action in form of either issuance of an *order of acceptance of reply* or issuance of *show cause notice* or initiation of audit/investigation.
- ARSM has already commenced with the scrutiny of GST returns for FY 2019-20, with the requisite data already with the tax officers.





## e-invoicing

- In 2019, the GST Council had approved the **standard of e-invoice** with the primary objective to enable interoperability across the entire GST ecosystem.
- Under this, a phased implementation was proposed to ensure a common standard for all invoices.
- That is, an e-invoice generated by one software should be capable of being read by any other software and through machine readability, an invoice can then be uniformly interpreted.
- With a uniform invoicing system, the tax authorities are able to pre-populate the return and reduce the reconciliation issues.
- With a high number of cases involving fake invoices and fraud avilment of input tax credit, GST authorities have pushed for implementation of this e-invoicing system.
- The government has now lowered the threshold for businesses to generate e-invoice for B2B transactions to Rs 5 crore from Rs 10 crore under GST. The changes will come into effect from August 1.
- At present, businesses with turnover of Rs 10 crore and above are required to generate e-invoice for all B2B transactions.

## Significance

- For companies, e-invoicing is a boon rather than a bane as suppliers who are e-invoicing-compliant result in proper flow of **input tax credit** and reduce the churn around credit issues.
- These changes are expected to broaden the compliance mandate for more businesses, especially small and medium enterprises and help boost the GST revenue collections.
- It is expected to help to curb the actions of tax evaders and reduce the number of frauds as the tax authorities will have access to data in real-time.

## BIZAMP Programme

- An outreach programme was organised recently by the Ministry of MSME in association with NSIC Venture Capital Fund Limited (NVCFL) under its **Self Reliant India (SRI)** Fund at Dimapur Nagaland.
- The "BIZAMP programme" - **Amplifying businesses of North East Region** aimed at empowering MSMEs from the North Eastern States and amplifying their businesses utilizing benefits under SRI Fund.
- The event showcased concerted efforts of State and Central government and provided insights about various policies designed for MSMEs to assist them in their growth.
- It served to provide a platform for the empaneled daughter funds (e.g. venture capital and private equity funds) of SRI Fund to reach the MSMEs in the NE Region of India.
- It will help the MSMEs in the North East Region (NER) to interact with the daughter funds and reap the benefit through capital infusion for scaling up their business.

## Significance of MSME Sector

- The segment enables the inclusion of generally neglected entrepreneurs e.g. women, marginal entrepreneurs and empowerment & wealth creation at the grass root.
- However, one of the biggest challenges faced by MSMEs in India is the inadequate availability of capital. MSMEs have limited access to external equity primarily because only a handful of players provide early stage equity capital.
- Empowering MSMEs in NER is important for enhancing their contribution to the regional and national economy.

### SRI Fund

- The government has launched SRI Fund (functions as a Fund of Funds) with an outlay corpus of Rs 10,006

crore, concentrated towards financing an infusion of capital to MSMEs through **Daughter Funds**.

- The SRI fund being managed by NVCFL, is an *Alternative Investment Fund (AIF)* providing growth capital to MSMEs through equity/quasi-equity/equity-like structured instruments.
- As of March 2023, the fund has made a capital commitment of Rs. 5,120 crore to 42 empaneled daughter funds.

## GAINS 2023

- Garden Reach Shipbuilders and Engineers Ltd has launched the **GRSE Accelerated Innovation Nurturing Scheme (GAINS) 2023**.
- GAINS 2023 is a start-up challenge to leverage the vast start-up ecosystem in India to identify and encourage the development of innovative solutions as part of the shipyard's technology development efforts.
- GAINS aims to address present and emerging challenges in the *ship design and construction industry*, while also achieving the objectives of Atmanirbhar Bharat.
- The thematic areas would be artificial intelligence, renewable or green energy, and energy efficiency and efficiency enhancement.

### Two-stage Process

- The GAINS challenge is envisaged as a two-stage process to help generate ideas from which a few promising ones will be selected and nurtured.
- In the first stage, participating entities or firms, or individuals would be required to submit short submissions with sufficient detail to clarify a required degree of understanding of the chosen problem.
- Only those proposals which are implementable within a reasonable time frame and have the potential to add value to the shipyard's business interests would be considered for selection to the second stage.
- The selected entities would be given a *fixed period of time to submit a detailed stage-II proposal* to the GAINS challenge team.
- These proposals should have a detailed technical description of the proposals, bringing out clearly the implementation strategy, the advantages of implementation, market potential, timelines, detailed costing, and an estimate of return on investment.
- Selected entities would be given a sum of a **maximum ₹5 lakh each**, as per recommendations of the committee, against delivery of the project report.
- The final winners will then be invited for further negotiations and potential award of contract for implementation.

### Garden Reach Shipbuilders and Engineers (GRSE)

- GRSE is India's leading shipyards under the administrative control of **Ministry of Defence**.
- Founded in **1884** as a small privately owned company, it was nationalised by Union Government in 1960.
- Located in **Kolkata**, GRSE's primary role has been building warships and other vessels for the Indian Navy and Indian Coast Guard.
- It is the first Indian shipyard to build 100 warships and was awarded the **Miniratna status** in 2006.

## Volatility In Edible Oil Prices

- Edible oil prices have witnessed a lot of volatility over the last 2-3 years.
- The UN Food and Agriculture Organization's **global vegetable oils price index** (2014-16 base period value = 100) fell down to a low of 77.8 points in May 2020 at the height of the worldwide Covid lockdowns.

- It reached an all-time-high of 251.8 in March 2022 after Russia's invasion of Ukraine. But by April 2023, it was down to a 29-month-low of 130 points.

### Factors Influencing Oil Prices

- The oil that has witnessed the *highest price rise and fall* in just the last one year is **sunflower**. This is because, Ukraine and Russia together accounted for nearly 58% of the world's production of sunflower oilseed in 2021-22.
- As the war shut off their supplies through the Black Sea ports, prices increased.
- However, the situation changed with the **Black Sea Grain Initiative agreement** between Russia and Ukraine signed on July 22.
- The initiative facilitated the safe navigation of vessels carrying grain and foodstuffs from *three designated Ukrainian ports*.
- The opening of the corridor helped much of the sunflower oil, meal, and seed that had accumulated in Ukraine to be shipped out. It led to international vegetable oil prices falling below even pre-war levels.

### Oil Consumption In India

- India consumes 23.5-24 million tonnes (mt) of cooking oil annually, out of which 13.5-14 mt is imported and the balance 9.5-10 mt produced from domestically cultivated seed.
- Sunflower is the fourth largest consumed oil (2-2.5 mt), behind mustard (3-3.5 mt), soyabean (4.5-5 mt) and palm (8-8.5 mt).
- **Both sunflower and palm oil are almost wholly imported**, with their domestic production at hardly 50,000 tonnes and 0.3 mt respectively.
- This is unlike mustard and soyabean, where the share of domestic output are close to 100% and 30-32% respectively.
- Thus, what the Indian consumer pays for edible oils is significantly dictated by import prices. The other locally produced oils — cottonseed (1.2-1.3 mt), rice bran (1-1.1 mt), groundnut (0.75-1 mt), and coconut (0.4 mt) — aren't big enough to influence prices.

### Market Evolution

- Roughly 70% of the country's sunflower oil consumption is in the South, with Maharashtra (10-15%) and other states making up the rest.
- One reason for this geographical skew has to do with sunflower being traditionally grown in Karnataka, Telangana, and Maharashtra.
- Consumers in these states were familiar with this oil, just as those in Madhya Pradesh and Rajasthan knew about soyabean that was already being planted there.

### Impact on India

- India's edible oil imports at 8 mt during November-April 2022-23, a 22.3% increase over the 6.5 mt for the corresponding six months of the previous oil year.
- At the present rate, total imports for this oil year (November-October) may well surpass the record **14.9 mt** of **2018-19**. The import surge has been led by palm and sunflower, which have gained at the expense of soyabean oil.
- When prices increased significantly, many households replaced sunflower with relatively cheap soyabean or even local oils.
- Institutional consumers such as restaurants, tiffin rooms and canteens that were using sunflower, likewise, switched to palm oil.
- But with import flows and price parity being restored, they are all being restored.

## Angel Tax Exemptions

- Investors from 21 countries including US, UK, France, Australia, Japan have been exempted from the levy of angel tax for investment in unlisted Indian startups.
- Countries like Singapore, Netherlands and Mauritius, which constitute the major chunk of FDI in India, have not been included in the exemption list.

### Background

- The **Finance Act, 2023**, had *amended Section 56(2)(viib) of the Income-tax Act* in February, 2023. The provision is colloquially known as the 'angel tax' and was **first introduced in 2012**.
- It was introduced to discourage the generation and use of unaccounted money through the subscription of shares of a closely held company at a value that is higher than the fair market value of the firm's shares.
  - ✓ The amended provision stated that when an **unlisted company**, such as a start-up, receives equity investment from a **resident** for issue of shares that exceeds the face value of such shares, it will be **counted as income** for the start-up.
  - ✓ Thus, it will be subject to income tax under the head **Income from other Sources** for the relevant financial year.
- For instance, if the fair market value of a start-up share is Rs 10 apiece, and in a subsequent funding round they offer it to an investor for Rs 20, then the difference of Rs 10 would be taxed as income.
- The **Finance Act, 2023** had also proposed to include **foreign investors in the ambit**, i.e. when a start-up raises funding from a foreign investor, even that would have been counted as income and would be taxable. However, **DPIIT-recognised startups were excluded**.

### Current Exemptions

- In the recent notification, the Central Board of Direct Taxes (CBDT) excluded entities which include those registered with Sebi as Category-I FPI, Endowment Funds, Pension Funds.
- Broad-based pooled investment vehicles where the number of investors in such vehicle or fund is more than 50 and the residents of 21 specified nations including US, UK, Australia, Germany and Spain have also been exempted.
- Other nations mentioned in the notification are Austria, Canada, Czech Republic, Belgium, Denmark, Finland, Israel, Italy, Iceland, Japan, Korea, Russia, Norway, New Zealand and Sweden.
- Other exempt entities include *government and government-related investors such as central banks, sovereign wealth funds, international or multilateral organisations or agencies including entities controlled by the government or where direct or indirect ownership of the government is 75 per cent or more*.
- Banks or entities involved in insurance business where such entity is subject to applicable regulations in the country where it is established or incorporated or is a resident are also exempt.

### Reasons For Current Exemptions

- The amendment in February was introduced in a backdrop where funding for India's startups dropped by 33 per cent to \$24 billion in 2022 as compared to the previous year, according to a PwC India report.
- Foreign investors are a key source of funding for the start-ups and have played a big role in increasing the valuation.
- For instance, Tiger Global, one of the most prolific foreign investors in India, has invested in over a third of the start-ups that have turned unicorn, with a valuation of at least \$1 billion.
- This could push more startups to move overseas, as foreign investors may not want to deal with additional tax liability due to their investment in the startup.

## Concerns Regarding The Exemptions

- This relaxation is a welcome step to ease foreign investments. However, the exemption for broad-based fund is provided for 21 countries, which excludes top jurisdictions like Singapore, Mauritius and UAE.
- These three countries together constitute over 50% of foreign investment in India. Not including Singapore, Mauritius and UAE, is a cause for concern for almost all significant PE/VC funds and start-ups in which they invest.
- Startup exemption for Angel Tax applies to less than 2% of DPIIT registered start-ups due to a long list of conditions they need to fulfill for a 7-year period, which makes it an exemption just on paper.
- Government spends a lot of time making policies after due consultation with the industry. However, the gap between policy intent and implementation needs to be bridged quickly, to utilise the opportunity available to Indian entrepreneurs today.

## UDAN 5.1

- The Ministry of Civil Aviation has launched UDAN 5.1 to further enhance the connectivity to remote areas of the country and achieve last mile connectivity through helicopters.
- For the first time under the Regional Connectivity Scheme (RCS) - UdeDesh Ka Aam Nagrik (UDAN), this round is **designed specifically for helicopter routes**.
- The latest round of UDAN scheme is a testament to **two emerging phenomena in Indian civil aviation**:
  - A deeper democratisation of air travel with a focus on last-mile connectivity.
  - A growing appetite for helicopters in aiding tourism.

## Main Features

- An increase in the scope of operations for operators wherein the scheme will now allow routes where one of the origin or destination locations is in a priority area. **Earlier both points had to be in priority areas**.
- **Airfare caps have been reduced by as much as 25%** to make flying in helicopters more affordable for passengers.
- **Viability Gap Funding (VGF) caps** for the operators have been **increased substantially** for both single and twin-engine helicopters to enhance financial viability for operating the awarded routes.

## Benefits

- Under the scheme passengers have received the benefit of air connectivity, airlines have received concessions for operating regional routes, and unserved regions have received the direct and indirect benefits of air connectivity for their economic development.
- Greater helicopter penetration through such efforts will help boost tourism, hospitality, and thus local economies.
- While the intended target is to provide last-mile connectivity, it is also projected to give the helicopter segment of the Indian civil aviation industry a much-needed boost.
- Till date 46 helicopter routes have been operationalized under previous rounds of the scheme benefitting a number of hilly and North East states and this round is targeting coverage of a much larger number of routes.

## PLI Scheme 2.0 for IT Hardware

The Union Cabinet recently approved an updated Production Linked Incentive (PLI) scheme for IT hardware manufacturing, with the total budgetary outlay increased to ₹17,000 crore.

## Background

- Electronics manufacturing in India has witnessed consistent growth with 17% CAGR in the last 8 years. This year it crossed a major benchmark in production – \$105 billion (about Rs 9 lakh crore).
- India crossed \$11 billion in mobile phone exports, and was now the second-largest mobile handset manufacturer, trailing only China.
- The PLI scheme for IT hardware was first notified in March 2021. The scheme provides upwards of 4% in incentives for incremental investment in domestic manufacturing for eligible firms.
- The first version of the scheme was a laggard with only two companies – Dell and Bhagwati – managing to meet first year's (FY22) targets, and the industry calling for a renewed scheme with an increased budgetary outlay.

## Details Of The Updated Scheme

- Based on industry feedback on improving the previous version of the scheme, the Cabinet has incorporated several changes in the updated scheme.
- For instance, the incentive has now been increased to 5%. An **additional optional incentive** has also been introduced for using domestically produced components.
- While the rates of these optional incentives have not been specified, if they are availed as expected, the total incentive would amount to 8–9%.
- Furthermore, semiconductor design, IC manufacturing, and packaging are also included as incentivised components under the updated scheme.
- The budgetary outlay of the scheme would now be ₹17,000 crore, more than doubling the budget for the scheme that was first cleared in 2021. The tenure of the new scheme has been fixed for 6 years.
- It has three category of applicants, namely global companies, hybrid (global/domestic) companies and domestic companies.

## Benefits

- The Centre is expecting an investment of over Rs 2,430 crore and the expected incremental production value could touch Rs 3.35 lakh crore.
- It will generate 75,000 direct jobs – in total, the employment figure could touch 2 lakh when accounted for indirect jobs.
- It will promote large scale manufacturing in Laptops, Tablets, All-in-One PCs, Servers and Ultra Small Form Factor (USFF) devices and contribute significantly to achieve electronics manufacturing turnover of approximately USD 300 billion by 2025-26.

## The Indian Payments Handbook 2022-27

- Unified Payments Interface (UPI) transactions are expected to continue growing steadily, reaching a remarkable milestone of 1 billion transactions per day by 2026-27.
- This projection was made in the recently released report by PwC India titled “The Indian Payments Handbook 2022-27”.

## Key Highlights

- UPI, which has been instrumental in driving the digital payments revolution in India, accounted for approximately 75% of the total transaction volume in the *retail segment* during the period of 2022-23.
- UPI is projected to dominate the retail digital payments landscape even further, accounting for an impressive 90% of the total transaction volume over the next five years.

- This projection underscores the increasing adoption and reliance on UPI as the preferred mode of digital payment in the country.
- The Indian digital payments market has witnessed consistent growth, with a compounded annual growth rate (CAGR) of 50% in terms of transaction volume.
- The report predicts that this growth trajectory will continue, projecting the number of transactions to surge from 103 billion in FY 2022-23 to a staggering 411 billion in FY 2026-27.
  - ✓ Specifically, it is estimated that UPI transactions will experience a substantial rise from 83.71 billion in 2022-23 to 379 billion transactions by 2026-27.

### Card Payments

- While UPI takes the lead, the report also acknowledges the significance of the credit card segment, which continues to experience robust growth.
- Card payments, including both debit and credit cards, remain popular instruments for retail digital payments after UPI.
- However, the report foresees a shift in dominance between debit and credit cards, with credit card transactions expected to surpass debit card transactions by FY 2024-2025.
- Over the **next 5 years**, credit card issuance is projected to grow at a healthy CAGR of 21%, whereas debit card issuance is anticipated to have stagnant growth with a CAGR of 3%.
- The decline in debit card usage is attributed to the fact that cash withdrawal, which has been a primary use case for debit cards, can now be conveniently replaced by UPI-based cash withdrawal methods.
- In 2022-2023, revenue generated through the credit card segment accounted for nearly 76 per cent of the total cards' revenue, making it an attractive and lucrative business segment for banks, non-banking financial companies (NBFCs), and fintech firms.
- The revenue from credit card issuance witnessed a substantial increase of 42% in 2022-2023 compared to the previous year and is projected to grow at a CAGR of 33% over the next 5 years.

### Laundromat Countries

- According to a report by a Finland based group Centre for Research on Energy and Clean Air (CREA), **India leads five countries named as Laundromat countries**. The other four laundromat countries are **China, Turkey, UAE and Singapore**.
- Laundromat countries are countries that buy Russian oil and sell processed products to European countries, sidestepping European sanctions against Russia.
- The report accused Indian sellers and European buyers of possibly circumventing sanctions by selling crude products from a refinery in Gujarat that is co-owned by Russian oil company Rosneft.
- European countries are simply substituting oil products they previously bought directly from Russia, with the same products now “whitewashed” in third countries and bought from them at a premium.
- India exported nearly 3.8 million tonnes of oil products to **price cap coalition countries**, which include the EU, G-7 countries, Australia and Japan.
- From less than 1% of its total oil intake pre-February 2022, India imported about a third or 35% of its oil imports from Russia in March 2023, buying about 1.6 million barrels per day from Russia over the past year.

### Greenwashing TechSprint

- The Reserve Bank of India has opened the application window for all India based firms and innovators to participate in **Global Financial Innovation Network (GFIN)**'s first ever Greenwashing TechSprint.

- The TechSprint will be hosted on the *Financial Conduct Authority's digital sandbox* and would commence in June and run for three months, ending in September.
- The TechSprint will bring together 13 international regulators alongside firms and innovators to address GFIN's priority on environmental, social and governance (ESG) and sustainable finance.
- The TechSprint's objective is to ***develop a tool that could help regulators, or the market more effectively tackle or mitigate the risks of greenwashing in financial services.***

### Greenwashing

- It is the process of conveying a false impression or misleading information about how a company's products are environmentally sound.
- It is a play on the term "whitewashing," which means *using false information* to intentionally hide wrongdoing, error, or an unpleasant situation in an attempt to make it seem less bad than it is.
- It is an attempt to capitalize on the growing demand for environmentally sound products, that means they are more natural, healthier, free of chemicals, recyclable, or less wasteful of natural resources.
- It involves making an unsubstantiated claim to deceive consumers into believing that a company's products are environmentally friendly or have a greater positive environmental impact than they actually do.
- In addition, it may occur when a company attempts to emphasise sustainable aspects of a product to *overshadow the company's involvement in environmentally damaging practices.*
- It is performed through the use of environmental imagery, misleading labels, and hiding tradeoffs.

### Impact

- Greenwashing is deceitful and unethical because it misleads investors and consumers that are genuinely seeking environmentally friendly companies or products.
- Often, green products can be sold at a premium, making them more expensive, which can lead consumers to overpay. If greenwashing is revealed, it can seriously damage a company's reputation and brand.

### Legal Entity Identifier

- Capital markets regulator Sebi has introduced **Legal Entity Identifier (LEI)** system for issuers that have listed or are planning to list non-convertible securities, securitised debt instruments and security receipts.
- LEI is a unique global identifier for legal entities participating in financial transactions.
- It is designed to create a *global reference data system* that uniquely identifies every legal entity, in any jurisdiction, that is party to a financial transaction.
- It is a **unique 20-character code** to identify legally distinct entities that engage in financial transactions.
- Presently, RBI mandates non-individual borrowers having aggregate exposure of above Rs 25 crore to obtain LEI code.
- The LEI code can be obtained from **Legal Entity Identifier India Ltd**, a subsidiary of the Clearing Corporation of India Ltd, which has been recognised by the RBI as issuer of LEI
- It is accredited by the *Global Legal Entity Identifier Foundation (GLEIF)* as the local operating unit in India for issuance and management of LEI code.

### Commemorative Coins

- To mark the inauguration of the new Parliament building, a commemorative coin of Rs 75 denomination has been released.



- India has been issuing commemorative coins since the 1960s for several reasons such as paying homage to notable personalities, spreading awareness about government schemes, or remembering key historic events.
- The **first commemorative coin** was released in 1964 in the honour of **Jawaharlal Nehru**, who had passed away that year.
- The **Coinage Act, 2011** gives the central government the power to design and mint coins in various denominations.
- In the case of coins, the role of the RBI is limited to the distribution of coins that are supplied by the central government.
- The central government regularly releases commemorative coins according to its choice, but it also mints such coins **at the request of third parties**.
- In 2017, the government issued commemorative coins to pay homage to Indian actor and politician Late MG Ramachandran and Carnatic singer MS Subbalakshmi.
- The decision was taken after the request was placed by Sri Shanmukhananda Fine Arts & Sangeetha Sabha for the MS Subbalakshmi commemorative coins and by the Tamil Nadu government for the MG Ramachandran commemorative coins.
- All coins are minted in the **four mints** owned by the Union Government in **Mumbai, Hyderabad, Kolkata and Noida**.

### Falling Bond Yields

- The yield on the benchmark 10-year government security (G-secs) has fallen to 6.9% from 7.4% in early March.
- Even yields on shorter tenor papers, including on 5-year government bonds, have fallen below 7%.

### Bonds and Bond Yields

- Across the world, governments sell bonds to raise money to meet their expenditure.
- These bonds have a selling price and a fixed coupon rate (or the absolute amount of money that people earn).
- Bond yield is the return an investor gets on that bond or on a particular government security.
- For example, consider a 10-year government bond (called Treasuries in the US, Gilts in Britain and G-Secs or government securities in India) is **priced at \$100 and the coupon rate is \$5**.
- This means that if person buys this bond from the government for \$100 today, the government will pay the person \$5 each year and return \$100 to the person at the end of 10 years.
- In this example, the “yield” or the annual rate of return from the bond is 5%, but this **yield can change if the selling price of the bond changes**.

### Change In Bond Yields

- For example, at the start of the second year, if investors feel that the prospects of the overall economy are not good, they might start investing in government bonds, as it is the safest form of investment.
- Due to this, the demand for government bonds will increase, which will increase the price of the bond.
- Consider that the price of the same 10-year bond rises by a dollar to \$101. Since the fixed coupon rate is still \$5, the effective return — on an investment of \$101 — that bondholders will get at the end of the second year will be only \$4.
- This leads to a yield of 3.96% — a fall from the 5% yield bondholders earned in the first year.

### Factors Affecting Bond Yields

- There are many domestic and global developments that have an impact on bond yields.
- Major factors affecting the yield is the monetary policy of the Reserve Bank of India, especially the interest rates and the inflation.
- Inflation and interest rates are in turn affected by various other factors such as economic growth, sovereign rating, money supply, government borrowing, global liquidity and geopolitical developments.

### Link Between Interest Rate And Bond Yields

- A fall in interest rates in the economy (e.g. the rate at which government lends to banks and banks further lend to businesses) leads to an increase in bond prices and bond yields fall.
- Similarly, rising interest rates cause bond prices to fall, and bond yields to rise.

### Link Between Stock Markets And Bond Yields

- Traditionally, when bond yields go up, investors pull out their investments from stocks and invest that money into bonds, as they are much safer.
- In essence, this means investors consider lending to the Indian government a better alternative than lending to the Indian firms via the stock markets.
- Therefore, generally **bond yields are inversely proportional to equity returns** (returns from the stock markets).
- When bond yields decline, returns from equity markets tend to grow, and when bond yields rise, equity market returns tend to fall.
- Also, a rise in bond yields raises the borrowing cost for companies, which in turn reduces the valuations of their stocks.

### Impact of Bond Yield On Borrowing Cost

- When bond yields rise, the RBI has to offer higher yield to investors.
- Besides, as government borrowing costs are used as the benchmark for calculating loans to businesses and consumers, any increase in yields can increase the borrowing cost in the overall economy.

### Impact Of Bond Yield On FPI

- Bond yields play a big role in Foreign Portfolio Investment (FPI) flow. Traditionally, when bond yields rise in the US, FPIs move out of Indian stock market.
- A higher return on treasury bonds in the US, leads investors to move their funds from more risky emerging market investments to the US Treasury, which is the safest investment instrument.
- So, a continued rise in yields in developed markets may put more pressure on Indian stock markets, which may lead to an outflow of funds.

### Credit Card Spend Excluded From LRS

- The Finance Ministry has clarified that payments using **international debit or credit cards** up to Rs 7 lakh per financial year will be excluded from the Liberalised Remittance Scheme (LRS) limits and, therefore, will not attract any Tax Collected at Source (TCS).
- The clarification comes days after the ministry's decision to bring international credit card spending under the RBI's Liberalised Remittance Scheme and the consequent levy of 20 per cent TCS evoked sharp reactions from experts.

#### Background

- The Centre had amended rules under the Foreign Exchange Management Act (FEMA), bringing

international credit card spends outside India under the Liberalised Remittance Scheme (LRS).

- As a consequence, the spending by international credit cards were to attract a higher rate of TCS at 20 per cent effective July 1.
- The Finance Ministry has now revoked the above mentioned amendments.
- Prior to this, the usage of an international credit card to make payments towards meeting expenses during a trip abroad was not covered under the LRS.
- The spending through international credit cards were excluded from LRS by way of Rule 7 of the Foreign Exchange Management (Current Account Transaction) Rules, 2000.
- The change in rules were brought due to a rise in spending in overseas travel.
- Indians spent \$12.51 billion on overseas travel between April-February of fiscal 2022-23, a rise of 104% compared to the same period of the last year, albeit over a low base due to Covid-linked travel restrictions.
- Outlining its reasons for the changes in rules for international credit card usage, the Finance Ministry had cited instances where LRS payments are disproportionately high when compared to the disclosed incomes.

### Liberalised Remittance Scheme (LRS)

- The Liberalised Remittance Scheme (LRS) of the Reserve Bank of India (RBI) allows resident individuals, including minors, to remit a certain amount of money during a financial year to another country for investment and expenditure.

	Apr-Feb 2022-23	Apr-Feb 2021-22	YoY change (%)
Overseas travel	12.51 (\$bn)	6.13 (\$bn)	104.1
Total outward remittances*	24.18 (\$bn)	19.61 (\$bn)	23.3

Total includes remittances for deposits, property purchases, gifts and medical treatment, among others; Source: RBI

- The Scheme is not available to corporates, partnership firms, Hindu Undivided Family (HUF), Trusts etc.
- Under LRS, resident individuals may remit up to \$250,000 per financial year without prior approval from RBI.

### Tax Collected at Source

- Tax collected at source (TCS) is the tax collected by the seller from the buyer on sale so that it can be deposited with the tax authorities.
- Section 206C of the Income-tax act governs the goods on which the seller has to collect tax from the buyers.
- Such persons must have the Tax Collection Account Number to be able to collect TCS.

{For more details about LRS, refer The Recitals-July 2022}

## Freedom of Religion

The Tamil Nadu Government recently told the Supreme Court that the act of missionaries to spread Christianity cannot be considered illegal as the constitution under article 25 guarantees every citizen the right to propagate his religion.

### Background

A petition was filed in the Supreme Court requesting NIA/ CBI investigation in a case related to forceful conversion which led to the death of a 17-year-old girl in Tamil Nadu. The petition argued that forcible or deceitful conversion was a violation of fundamental rights.

### Arguments by Tamil Nadu Government

- The state submitted that the acts of spreading one's religion cannot be seen as something against the law. But if this act is against public order, morality and health and to other provisions of **Part III** of the Constitution, it must be viewed seriously.
- It argued that any person has the right to propagate and preach his belief system to other people without the use of intimidation, threats, deceit, allurement, superstition or black magic.
- A person has a fundamental right to propagate his/her religion but not to convert others to his/ her own religion and the Constitution does not prevent any person from getting converted to the religion of his choice.
- It quoted **Article 21(right to a dignified life)** for the right to have faith in a particular religion and termed it as an inviolable right.

### About The Right to Freedom of Religion, Secularism and Related Constitutional Provisions

- The term 'Secular' was inserted in our preamble by the **42nd Amendment** Act of the Indian Constitution.
- The Constitution of India (**Under Article 25**) provides every person of the country the right to profess, practice, and propagate religion freely, subject to considerations of public order, morality, and health.
- It prohibits government discrimination based on religion, including for employment, as well as religiously based restrictions on access to public or private establishments.
- (**Under Article 26**) It authorizes religious groups to establish and maintain institutions for religious and charitable purposes, manage their own affairs in religious matters, and own, acquire, and administer property but at the same time it prohibits the use of public funds to support any religion.
- **Article 27-** It states that no person in the country can be compelled to pay any taxes, the proceeds of which are specifically appropriated in payment of expenses for the promotion or maintenance of any particular religion or religious denomination.
- **Article 28-** It talks about the freedom as to attendance at religious instruction or religious worship in certain educational institutions.
- The constitution (Under Article 44) directs the states to create a uniform civil code applicable to members of all religions across the country.
- The government is empowered to ban religious organizations that provoke intercommunal tensions, terrorism or sedition, or violate laws governing foreign contributions.

### Need for Freedom of Religion

As per the 2011 census, there are 79.8% Hindus, 14.2% Muslims, 2.3% Christians, 1.7% Sikhs and 2% of others. With such a diversified population, it becomes important to protect religious minorities, to preserve their culture and religious interests to maintain peace and harmony in the country.

## Judicial Perception

- ✓ **Robasa Khanum vs. Khodabad Irani, 1946**-The court stated that the conduct of a spouse who converts to Islam must be judged based on the rules of justice equity and good conscience.
- ✓ **L.T.Swumiar v Commr. H.R.F. Madras, 1951**-In this case the court held that even if a tax is imposed on persons belonging to a particular religion, to meet the expenses of *that* particular religion, such tax is void.
- ✓ **Mohd. Hanif Quareshi v State of Bihar, 1959**- The petitioner in this case claimed that the sacrifice of the cows during Bakr- id was an essential part of his religion. The court rejected this argument and stated that the sacrifice of cow on the Bakri-Id was not an essential part of the Mohammedan religion and could be prohibited by State under clause (2) (a) of Article 25.
- ✓ **Bijoe Emmanuel v. State of Kerala aka the National Anthem Case, 1986**- this case is concerned with three children belonging to a sect (Jehovah's witness) who worshipped only Jehovah (the creator) and refused to sing the national anthem "Jana Gana Mana" as it was against the tenets of their religious faith according to the children. They stood up respectfully in silence daily for the national anthem but refused to sing because of their honest belief. A Commission was appointed to enquire about the matter which stated that these children were 'law-abiding' and did not show any disrespect to the national anthem but the headmistress under the instruction of the Dy. Inspector of Schools expelled the students. This decision was challenged in the Supreme Court which held the action of the headmistress violative of freedom of religion and infringement of fundamental rights guaranteed under Article 19(1)(a) and Article 25(1).
- ✓ **Sarla Mudgal V. Union of India, 1995**- The Court stated that conversion to any other religion by either one or both the spouses is not at all a ground to have the marriage dissolved.

## Conclusion

India is a secular country and provides every citizen the right to choose, practice, propagate and even change his or her religion but subject to certain restrictions. No one is allowed to spread disharmony or create disturbance in society in the name of religion.

## Post of Deputy Chief Minister

D K Shivakumar was recently sworn in as the Deputy Chief Minister of Karnataka.

## About the Post of Deputy Chief Minister

<b>What?</b>	This post is considered as second most important in the hierarchy in the Council of Ministers after the CM. It is considered equivalent in rank to that of Cabinet Minister of the state. He/She enjoys the same pay and perks as a cabinet minister.
<b>How?</b>	It has been a regular feature in Indian politics and may have come as a ripple effect of Vallabhbai Patel's appointment as the deputy prime minister in the Pandit Jawaharlal Nehru government.
<b>Historical Background</b>	<ul style="list-style-type: none"><li>• Anugrah Narayan Sinha, an upper caste Rajput leader from Aurangabad became the first Deputy Chief Minister in the Indian History. He was the deputy CM of Bihar.</li><li>• Other states too had this post especially after the reduction of the Congress's near-total dominance on national politics after 1967 - Karpoori Thakur in Bihar, Ram Prakash Gupta in 1967 with Chaudhary Charan Singh as CM, Virendra Kumar Saklecha in MP with Govind Narain Singh as CM in July 1967.</li><li>• Recent examples are Tejashwi Yadav (in two separate stints) in Bihar, Keshav Maurya and Dinesh Sharma (in Yogi Adityanath government) etc.</li></ul>
<b>Constitutional View</b>	<ul style="list-style-type: none"><li>• Post of the deputy Chief minister is not a constitutional post unlike the Chief Minister and Cabinet Ministers.</li><li>• Article 163(1) states that there shall be a Council of Ministers with the Chief Minister as the</li></ul>

	<p>head to aid and advise the Governor in the exercise of his functions.</p> <ul style="list-style-type: none"> <li>Article 164(1) states that the chief Minister will be appointed by the Governor and the other Ministers will be appointed by the Governor on the advice of the Chief Minister, and will hold office during the pleasure of the Governor:</li> <li>Neither Article 163 nor Article 164 mentions about '<i>Deputy Chief Minister</i>'.</li> </ul>
<b>Role in Government's Functioning</b>	He gets a portfolio or two, as any other cabinet minister. His actual importance depends a lot on the portfolio allocated to him.
<b>Financial Powers</b>	He does not enjoy any specific financial power and holds the same financial powers as other cabinet ministers. Even for his own portfolio, he must take approval of the Chief Minister for any expenditure over and above the allocated budget.
<b>Current Scenario</b>	<ul style="list-style-type: none"> <li>Ten other states besides Karnataka currently have Deputy CMs including Devendra Fadnavis (Maharashtra), Tejaswi Prasad Yadav (Bihar), and Dushyant Chautala (Haryana), Keshav Prasad Maurya and Brajesh Pathak (Uttar Pradesh) and Mukesh Agnihotri (Himachal Pradesh).</li> <li>Four Northeastern states have Deputy CMs.</li> <li>Chief Minister Y S Jagan Mohan Reddy of Andhra Pradesh has five Deputy CMs.</li> </ul>
<b>EXTRA MILE: Post of Deputy Prime Minister</b>	
<p>Deputy Prime Minister is the second-highest ranking minister of the Union and is a senior member of the Union Council of Ministers. His post finds no mention in the constitution and has been specially created to strengthen the coalition government.</p> <p><b>History</b></p> <ul style="list-style-type: none"> <li>Sardar Vallabhbhai Patel became the first Deputy Prime Minister of India in 1947. He held the portfolio of the Home Ministry and was the longest-serving (1947-1950) Deputy of the Prime Minister.</li> <li>Sardar Patel was followed by Morarji Desai (in 1967) and later by Choudhary Charan Singh and Jagjivan Ram who became Deputies consecutively (in 1979).</li> <li>Morarji Desai and Choudhary Charan Singh later became the Prime Ministers of India.</li> <li>Then came Yashwantrao Chavan (1979), Devi Lal (1989) and LK Advani (2002) as the Deputy Prime Ministers.</li> </ul> <p><b>Constitutional Provisions</b></p> <p>Articles 74, 75, and 78 deal with the affairs pertaining to the Council of Minister, the Prime Minister and their relationship with the President but there is no mention of the Deputy Prime Minister anywhere in the constitution.</p> <p><b>Related Controversies</b></p> <p><i>K M Sharma vs Devi Lal and Ors</i> (1990)- In this case, the oath administered by Devi Lal as a Deputy Prime Minister in 1989 was challenged on the grounds that it was not in accordance with the prescription of the Constitution as he used the term "Deputy Prime Minister instead of Minister" in his oath. The Supreme Court upheld Devi Lal's appointment "in view of the clear statement made by the learned Attorney General that Lal was just a Minister like other members of the Council of Ministers, though he has been described as Deputy Prime Minister. The description of him as Deputy Prime Minister does not confer on him any powers of the Prime Minister".</p>	

## Forum Shopping

The Chief Justice of India recently denied permission for forum shopping to a litigant appearing before him.

### About Forum Shopping

<b>What?</b>	When litigants or lawyers deliberately try to move their case to a particular judge or Court expecting that this would turn the judgement in their favour, it is called forum shopping.
<b>Types</b>	<b>Domestic-</b> When a litigant chooses between two or more courts within a country.
	<b>Transnational-</b> When a litigant chooses between the courts of two or more countries.
<b>Why?</b>	To gain advantage in litigation by benefiting from the differences in the laws, speed, rules and tendencies of the courts with potential jurisdiction over the litigation.

### Advantages of Forum Shopping

- **Favorable Legal Environment:** Forum shopping allows parties to select a jurisdiction known for having favorable legal standards, precedents, or interpretations of the law. This can provide an opportunity to present arguments that are more likely to be accepted or to benefit from legal provisions that are advantageous to the party's position.
- **Expertise and Experience:** Different jurisdictions may have specialized courts or judges with expertise in specific areas of law. By selecting a forum with a reputation for handling particular types of cases, parties may benefit from the court's understanding of complex legal issues or its familiarity with industry-specific matters. This can result in more informed and efficient adjudication.
- **Convenience and Efficiency:** Forum shopping can be driven by practical considerations such as convenience and efficiency. Parties may choose a forum that is geographically closer to them, making it easier to attend hearings or present evidence. Additionally, some jurisdictions may offer streamlined procedures or expedited timelines, enabling quicker resolution of the dispute.
- **Availability of Remedies:** In certain cases, forum shopping can enable parties to access remedies that may not be available in other jurisdictions. For example, a specific jurisdiction may have a history of awarding substantial damages or granting injunctive relief more readily. Parties may opt for such a forum to maximize their chances of obtaining a favorable outcome or appropriate relief.
- **Strategic Considerations:** Forum shopping can be part of a broader legal strategy. Parties may strategically select a forum based on factors such as the composition of the judiciary, the reputation of the court for settlement-oriented approaches, or the likelihood of *attracting media attention*. These considerations may align with the party's overall objectives and enhance their litigation strategy.

### Disadvantages of Forum Shopping

- **Inconsistent Outcomes:** Forum shopping can result in inconsistent outcomes across different jurisdictions. Parties may choose a jurisdiction known for favoring their position, which can lead to divergent legal interpretations and contradictory judgments. This inconsistency undermines legal predictability, creates uncertainty, and erodes confidence in the justice system.
- **Unequal Access to Justice:** Parties with more resources may be better equipped to engage in forum shopping, allowing them to select jurisdictions that favor their interests. This can disadvantage parties with limited financial means or those who lack the knowledge or ability to navigate different legal systems.
- **Delay and Increased Costs** for the parties involved. The process of initiating a case in a different jurisdiction, familiarizing oneself with the local legal system, and dealing with potential conflicts of laws can prolong the litigation process. This can result in higher legal fees, longer timeframes, and added burdens.
- **Abuse and Manipulation:** Parties may engage in strategic manipulation by filing cases in jurisdictions known for their leniency, inefficiency, or excessive delays. This can lead to forum abuse, where litigants seek to gain an unfair advantage or create hurdles for the opposing party.

- **Undermining Local Interests and Sovereignty:** When parties choose to litigate in foreign jurisdictions rather than the one most closely connected to the dispute, it can undermine the ability of local courts to address local issues and interpret local laws in a manner consistent with the needs and values of the community.
- **Overburdening Certain Courts:** Forum shopping can lead to an uneven distribution of cases, overburdening certain courts while others remain underutilized. Popular jurisdictions may experience increased caseloads, which can strain the resources and infrastructure of the local legal system. This may result in delays and potential backlogs in these chosen forums.

### Ways of Forum Shopping

Forum shopping can occur in various legal contexts, including civil, criminal, and international cases. Here are a few examples of forum shopping:

- **Civil Litigation:** In civil cases, forum shopping may involve selecting a jurisdiction with laws that are more favorable to the plaintiff or defendant. For instance, a plaintiff may choose to file a lawsuit in a jurisdiction known for larger damage awards or more sympathetic juries. On the other hand, a defendant might prefer a jurisdiction with stricter evidentiary standards or a history of dismissing similar cases.
- **Corporate Law:** In corporate disputes, forum shopping may involve selecting a jurisdiction with corporate laws that are more lenient or protective of certain interests. Corporations might choose to incorporate in a particular jurisdiction to benefit from favorable tax laws, relaxed regulations, or shareholder-friendly provisions.
- **Intellectual Property:** In cases involving intellectual property, forum shopping could involve selecting a jurisdiction with more favorable patent, copyright, or trademark laws. Parties might choose a jurisdiction known for strong enforcement of intellectual property rights or for having specialized courts with expertise in IP disputes.
- **International Arbitration:** In international disputes, forum shopping can occur when parties select an arbitration forum or jurisdiction that is perceived to be more favorable to their interests. Parties may consider factors such as the neutrality of the arbitrators, the procedural rules, or the enforceability of arbitral awards.

### Global Scenario

- The US and UK courts have criticized the practice of forum shopping as something to be avoided or prohibited.
- Indian Judicial has condemned this practice and termed it as an abuse of law.

### Related Judgements

- ✓ **Chetak Construction Ltd. vs. Om Prakash, 1988-** SC held that a litigant cannot be allowed forum shopping and every such effort should be crushed with heavy hand.
- ✓ **Union of India & Ors. vs. Cipla Ltd., 2012-** SC laid down a “functional test” to be adopted for forum shopping in this case by checking if there is any functional similarity in the proceedings between one court and another or whether there is some sort of deceit on the part of a litigant.
- ✓ **Rosmerta HSRP Ventures Pvt. Ltd. vs. Govt. of NCT of Delhi & Anr, 2017-** The Delhi High Court imposed costs on a private company that it found was indulging in forum hunting in an arbitration matter.
- ✓ **Dhanwantri Institute of Medical Science vs. The State of Rajasthan, 2022-** The Rajasthan High Court in this case upheld an order imposing costs worth 10 lakh rupees on a party for engaging in forum shopping.
- ✓ **Vijay Kumar Ghai vs. State of W.B, 2022-** In this case, SC termed forum shopping as a disreputable practise by the courts that has no sanction and paramountcy in law.
- ✓ **Dr. Khair-Un-Nisa and Ors vs. UT of Jammu and Kashmir and Ors, 2023-** The Jammu-Kashmir and Ladakh High Court in this case, imposed costs worth one lakh rupees on the petitioners for indulging in forum shopping by filing multiple petitions before different wings of the court, albeit having the same cause of action.



## Forum Non-Conveniens

- It is a way to prevent forum shopping, as it gives the court discretionary powers to refuse to exercise its jurisdiction over a matter where another court, or forum, may more conveniently hear a case.
- It allows a court to dismiss a case in the interests of justice and the parties while allocating it to the appropriate bench.
- It varies in each country where it is applied. In a few, it is an essential component of jurisdictional examination while in others; it is applied simply after purview has been set up.

### Extra Mile

**Bench Hunting:** It refers to the practice where petitioners try to get their cases heard by a particular judge or court to ensure a favorable order.

## Open Network for Digital Commerce (ONDC)

Recently, Centre directed e-commerce companies and food delivery players to join the government-backed Open Network for Digital Commerce (ONDC). While some players like Flipkart and Zomato are trying to set up step down subsidiaries to join this network, others like Amazon and Swiggy have chosen to stay away.

### About ONDC

<b>What?</b>	It is a network based on <b>open-sourced methodology</b> to enable local commerce across segments, such as mobility, grocery, food order and delivery, hotel booking and travel, among others, to be discovered and engaged by any network-enabled application.
<b>Objective</b>	<ul style="list-style-type: none"><li>• To promote open network for all aspects of exchange of goods and services over digital or electronic networks and create new opportunities,</li><li>• To curb <b>digital monopolies</b> by supporting micro, small and medium enterprises and small traders and help them get on online platforms.</li></ul>
<b>Implemented By</b>	Department for Promotion of Industry and Internal Trade (DPIIT) under Ministry of Commerce & Industry
<b>Reasons for creating ONDC</b>	<ul style="list-style-type: none"><li>• Technological self-reliance</li><li>• Demand for level playing field mainly from small retailers</li><li>• Lower the barrier of entry and discovery online</li><li>• Adoption of open digital ecosystem across key sectors</li><li>• Fixing the non-competitive behavior of big e-commerce firms like Amazon and Flipkart</li><li>• To increase e-retail penetration from the existing 4.3% to its maximum potential.</li><li>• To enable population-scale inclusion of all types and sizes of sellers in e-commerce.</li></ul>
<b>Features</b>	<ul style="list-style-type: none"><li>• Also known as <u>UPI for e-commerce</u>, ONDC will democratize digital or electronic commerce, moving it from a <u>platform-centric model to an open-network</u>.</li><li>• It will standardize operations like cataloguing, inventory management, order management and order fulfilment.</li><li>• It will create a level playing field for e-commerce behemoths such as Amazon, Flipkart, and offline traders who have been crying foul at the unfair trade practices of these e-tailers.</li><li>• It will be compliant with the Information Technology Act, 2000 and emerging Personal Data Protection Bill.</li><li>• It will enable sellers and buyers to be digitally visible and transact through an open network, regardless of the platform or application they are using and form a single network to drive</li></ul>

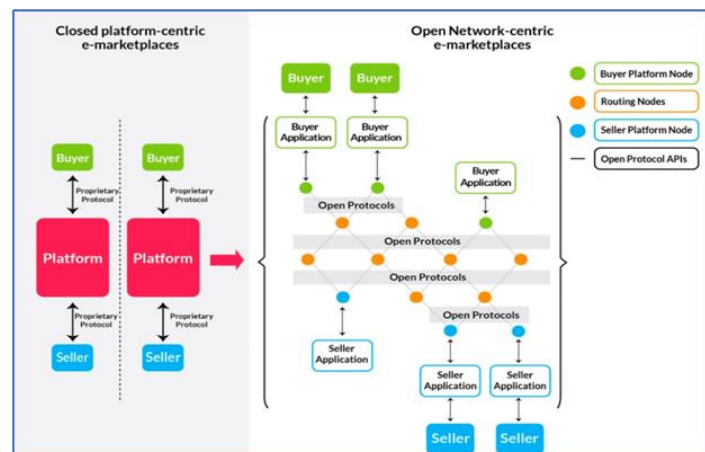
	<p>innovation and scale, transforming all types of businesses.</p> <ul style="list-style-type: none"> <li>• Data storage - Through ONDC, merchants will be able to save their data to build credit history and reach consumers.</li> <li>• It will ensure confidentiality and privacy of data in the network. Sharing of any transaction-level data by participants with ONDC will not be mandatory.</li> </ul>
<b>Source of Funding</b>	<ul style="list-style-type: none"> <li>• Initial funding was generated through share allotments.</li> <li>• For future, it could start charging a small fee from platforms to fund ongoing and expansion-related activities independently. This way it can become a self-sustaining financial model without any aid from government in the form of subsidies.</li> </ul>
<b>User Council</b>	<p>Comprising of representatives from Network Participants and civil society, the User Council will provide regular guidance on various aspects of the network's functioning and governance and serve as a liaison among Network Participants, Consumers, Buyer, and the network.</p>

### Working

ONDC is an interoperable network based on the **BeckN protocol** which comprises of different entities called 'Network Participants', including Buyer Applications, Seller Applications, and Gateways that perform the search and discovery function.

### Government's Role

- ONDC is managed and operated by the ONDC entity. It is a not-for-profit company incorporated under Section 8 of the Companies Act 2013 and is not a government organization.
- Founding members - Quality Council of India and Protean eGov Technologies Limited.
- ONDC's board includes representatives from banks, the government, and independent industry and civil society members to ensure market and community both are equally involved in the decision-making process.



Benefits		
<p><b>For Sellers</b></p> <ul style="list-style-type: none"> <li>• Access to more buyers</li> <li>• Better discoverability of products and cost.</li> <li>• Autonomy on terms because of multiple choices for being digitally visible.</li> <li>• Lower cost of doing business</li> <li>• More options for value chain services like logistics and fulfilment.</li> <li>• Reduces the skewed bargaining power which favors ecommerce giants, and often results in higher entry barriers and lower margins for sellers.</li> </ul>	<p><b>For Buyers</b></p> <ul style="list-style-type: none"> <li>• Promotes discoverability of local digital stores across industries.</li> <li>• More inclusive and accessible for consumers.</li> <li>• Increased freedom of choice for consumers.</li> <li>• Better service and faster deliveries due to access to hyper-local retailers</li> <li>• Better customer experience</li> </ul>	<p><b>For Technology Platforms</b></p> <ul style="list-style-type: none"> <li>• New opportunities for <u>start-ups to drive innovation in various parts of the network</u></li> <li>• Access to the growth of digital commerce through buyer and seller side applications</li> <li>• Reduced <b>time-to-market</b> and <b>time-to-scale</b></li> <li>• Focus on niche aspects leaving other partners to focus on different aspects</li> </ul>

## Challenges

<b>Awareness and information overload</b>	<ul style="list-style-type: none"><li>• A massive awareness campaign must be organized as most small business owners lack the technical expertise to get involved in this program.</li><li>• Another challenge is the sheer information overload that customers has to shift through.</li></ul>
<b>ONDC and UPI</b>	<ul style="list-style-type: none"><li>• ONDC is a far more complex system than UPI.<ul style="list-style-type: none"><li>➤ The UPI loop closes the moment a transaction is completed.</li><li>➤ But in ONDC, the loop is much longer – anything bought online has to be delivered offline.</li><li>➤ A mechanism for returns, grievance redressal is required.</li></ul></li><li>• Unlike UPI, which the government has consistently funded, ONDC stakeholders are banks and financial institutions.</li><li>• Hence, ONDC is unlikely to receive similar financial or policy support.</li></ul>
<b>Viability</b>	<ul style="list-style-type: none"><li>• So far big players are reluctant to join the network.</li><li>• Hence, it raises the question whether ONDC can be a success without the participation of the very entities whose hold over the e-commerce market it is vying to challenge?</li></ul>

## Way Forward

- Achieving a harmonious equilibrium between fostering *equitable competition and upholding service quality* plays a pivotal role in ensuring the triumph of ONDC.
- Provide technical assistance and support to e-commerce platforms and sellers for seamless integration with the ONDC.
- Establish an all-encompassing regulatory structure to govern the ONDC, encompassing elements such as fair competition, safeguarding consumer rights, and combating anti-competitive practices.

## Supreme Court Upholds Laws Allowing Jallikattu, Kambala

The Supreme Court recently upheld the 2017 amendments made by Tamil Nadu, Karnataka and Maharashtra Governments to the Prevention of Cruelty to Animals (PCA) Act, 1960, allowing Jallikattu and Kambala, and bullock-cart racing respectively.

### Background

- In ‘*Welfare Board of India v. A. Nagaraja, 2014*’ case, a two-judge SC bench, had essentially banned ‘*Jallikattu*’ and ‘*Bullock Cart Race*’ practiced in the States of Tamil Nadu and Maharashtra and held that “**bovine sports**” were contrary to the provisions of PCA Act’s Sections 3 (relating to ‘duties of persons having charge of animals’) and Section 11 (related to ‘treating animals cruelly’).
- In 2016, the Ministry of Environment, Forest and Climate Change (MoEF&CC) released a notification prohibiting the exhibition or training of bulls as performing animals.
  - ✓ But there was an exception. The notification specified that subject to conditions such as reducing the pain and suffering of bulls utilized in such sports, bulls might still be trained as performing animals at events such as Jallikattu in Tamil Nadu, as per the customs and culture of different communities.
- In 2017, Centre cleared a proposal of Tamil Nadu government to introduce state amendment to PCA act allowing Jallikattu. The state passed the Jallikattu Bill to bring into effect the PCA (Tamil Nadu Amendment) Act, 2017 which sought to preserve the cultural heritage of Tamil Nadu, and to ensure the survival and well-being of the native breeds of bulls.

- Similar bills were passed by Maharashtra & Karnataka governments to allow Bullock Cart Race and Kambala respectively.
- The initial petitions filed by the Animal Welfare Board of India had sought a direction to the states to comply with the 2014 SC ruling but the passage of The Prevention of Cruelty to Animals (Tamil Nadu Amendment) Act in 2017 led to modification of the petition to include the quashing of the 2017 Act.
- Following this, an SC Bench comprising of former Chief Justice of India (CJI) Dipak Misra opined that the jallikattu issue involves substantial questions of interpretation of the Constitution, and thus, referred the matter to the Constitution Bench.
- This Bench was given the responsibility to decide whether Tamil Nadu could preserve jallikattu as its cultural right under Article 29(1) of the Constitution or not?
  - ✓ Article 29(1) states that any section of the citizens residing in India, having a distinct language, script or culture of its own shall have the right to conserve the same”.

### About Jallikattu and Kambala

Jallikattu	Kambala
<ul style="list-style-type: none"> <li>• It originated from the Tamil words <b>Jalli</b> and <b>Kattu</b>, referring to silver or gold coins tied to the bulls’ horns.</li> <li>• Also known as Eruthazhuvuthal, it is a bull-taming sport traditionally played in Tamil Nadu as part of the Pongal harvest festival. On this occasion, people thank and worship Sun for abundant agricultural crops.</li> </ul>	<p>It is a buffalo race held during a harvest festival dedicated to an incarnation of Lord Shiva. Every year, after the harvest, the locals thank God for a year of good harvest. And since buffaloes are a big part of the farming life, they conduct these races as a gesture of thankfulness and gratitude towards the god for the good health of the buffaloes.</p>

### The Jallikattu Ban

Why?	Why not?
<ol style="list-style-type: none"> <li>1. Every living entity, including animals, holds an innate freedom that is acknowledged by the Constitution.</li> <li>2. It leads to physical and mental torture of animals.</li> <li>3. Bulls are often beaten, poked, prodded, harassed and their tails are bitten and twisted and their eyes and noses are filled with irritating chemicals.</li> <li>4. It causes human and animal deaths.</li> <li>5. Dignity and honour of animals should be protected too.</li> <li>6. Animal Supporters drew parallels between jallikattu and customs such as sati and dowry, which were formerly regarded as cultural norms but were ultimately abolished through legislative measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. It is considered a tool for conserving this precious indigenous breed of livestock.</li> <li>2. It is both a religious and cultural event celebrated by the people of Tamil Nadu and its influence extends beyond the confines of caste and creed.</li> <li>3. It’s a centuries-old practice, symbolic of a community’s identity. It can be regulated and reformed as humans evolve rather than being completely banned.</li> <li>4. The people of Tamil Nadu have a right to preserve their traditions and culture.</li> <li>5. Conservationists and peasants argue that Jallikattu is a way to protect these male animals which are otherwise used only for meat if not for ploughing. This becomes significant at a time when cattle breeding is increasingly becoming an artificial process.</li> </ol>

### SC’s Judgement

- **Tamil Nadu Amendment Act is not a piece of colourable legislation-** The top court held that the Tamil Nadu Amendment Act is not a piece of colourable legislation. It relates to **Entry 17 of List III of the Seventh Schedule** to the Constitution deals with prevention of cruelty to animals.

- ✓ **Doctrine of Colourable Legislation** means that if a legislature lacks the jurisdiction to enact laws on a specific subject directly, it cannot make laws on it indirectly. In simple words, the doctrine checks if a law has been enacted on a subject indirectly when it is barred to legislate on that topic directly.
- **Upheld the Amendment-** The apex court held that the 2017 amendment minimizes cruelty to animals in the concerned sports and once the amendment is implemented, the sport will not come under the definition of cruelty defined in the 1960 Act.
- **No Reason for Isolation-** As the amendment had already received Presidential assent, the court found no reason to isolate 'Jallikattu' as a bovine sport from the way they were earlier practiced.
- **Part of Cultural Heritage-** It highlighted that according to the legislature exercise conducted by the Tamil Nadu legislature, Jallikattu forms a part of its cultural heritage as it has continued for the last few centuries and the court clarified that it did not want to disrupt the legislature's view.
- **No Violation of Fundamental Duties and Fundamental Rights-** The court clarified that the amendment does not violate Articles 51-A (g), 51-A (h), Article 14 (Right to Equality) and 21 (Right to Life) of the Constitution.
  - ✓ 51-A (g) imposes duty on Indian citizens to protect the environment.
  - ✓ 51-A (h) deals with developing a scientific temper, humanism, spirit of inquiry, and reform.

#### **Prevention of Cruelty to Animals Act, 1960**

- The Act is designed with the legislative intent of preventing the unnecessary infliction of pain or suffering on animals.
- Under Section 4 of the Act, the **Animal Welfare Board of India (AWBI)** was established in 1962.
- This legislation establishes penalties for causing cruelty and unnecessary suffering to animals, while also defining different categories of animals.
- It addresses various forms of cruelty, exceptions, and outlines procedures for euthanizing suffering animals to relieve them from further pain.
- The Act provides guidelines for conducting scientific experimentation on animals, ensuring ethical considerations are taken into account.
- The Act specifies a limitation period of 3 months, after which no prosecution can be initiated for offenses under this legislation.

#### **The Prevention of Cruelty to Animals (Care and Maintenance of Case Property Animals) Rules, 2017**

- The Rules enable a Magistrate to seize and confiscate the livestock owned by an individual who is undergoing trial under the Act.
- Subsequently, the animals are transferred to infirmaries, animal shelters, or similar facilities.
- Additionally, the authorities facilitate the adoption of these animals to suitable individuals or organizations.

### **PM CARES Fund Receives Rs 535 Crore as Foreign Donations in Three Years**

According to official records, The **Prime Minister's Citizen Assistance and Relief in Emergency Situations Fund (PM CARES Fund)** received Rs 535.44 crore as foreign donations during the last three years.

#### **Key Points**

- **Foreign Contributions:**

2019-20	2020-21	2021-22
Rs 0.40 crore	Rs 494.92 crore	Rs 40.12 crore

- In all, the PM CARES Fund received a total of Rs 12,691.82 crore — as voluntary contributions (Rs 12,156.39 crore) and foreign contributions (Rs 535.43 crore) — during three years from 2019-22.

- **Interest Income:** Rs 24.85 crore from its foreign contribution account in three financial years from 2019-20 to 2021-22.
- **Voluntary Contributions:** Declined to Rs 1,896.76 crore during 2021-22 from Rs 7,183.77 crore during 2020-21.
- Details of the expenditure show that the amounts were disbursed for ventilators to government hospitals, welfare of migrants, establishment of makeshift Covid hospitals, installation and operationalization of 162 Pressure Swing Absorption (PSA) medical oxygen generation plants, procurement of Covid-19 vaccine, and other Covid-related supplies.

#### About PM CARES Fund

<b>What?</b>	<p>1) It was <u>created in 2020 for combating, containment and relief efforts against the coronavirus outbreak</u> and similar pandemic like situations in the future and is registered as a public charitable trust under the Registration Act, 1908.</p> <p>2) This fund is used at the discretion of the PM and does not form a part of the Government of India's accounts.</p>
<b>Objective</b>	<ul style="list-style-type: none"> <li>• To provide assistance and relief to the affected in the event of any calamity, disaster, public health emergency or any other emergency of any kind that may be either natural or man-made.</li> <li>• Creation as well as upgradation of any pharmaceutical facilities.</li> <li>• Funding research.</li> <li>• Creation or upgradation of any necessary infrastructure, healthcare support or any other kind of support.</li> </ul>
<b>Composition</b>	<ul style="list-style-type: none"> <li>• <b>Ex-officio Chairman-</b> Prime Minister</li> <li>• <b>Ex-officio Trustees-</b> Minister of Defence, Minister of Home Affairs and Minister of Finance.</li> <li>• <b>Trustees-</b> 3 trustees to be nominated to the Board of Trustees by the Prime Minister.</li> </ul>
<b>Contributions</b>	<ul style="list-style-type: none"> <li>• The fund consists <b>entirely of voluntary contributions</b> from individuals/organizations (including companies, other charitable institutions, associations, etc.) and does not get any budgetary support.</li> <li>• Individuals and organizations based in foreign countries can contribute too.</li> </ul>
<b>Exemptions</b>	<ul style="list-style-type: none"> <li>• Donations to PM CARES Fund are eligible for 80G benefits for 100% exemption under the Income Tax Act, 1961.</li> <li>• Donations to be counted as Corporate Social Responsibility (CSR) expenditure under the Companies Act, 2013.</li> <li>• Foreign donations are exempt under FCRA.</li> </ul>

#### Extra Mile: Existing Similar Funds

##### Prime Minister's National Relief Fund (PMNRF)

- PMNRF was established in 1948 with public contributions to assist displaced persons from Pakistan. The resources of the PMNRF are now utilized primarily to render immediate relief to families of those killed in natural calamities like floods, cyclones and earthquakes, etc. and to the victims of the major accidents and riots.
- The fund consists entirely of public contributions and does not get any budgetary support. The corpus of the fund is invested in various forms with scheduled commercial banks and other agencies. Disbursements are made with the approval of the Prime Minister.

- PMNRF accepts only voluntary donations by individuals and institutions.

### National Disaster Response Fund

- With the implementation of the Disaster Management Act in 2005, the National Calamity Contingency Fund (NCCF) underwent a name change and became known as the National Disaster Response Fund (NDRF).
- As per the legislation, the NDRF is now allocated to the "Public Account" of the Government of India and classified under the category of "reserve funds not bearing interest."
- It supplements the **State Disaster Response Fund (SDRF)** in case of a disaster of severe nature, provided adequate funds are not available in the SDRF.
- Currently, a **National Calamity Contingent Duty (NCCD)** is levied to finance the NDRF and additional budgetary support is provided as and when necessary.
- Comptroller and Auditor General (CAG) audits the accounts of NDRF.

### Aadhaar-enabled Payment Services Breach

Cybercriminals have started using Aadhaar biometrics to withdraw money from users' bank accounts through Aadhaar-enabled Payment Services (AePS).

### Aadhaar-enabled Payment Services (AePS)

- It is a type of payment system that is based on the Unique Identification Number and allows Aadhaar card holders to seamlessly make financial transactions through Aadhaar-based authentication.
- It is a **bank led model** which allows online interoperable financial transaction at PoS (Point of Sale) & Micro ATM through the Business Correspondent (BC)/Bank Mitra of any bank using the Aadhaar authentication.
- The model removes the need for OTPs, bank account details, and other financial details. It allows fund transfers using only the bank name, Aadhaar number, and fingerprint captured during Aadhaar enrolment.

### Need for AePS

- The government intends to bring all the **unbanked sections** of the society in the banking framework. However, this is not geographically possible for people who live in distant and remote places.
- AePS enables people in far off places to easily send/receive money and avail banking and non-banking facilities with the help of micro-ATM and banking executives.
- It also helps in eliminating the hassle of carrying bank passbooks and debit card as the transaction can be done with only the Aadhaar number and fingerprint authentication.

### Types of transactions

- Cash Withdrawal
- Cash Deposit
- Balance Enquiry
- Aadhaar to Aadhaar Fund Transfer
- Mini Statement
- eKYC - Best Finger Detection/IRIS Detection

### Significance

- AePS is **delivering the 4As for financial inclusion** to rural parts of India — authentication of customer, availability of services, accessibility through AePS channel and affordability as it is free of cost to the customers
- It is helping in the empowerment of all sections of the society by making financial and banking services available to all through Aadhaar.
- It enables **both financial and non-financial transactions** with the help of a banking correspondent. The process is easy-to-use for individuals who are not tech-savvy.
- Banking correspondents of one bank can perform transactions of other banks as well.

- It helps in facilitating disbursements of different government schemes such as MGNREGA, Social Security pension, Handicapped Old Age Pension etc using Aadhaar authentication.

### Enabling AePS Transactions

- Neither Unique Identification Authority of India (UIDAI) nor National Payments Corporation of India (NCPI) mentions clearly whether AePS is enabled by default.
- Cashless India, a website managed and run by MeitY, says the service does not require any activation, with the only requirement being that the user's bank account should be linked with their Aadhaar number.
- Users who wish to receive any benefit or subsidy under schemes notified under **section 7** of the Aadhaar Act, have to mandatorily submit their Aadhaar number to the banking service provider, according to UIDAI.
- Aadhaar is also the preferred method of KYC for banking institutions, thus enabling AePS by default for most bank account holders.

### Biometric Information Breach

- While data breaches in Aadhaar have been reported in 2018, 2019, and 2022, UIDAI has denied that any Aadhaar data was breached. However, UIDAI's database alone is not the only location where data can be leaked.
- Aadhaar numbers are readily available in the form of photocopies, and soft copies, and criminals are using AePS to breach user information.

### Securing Aadhaar Biometric Information

- **Sharing redacted or blacked(masked) out Aadhaar numbers**
  - UIDAI is proposing an amendment to the Aadhaar (Sharing of Information) Regulations, 2016.
  - This amendment will require entities in possession of an Aadhaar number to not share details unless the Aadhaar numbers have been redacted or blacked out through appropriate means, both in print and electronic form.
- **UIDAI has implemented Two-factor authentication mechanism**
  - This mechanism uses a machine-learning-based security system, combining **finger minutiae** and **finger image capture** to check the liveness of a fingerprint.
- **Locking Aadhaar information**
  - Users have been asked to lock their Aadhaar information by visiting the UIDAI website or using the mobile app.
  - This will ensure that their biometric information, even if compromised, cannot be used to initiate financial transactions.
  - Aadhaar can be unlocked when the need for biometric authentication arises, such as for property registration and passport renewals, after which it can again be locked.



# INTERNATIONAL RELATIONS

## US Debt Ceiling Crisis

- President Joe Biden and Republican House Speaker Kevin McCarthy agreed on a deal that can potentially avert the US debt ceiling crisis.
- Under the deal, the **\$31.4 trillion debt ceiling** will be suspended until January 2025. Till then, the government can keep borrowing to fund itself.
- In return, the White House has agreed to cap non-defence discretionary spending at 2023 levels in 2024, and increase it by 1% the year after.

## Current Debt Ceiling Crisis

- The Democrats-led US government had in January hit its debt ceiling — the amount it is legally allowed to borrow for its expenses.
- With no new money coming in, Treasury Department Secretary had warned that funds would run out by the first week of June 2023.
- Since then, the Republican-dominated House of Representatives and President Biden's White House have failed to reach a consensus to raise or suspend the debt ceiling.
- This stalemate led to the current debt ceiling crisis in USA.

### U.S. debt ceiling

#### Origin of debt ceiling in US

- In 1917, Congress passed the **Second Liberty Bond Act**, to allow then-President to take out funds for the First World War without waiting for the approvals of absent Congress lawmakers.
- However, the Congress created a limit on borrowing, thus creating a debt ceiling that could only be **raised by approval of the Congress (House and Senate)**.
  - This ceiling was created to curtail the President's spending capacity.

#### Debt ceiling in its current form

- The debt ceiling started to take its present-day form in 1939, when separate borrowing caps for bonds were consolidated into one debt ceiling.
  - At that time, it was set at **\$45 billion**.
- The U.S. government has hit or come close to hitting the debt ceiling multiple times.
- **While the government continues to receive taxation revenue after hitting the debt ceiling, it cannot borrow any more to pay its existing bills.**

## What Will Happen If U.S. Defaults


- If the debt ceiling is not raised once the government reaches the ceiling and runs out of cash, the U.S. would be unable to pay its debt-holders, resulting in a default.
- **Domestic payments**
  - In this case, the government would be **unable to pay its bills** including military salaries, benefits to retirees, and interest and **other payments it owes to bondholders**.
- **Global financial crisis**
  - If the government cannot make interest payments to domestic and foreign investors, it could plunge the globe into a financial crisis.
  - It would also increase the national debt, in turn causing widespread interest rate hikes for business owners, mortgages, and other sectors.
  - A drop in U.S. consumer confidence would translate to **shocks in the financial market, tipping the economy into recession**.
  - More than half of the world's foreign currency reserves are held in U.S. dollars. Hence, a US default would affect the treasury markets around the world.
    - A loss of confidence in the U.S. economy could force investors to sell U.S. Treasury bonds, thus weakening the dollar.

- A sudden decrease in the currency's value could domino across treasury markets as the value of these reserves drops.
- **Downgraded Creditworthiness of US**
  - A U.S. default could lead to another downgrade of U.S. creditworthiness by agencies which in turn would raise the cost of borrowing for the government.
- **Impact on economy**
  - It would result in large-scale job losses, weakening of the dollar, stock sell-offs.

## Turkey Election

- Turkish President Recep Tayyip Erdogan has secured a victory in a historic runoff election. This win cements his third term in power.

- A run-off vote is a second round of voting that takes place when no candidate receives more than half of the presidential vote.

- 
- Turkey transitioned from a parliamentary to a presidential system in July 2018, a month after Erdogan won the presidential election.
  - The powers of the president were broadened after a 2017 referendum approving the change to an executive presidency.
  - The post of prime minister was abolished and the president also became the head of government.
  - In the new system, voters elect the president directly.

- Earlier, in the first round, neither the incumbent Recep Tayyip Erdogan nor his challenger Kemal Kilicdaroglu cleared the 50% threshold needed to avoid a second round.

## Türkiye's Electoral System

- **Mixed System**

- Türkiye's electoral system is a mixed system, a combination of both proportional representation and majority voting.
  - In proportional representation the number of seats held by a political group or party in a legislative body is determined by the number of popular votes received.
  - **A majority vote is valid for the presidential election** and it simply means obtaining more than half of the national vote share.

- **Two-ballot System**

- One is to elect a president. And the other is meant for voting members of Parliament from each electoral district.

- **The Threshold Requirement**

- According to a new election law passed in April 2022, to enter parliament, a political party must receive a minimum of 7 percent of the national vote.
- The law permits the formation of alliances between different political parties.
- Therefore, any party may be able to secure a seat in parliament if they form an alliance that collectively receives over 7 percent of the vote across any district in Türkiye.

- **Choosing The President**

- Turkish citizens elect their president separately from the parliament, using a two-round majority system.
- If no candidate wins a majority of votes in the first round, the top two candidates compete in a second round of voting where one candidate should get more than 50 percent to be elected.

- **Frequency of Election**

- Turkey holds simultaneous presidential and parliamentary elections every five years.

### King Charles III Crowned at London's Westminster Abbey

- King Charles III becomes the 40th British monarch to be crowned at Westminster Abbey in London.
- In front of a congregation, the spiritual leader of the Anglican Church, slowly placed the 360-year-old St Edward's Crown on Charles' head as he sat upon a 14th-century throne in Westminster Abbey.

### What Is Westminster Abbey?

- Westminster Abbey is a historic church located in the City of Westminster, London, United Kingdom.
  - *An abbey refers to a religious building, which can either mean a church or a place where monks or nuns live.*
  - This abbey's story begins with **King Edward**, also known as Edward the Confessor.
    - He was born in the 11th century into a royal family but was forced to flee his homeland after Danish attacks in the region.
    - Later, upon his return to the Kingdom, he ordered a new church to be built at Westminster. The Abbey was consecrated (declare sacred) in 1065.
- It is one of the most famous and important religious buildings in the country, and has been the site of many important royal and national events throughout history.
- The Abbey has been the coronation church for English and British monarchs since 1066.
  - Every Westminster Abbey coronation has taken place in the vicinity of King Edward's shrine.
  - Successors were placed in **St Edward's Chair**, famously known as the Coronation Chair, carrying the **Stone of Scone**, and monarchs are typically crowned with St Edward's Crown.
  - With the use of regalia related to King Edward, influence of a monarch from nearly 1,000 years ago continues to hold strong over the present.
- It is also the final resting place of many monarchs, statesmen, and other important figures from British history, including Isaac Newton, Charles Darwin, and Winston Churchill.

[For detailed discussion about Monarchy in Britain, refer the topic "King Charles III proclaimed Britain's monarch" from The Recitals – September 2022]

### European Union's Artificial Intelligence Act

- European Parliament has prepared a new draft of the European Union's ambitious Artificial Intelligence Act.
- The AI Act was drafted with the aim of bringing transparency, trust, and accountability to AI.
- It also aims to create a framework to mitigate risks to the safety, health, fundamental rights, and democratic values of the EU.
- Following a risk-based approach, **it regulates the prohibition of certain AI systems**, and sets out several obligations for the development, placing on the market and use of AI systems.

- The Act envisages establishing an **EU-wide database of high-risk AI systems** and setting parameters so that future technologies can be included if they meet the high-risk criteria.

### Current Status of Global AI Governance

- The rapidly evolving pace of AI development has led to diverging global views on how to regulate these technologies.
- **U.S. does not currently have comprehensive AI regulation** and has taken a fairly hands-off approach.
- On the other end of the spectrum, **China over the last year came out with some of the world's first nationally binding regulations** targeting specific types of algorithms and AI.
  - It enacted a law to regulate recommendation algorithms with a focus on how they disseminate information.
- In case of India, the Union Minister for Electronics and Information Technology said that the **government is not considering any law to regulate the growth of AI in India.**

### News Visa Policy of USA and Its Impact on Bangladesh

- The US Secretary of State announced a new visa policy supporting Bangladesh's goal of holding free, fair and peaceful national elections.
- This was released after the PM of Bangladesh accused Washington DC of seeking to oust her government.
- The new policy would restrict issuance of visas to those who undermine the holding of a free and fair election.
- It covers *current and former Bangladeshi officials*, members of ruling and opposition parties, etc.

### Current Scenario In Bangladesh

- Opposition is protesting and demanding that the **elections be held** under a caretaker government and by a **"neutral" Election Commission.**
- In her three terms in office, PM's style of functioning has come to be seen as increasingly **authoritarian.**
- **Her crackdown** on former PM Khaleda Zia's Bangladesh Nationalist Party (BNP), citing its links to Islamist parties and alleging corruption at the top, dealt a crippling blow to the Opposition.
- **The space for dissent and criticism has shrunk** visibly in Bangladesh. Hence, the Bangladesh opposition has welcomed the new policy.

### Implications of This Policy On India

- The US position on the Bangladesh elections **could complicate India's diplomacy in Bangladesh.**
- New Delhi, **wants Sheikh Hasina** - a leader who has acted on its security concerns swiftly, **back in power in Dhaka**
- Over the last few years, **the US and India were seen as acting in tandem in Bangladesh**, especially as their security objectives converged.
- The visa policy is a sign that this may be changing. **A post-Afghanistan US** seems more open than India to political change in Dhaka.

### US Rail Link Plan For West Asia

- Recently, Saudi Prince and Prime Minister hosted a special meeting of the National Security Advisers (NSAs) of India, U.S. and UAE, in the Kingdom of Saudi Arabia.
  - This meeting is being billed as another **important Quad in West Asia.**

- The leaders discussed an ambitious proposal to link West Asian countries through rail — **using Indian expertise** — and connect the region to South Asia via sea lanes.
  - The proposal is being pushed by the White House.

### Key Highlights Of The Meeting

- The participants discussed the broad contours of the massive joint project to build railway, maritime and road connectivity in the larger region.
- This project aims to link the Indian subcontinent in South Asia with West Asia — which the US calls the Middle East.
  - In other words, the project would connect Gulf and Arab countries via a network of railways.
  - This network would also be connected to India via shipping lanes from ports in the region.

### Background: Origin of New Initiative

- The new initiative came up during talks that were held over the last 18 months in another forum called I2U2.
- Israel raised the idea of connecting the region through railways during the I2U2 meetings over the last year.
- Part of the idea was to use India's expertise on such big infrastructure projects.

### Why India Is Keen To Participate In The Project?

- **Presence of China in the West Asian region**
  - Beijing has expanded its sphere of political influence in the West Asian region through what Delhi views as **mission creep**.
    - Mission creep is a term used to describe a situation where a mission or project expands gradually beyond its original goals, often without clear direction or oversight.
  - The breakthrough in ties between Saudi Arabia and Iran had caught India unawares.
    - This breakthrough was mediated by China and it gave Beijing a space in the West Asia region.
- **India's Interests in West Asia**
  - This project has potential implications for India's interests in West Asia, which provides **energy security**.
    - Such connectivity will allow for faster movement of the crude and minimise India's costs in the long term.
  - The connectivity boost will also help India's eight million citizens who live and work in the Gulf region.
- **India As An Infrastructure Builder**
  - The project will help India build a brand as an infrastructure builder in the railways sector.
  - Boasting a strong rail network at home and buoyed by the success of creating such infrastructure in Sri Lanka, India has the confidence to do it overseas.
  - This will also have the effect of countering the Chinese Belt and Road project, which has burdened many countries in the region with infrastructure that has limited utility.
- **India's Connectivity To Its Western Neighbours Faces Several Challenges**
  - India feels that India's connectivity to its western neighbours has been limited for long by Pakistan's blocking of overland transit routes.
  - So, Delhi wants to use shipping routes to reach West Asian ports.
  - These include Chabahar and Bandar-e-Abbas (Iran), Duqm (Oman), Dubai (UAE), Jeddah (Saudi Arabia) and Kuwait City.

### What is I2U2?

- I2U2 is a diplomatic group of the **India, Israel, the UAE and the United States**.

- US Secretary of State Antony Blinken has used the I2-U2 moniker for the four-member grouping.
- The grouping was launched in October 2021 when the first virtual meeting of the foreign ministers of India, Israel, the US and the UAE took place.
- The new grouping is described as an international forum for economic cooperation.
- This grouping is already being termed as a **New Quad’ or the ‘Middle-Eastern Quad’**.
- **Objective** – To generate synergies that go beyond government level cooperation.

### Prime Minister Modi’s Visit to Australia

- PM Modi paid a state visit to Australia from May 22-24 as a guest of the Australian Government.
- During this visit, he held talks with his Australian counterpart Anthony Albanese and attended a community event to celebrate the country's dynamic, diverse Indian diaspora.

### Key Highlights Of The Prime Minister’s Visit To Australia

- **New Indian Consulate Announced**
  - PM Modi announced that a new Indian consulate would soon open in Brisbane.
- **PM Talks about 3Cs, 3Ds, 3Es**
  - Addressing the Indian diaspora, PM Modi mentioned, "Earlier, it was said that the relations between India and Australia is defined by **3 Cs** – commonwealth, cricket, and curry.
  - Then it was said that our relationship is defined by **3 D's** – democracy, diaspora, and dosti.
  - Some people also said that our relationship is based on 3 E's – energy, economy, and education.
  - But our historic ties are much bigger than that. They are based on mutual trust and mutual respect.
- **Renaming of Sydney Suburb**
  - PM Modi and his Australian counterpart Anthony Albanese renamed the Sydney suburb as ‘Little India’.
    - For this, PM Modi joined his Australian counterpart for the foundation stone laying ceremony of ‘Little India’ Gateway.
    - The Gateway is to be built in Harris Park, Parramatta, Sydney, inhabited by a large Indian community.
    - Harris Park is a hub in Western Sydney where the Indian community celebrates festivals and events such as Diwali and Australia Day.
- **PM Modi highlighted India’s position in the world as the force of global good**
  - PM Modi said India is always ready to help others whenever there is a disaster.
  - He also hailed India as the mother of democracy.
- **PM Modi lauded India’s banking system**
  - Today, the IMF considers India a bright spot in the global economy.
  - The World Bank believes that if anyone is challenging global headwinds, it is India.
  - Banking system in several countries are in trouble today but on the other hand, the strength of India’s banks are being appreciated everywhere.

[Also refer the topics *“State Visit of Prime Minister of Australia to India”* from March 2023 edition and the topic *“Australian Parliament clears way for India trade deal”* from November 2022 edition of The Recitals.]

## India, Russia Rupee Trade Talks

- Government officials have denied the reports that India and Russia have suspended negotiations on trade settlement in Indian rupee.
- The officials admitted that there are **issues on how Russia could use the excess rupee in Vostro accounts**, but the talks to iron out these differences continue.
  - A Rupee Vostro account is a foreign bank's account with an Indian bank in rupees in India.
- Bilateral trade between India and Russia is highly favourable towards Russia.
  - Since Russia's invasion of Ukraine, India's imports from Russia have risen to \$51.3 billion until April 5, from \$10.6 billion in the same period in the previous year.
  - Exports from India in the same period fell slightly to \$3.43 billion from \$3.61 billion in the previous year.
- Hence, Moscow believes it will end up with an annual rupee surplus of over \$40 billion if such a mechanism is worked. It feels rupee accumulation is not desirable.

## International Trade Settlement In Rupees

- When countries import and export goods and services, they have to make payments in a foreign currency.
- Since the US Dollar is the world's reserve currency, most of these transactions are entered into US dollars.
  - If an Indian buyer enters into a transaction with a seller from Germany, the Indian buyer has to first convert his rupees into US dollars.
  - The seller will receive those dollars which will then be converted into Euros.
  - Here, both the parties involved have to incur the conversion expenses and bear the risk of foreign exchange rate fluctuations.
- In the process of trade settlement in rupees, instead of paying and receiving US dollars, the invoice will be made in Indian rupees if the counterparty has a Rupee Vostro account.

## Why Does The RBI Want To Settle Payments In Rupees?

- **Reduce India's dependency on US dollars**
  - Hence, in long term, it will shift some demand into Rupees from USD.
- **Facilitate Trade with sanctions-hit countries**
  - The mechanism for international settlement in rupee might have been aimed particularly at facilitating trade with sanctions-hit Russia, possibly Iran, and forex-starved Sri Lanka.
- **Stability of Indian rupee**
  - India is a net importer and the value of the Indian rupee has been declining consistently.
  - The rupee was the worst performing Asian currency in 2022, witnessing a fall of around 10% against the greenback.
  - Using the rupee for international trade transactions will help check the flow of dollars out of India and slow the depreciation of the currency.
- **Global Acceptance of Indian Currency**
  - International trade settlements in rupee are expected to gradually contribute to the global acceptance of the currency.
  - Later it may be possible to repay loans taken from fund banks like the Asian Infrastructure Investment Bank in Indian currency.

## Steps Taken By RBI To Promote International Trade Settlement In Rupees

- In July 2022, the RBI has provided an additional arrangement for invoicing, payment, and settlement of exports/imports in the rupee.

- As part of this mechanism, in December 2022, India saw its first settlement of foreign trade in rupee with Russia.
- So far banks of 19 countries including the UK, New Zealand, Germany, Malaysia, Israel, and the United Arab Emirates have been permitted to make settlements in rupees.

### Challenges

- **Limited Acceptance:**
  - The Indian rupee is not widely accepted as a settlement currency in international trade.
  - The rupee is not fully convertible. India's share of global exports of goods also is just about 2%.
  - These factors reduce the necessity for other countries to hold rupees.
- **Complications in terms of formulating the monetary policy**
  - The internationalisation of the rupee can potentially limit the ability of the central bank to control domestic money supply and influence interest rates as per the domestic macroeconomic conditions.
  - If a substantial portion of its trade is in rupee, non-residents would hold rupee balances in India which would be used to acquire Indian assets.
  - Large holdings of such financial assets could heighten vulnerability to external shocks, managing which would necessitate more effective policy tools.
- **Challenges in promoting invoices in rupee**
  - In the prevailing global atmosphere of trade protectionism and geopolitical rivalries, promoting invoices in rupee with various countries will not be an easy task.
  - Currently, India's share in global trade is not significant enough and it is highly dependent on the import of fossil fuels, edible oils, gold, silver, etc.
  - This makes it an unlikely possibility for exporting countries to consider the Indian rupee as an invoicing currency, unless it suits their interests.

### India To Train ASEAN Women in United Nations Peacekeeping Operations

- To further expand the India-ASEAN ties, the Raksha Mantri had announced initiatives for Women in UN Peace Keeping Operations.
  - These proposals were made at the inaugural India-ASEAN Defence Ministers' Meeting held in November 2022 at Siem Reap, Cambodia, to commemorate the 30th Anniversary of India-ASEAN relations.
- As part of this announcement, India is set to conduct two initiatives for women personnel from South East Asia later this year.

### India-ASEAN Initiative for Women in UNPK Operations

- **Courses for women peacekeepers of ASEAN member-states**
  - One of the initiatives includes conduct of tailor-made courses for women peacekeepers of ASEAN member-states at the Centre for United Nations Peacekeeping (CUNPK) in India this September.
    - The Indian Army has established CUNPK (in 2000) in New Delhi to impart niche training in peacekeeping operations.
  - In all 20 peacekeepers, two from each country, would be trained.
- **Table Top Exercise for women officers from ASEAN**

The other initiative is a 'Table Top Exercise' for women officers from ASEAN incorporating facets of UNPK challenges to be conducted in December.



# SUMMITS AND ORGANISATIONS

## G7 Hiroshima Summit 2023

- The Leaders of the Group of Seven (G7) met in Hiroshima for **49<sup>th</sup> annual Summit**. This year's summit is hosted by Japan in its capacity as the President of the grouping.
  - The choice of Hiroshima as host city of the G7 Summit underlines Prime Minister Kishida's commitment to put nuclear disarmament and non-proliferation prominently on the agenda of the meeting.
- **PM Modi** also attended the Summit at the invitation of Japanese Prime Minister and as president of the G20 this year.
- The participating leaders issued a leaders' communiqué which was adopted at the end of the summit.

## G7 Hiroshima Leaders' Communiqué

- **On Ukraine**
  - Condemned in the strongest possible terms the war of aggression by Russia against Ukraine.
  - Separately issued G7 Leaders' Statement on Ukraine.
  - Decided to take concrete steps to support Ukraine for as long as it takes in the face of Russia's illegal war of aggression.
- **On Disarmament and Non-proliferation**
  - Decided to strengthen disarmament and non-proliferation efforts, towards the ultimate goal of a world without nuclear weapons with undiminished security for all.
  - The summit also released the **G7 Leaders' Hiroshima Vision on Nuclear Disarmament**.
- **Global Economy, Finance and Sustainable Development**
  - It decided to coordinate the approach of members to economic resilience and economic security that is based on diversifying and deepening partnerships and de-risking, not de-coupling.
  - It decided to work on issues such as resilient supply chains, non-market policies and practices, and economic coercion.
- **On debt sustainability**
  - Debt sustainability is a major concern undermining progress towards SDGs.
  - Supported the G20's effort to improve the implementation of the *Common Framework for Debt Treatments beyond the Debt Service Suspension Initiative (DSSI)*.
    - DSSI means that bilateral official creditors are, during a limited period, suspending debt service payments from the poorest countries that request the suspension.
  - It welcomed the **development of Climate Resilient Debt Clauses (CRDC)** to enhance the safety net for borrowers facing the impacts of climate change.
- **On infrastructure**
  - It reaffirmed the shared commitment to the **G7 Partnership for Global Infrastructure and Investment (PGII)** and to working together and aiming to mobilize up to **\$600 billion by 2027 for infrastructure funding**.
- **Clean energy economy**
  - Decided to take concrete steps to drive the transition to clean energy economies of the future through cooperation within and beyond the G7.
  - Expressed its commitment to deepen cooperation through Just Energy Transition Partnerships (JETPs), the Climate Club and new Country Packages for Forest, Nature and Climate.

- Also decided to preserve the planet by accelerating the decarbonization of energy sector and the deployment of renewables, end plastic pollution and protect the oceans.
- **Food Security**
  - Announced that member countries are taking concrete steps to **launch the Hiroshima Action Statement for Resilient Global Food Security** with partner countries to address needs today and into the future.
- **On China**
  - Urged China to pressure its strategic partner Russia to end its war on Ukraine.
  - The leaders expressed serious concern about the situation in the East and South China seas, where Beijing has been expanding its military presence and threatening to use force to exert its control over self-governed Taiwan.
  - The statement said there was “no legal basis for China’s expansive maritime claims in the South China Sea.
    - It opposed China’s militarization activities in the region.”
- **On regulating AI**
  - The digital ministers of the G7 had agreed to adopt "risk-based" regulation on artificial intelligence (AI).
    - The agreement sets a landmark for how major countries govern AI amid privacy concerns and security risks.
  - The ministers planned to convene **future G7 discussions on generative AI** which could include topics such as governance, how to safeguard intellectual property rights including copyright, etc.

[For detailed discussion about G7 group, refer the topic **“48th G7 Summit”** from The Recitals – June 2022.]

### Arab League Members Readmit Syria After 12-Year Suspension


- Arab League foreign ministers voted to readmit Syria into the organisation, after a suspension that lasted over a decade.
- The decision was taken at a closed meeting of Arab foreign ministers at Arab League’s headquarters in Cairo.
  - All 13 of the 22 member states that attended the session endorsed the decision.
  - The Arab League generally tries to reach agreements by consensus but sometimes opts for simple majorities.

### Analysis

- **Move does not mean normalisation**
  - The reinstatement of Syria does not mean normalisation of relations between Arab countries and Syria.
  - This is a sovereign decision for each country to make.
- **Lack of consensus on the issue**
  - There is still no Arab consensus on normalisation with Damascus.

### Why Syria’s membership was suspended by the Arab League?

- **Syria’s membership in the Arab League was suspended in 2011 after protests against President Bashar Assad turned violent.**
  - Anti-government protests had erupted across the country as part of the Arab Spring uprisings.
  - These protests had killed nearly a half million people since March 2011 and displaced half of the country’s pre-war population of 23 million.
- **The league had also imposed economic and political sanctions on Syria over its failure to stop the violence.**



- Some Arab states, including Qatar, have been opposed to normalising relations with Assad without a political solution to the conflict.
- But others, like the United Arab Emirates and Jordan, have quietly re-established contact in recent years.
- **Commitments to a gradual resolution to the conflict**
  - The decision for Syria to return also includes a commitment to ongoing dialogue with Arab governments to gradually reach a political solution to the conflict.

#### Arab League

- **About**
  - The Arab League is an intergovernmental organization (IGO), a voluntary association of independent African and Middle East countries whose peoples are mainly Arabic speaking.
  - It was formed in 1945 to promote cooperation and coordination among Arab countries.
  - It is headquartered at Cairo, Egypt.
- **Member States**
  - The Arab League currently has 22 member states including Egypt, Iraq, Jordan, Lebanon, Saudi Arabia, Syria, Yemen, and the Palestinian Authority.
  - The League also has several observer countries, including Brazil, Eritrea, **India**, and Venezuela.
- **Goals**
  - To promote economic, cultural, and political cooperation among its member states;
  - To safeguard their independence and sovereignty, and to coordinate their efforts in matters of common interest, such as the resolution of regional conflicts and the promotion of peace and stability in the Middle East.
- **Criticism**
  - The League makes decisions on a majority basis, but there is no mechanism to compel members to comply with resolutions.
  - It has been criticized for its internal conflicts and collective inaction on important international issues.
  - It has long been criticized for disunity and poor governance.
  - Critics also say it has traditionally been more representative of its various autocratic regimes than of Arab citizens.

#### 6th Indian Ocean Conference

- The 6<sup>th</sup> edition of the Indian Ocean Conference (IOC) was held by India Foundation in association with the Ministry of Foreign Affairs, Bangladesh and S. Rajaratnam School of International Studies.
- The two-day Indian Ocean Conference — with the theme **“Peace Prosperity and Partnership for a Resilient Future”** — was organised in Dhaka.

#### About Indian Ocean Conference (IOC)

- **IOC is an annual international conference that focuses on the geopolitical, economic, and strategic importance of the Indian Ocean region.**
- **The conference brings together policymakers, scholars, business leaders, and civil society representatives to discuss issues related to security, trade, and cooperation in the Indian Ocean region.**
- **The first edition of the Conference was held in Singapore in 2016. The fifth edition of IOC was organised in 2021 in Abu Dhabi, UAE.**
- **Organised by - India Foundation in partnership with other organizations in the region.**

## World Bank Launches Business Climate Rankings

- The World Bank has unveiled new methodology and improved safeguards, called “**Business Ready**”, for assessing the business climate in up to 180 countries.
- This was done after embarrassing revelations of data irregularities and favoritism toward China forced it to cancel its flagship “**Ease of Doing Business**” rankings two years ago.

### Key Highlights

- A pilot edition of the new replacement annual series called “**Business Ready**” will be published in the spring of 2024.
- It will cover an initial group of 54 economies in Asia, Latin America, Europe, the Middle East and Sub-Saharan Africa.
- More countries will be added in the next two years as the bank refines its methodology and ramps up the new project.

### About Ease of Doing Business Rankings

- The ease of doing business index was an index created by the World Bank Group, following the release of World Development Report 2002.
- The objective was **to provide an assessment of objective measures of business regulations and their enforcement across 190 economies on ten parameters affecting a business through its life cycle.**
- The 10 parameters were –
  - Starting a Business, Dealing with Construction permits, Electricity availability, Property registration, Credit availability, Protecting minority Investors, Paying Taxes, Trading across borders, Contracts enforcement, and Resolving Insolvency.
- It ranks countries on the basis of **Distance to Frontier (DTF) score** that highlights the gap of an economy with respect to the global best practice.
  - For example, a score of 75 means an economy was 25 percentage points away from the frontier constructed from the best performances across all economies and across time.

### Why Did World Bank Discontinue The Rankings?

- In September 2021, the World Bank announced it was “discontinuing” its “Doing Business” report.
- It cited the outcome of an investigation that found the **World Bank had changed the rankings under pressure of funding.**
  - According to an investigation conducted by Washington-based law firm WilmerHale, World Bank staff members changed data on China to improve its ranking on the ease of doing business.
- This wasn’t the first time the rankings had come in for criticism.
  - A 2008 internal evaluation report highlighted their **lack of transparency**, while in 2018 the Bank’s chief economist, Paul Romer, resigned decrying **data manipulation**.
- **Flawed Methodology –**
  - It did little to distinguish between good procedures, such as ensuring compliance with environmental rules, and unnecessary red tape, such as requiring yet another stamped and notarised copy of a document.

### World Bank Board Elects US Nominee Ajay Banga As President

- The World Bank’s 25-member executive board elected former Mastercard CEO Ajay Banga to a five-year term as president.
  - Banga, who was born in India and spent his early career there, has been a U.S. citizen since 2007.
- He was nominated for the post by U.S. President Joe Biden in late February and was the sole contender to

replace departing World Bank chief David Malpass.

- The World Bank has been led by an American since its founding at the end of World War II, while the International Monetary Fund has been led by a European.

### WHO Launches Global Network to Detect Infectious Disease Threat

The World Health Organization has launched a **global network** known as International Pathogen Surveillance Network (IPSN). It has been launched to help swiftly detect the threat from infectious diseases, like COVID-19, and share the information to prevent their spread.

#### IPSN

##### • About

- IPSN is a global network of pathogen genomic actors which is hosted by the WHO Hub for Pandemic and Epidemic Intelligence.
- Its aim is to accelerate progress on the deployment of pathogen genomics and improve public health decision-making.
- It will support ongoing disease surveillance and will help detect and fully characterize new disease threats before they become epidemics or pandemics.

##### • Need

- Without the rapid sequencing of the SARS CoV-2 virus, vaccines would not have been as effective and would not have become available as quickly.
- Hence, genomics lies at the heart of effective epidemic and pandemic preparedness and response.

##### • Areas of Work

- Set of communities of practice that enable exchange between partners, working on pathogen genomics;
- A Country Scale-Up Accelerator (CSUA) to accelerate and amplify the efforts of IPSN members to rapidly increase country capacity for pathogen genomic surveillance;
- Funding to improve equity and to power IPSN projects;
- High-level advocacy/communications to keep genomic surveillance on the agenda;
- Global partners forum for pathogen genomics to bring partners together.

### 76<sup>th</sup> World Health Assembly

- Prime Minister Narendra Modi virtually addressed the **76<sup>th</sup> World Health Assembly in Geneva**.
- While congratulating the organisation for serving the world for 75 years, PM Modi said the Covid-19 pandemic showed that there was a need for greater collaboration and health equity.
- The World Health Assembly is the **decision-making body** of World Health Organization (WHO).
- It is attended by delegations from all WHO Member States and focuses on a specific health agenda prepared by the Executive Board.
- The main functions of the World Health Assembly are to –
  - Determine the policies of the Organization,
  - Appoint the Director-General,
  - Supervise financial policies, and
  - Review and approve the proposed programme budget.

- The Health Assembly is held annually in **Geneva, Switzerland**.

#### **CAG Chief re-elected as External Auditor of WHO for 2024-27**

- Girish Chandra Murmu, the Comptroller and Auditor General of India (CAG), has been re-elected as the External Auditor of the World Health Organization (WHO) for a four-year term from 2024 to 2027.
  - The CAG is already holding this position in the WHO since 2019 for a four-year term from 2019 to 2023.
- The re-election was held at the 76th World Health Assembly in Geneva.
- Besides the WHO, the CAG of India is currently the External Auditor of:
  - International Labour Organisation (2024-2027)
  - the Food and Agriculture Organisation (2020-2025),
  - International Atomic Energy Agency (2022-2027),
  - Organization for Prohibition of Chemical Weapons (2021-2023);
- The CAG is a **Member of the United Nations Panel of External Auditors**.

#### **Global Agency Affiliated to UN Rights Body Defers NHRC Accreditation**

- For the second time in a row, the **Global Alliance for National Human Rights Institutions (GANHRI)**, has deferred re-accreditation of the National Human Rights Commission (NHRC) of India for a year.
- Without the accreditation, **NHRC will be not be able to represent India at the UN Human Rights Council**.
- GANHRI is an organisation affiliated to the **UN High Commissioner for Human Rights**. It brings together and supports *national human rights institutions* to promote and protect human rights.
  - GANHRI represents more than 100 national human rights institutions (NHRIs) from around the world.

#### **Accreditation By The GANHRI**

- In a unique peer-review-based accreditation process, GANHRI ensures individual NHRIs' compliance with internationally recognised standards – the **Paris Principles** – to ensure their independence, pluralism and accountability.
  - The **Paris Principles set out internationally agreed minimum standards that NHRIs must meet to be considered credible**.
  - The six principles require a country's human rights agency to be independent from the government in its structure, composition, decision-making and method of operation.
  - The principles were adopted by the UN General Assembly in **1993**.
- GANHRI, through the Sub-Committee on Accreditation (SCA), is responsible for reviewing and accrediting NHRIs in compliance with the Paris Principles.
- A National Human Rights Institution (NHRI) is reviewed by the SCA when –
  - It applies for initial **accreditation**
  - It applies for **re-accreditation** every five years
  - The **circumstances of the NHRI change** in any way that may affect its compliance with the Paris Principles.
- NHRIs that are assessed as complying with the Paris Principles are accredited with '**A status**', while those that partially comply are accredited with '**B status**'.
- India's NHRC got 'A' status of accreditation for the first time in 1999, which it retained in 2006, 2011, and in 2017 after it was deferred for a year.

## Insurgency in Assam

- Recently, the Dimasas National Liberation Army (DNLA), an insurgent group operating mostly in Assam's Dima Hasao district, signed a peace agreement with the government.
- Both Union Home Minister and Assam Chief Minister declared that this peace settlement marked the end of the tribal insurgency in Assam.

## Reasons Behind Insurgency In Assam

### • Ethnic minefield

- The Assam region has a long history of tensions between the indigenous ethnic groups.
- There are 15 recognised tribes in the autonomous districts of KarbiAnglong and North Cachar Hills and 14 recognised tribes in the rest of the state.
- Of these, the major tribes are **Bodo** (35% of the state's tribal population), **Mishing**

(17.52%), Karbi (11.1%), **Rabha** (7.6%), **SonowalKachari** (6.5%), **Lalung** (5.2%), **Garo** (4.2%), and **Dimasa** (3.2%).

- The most sustained and violent movement for autonomy has been carried out by **Bodo** groups.
- However, there have also been **Karbi and Dimasa groups** that waged militant operations over the decades.

### • Immigration

- The large-scale immigration of Bengali-speaking Muslims from Bangladesh is seen by Assamese people as a threat to their identity, culture, and economic well-being.

### • Political factors

- This region saw movements which ask for recognition of sub-regional aspirations.
- These movements often came in direct conflict with the State Governments or even the Autonomous Councils.
  - E.g., All Bodo Students' Union (ABSU) stepped up the movement in 1987 for a separate state of Bodoland on the North Bank of the Brahmaputra.

### • Economic factors

- The isolation of the region after partition was a big blow to the economy of the region.
- The perception of exploitation of NE resources by the government in Delhi boosted insurgency.

## Background

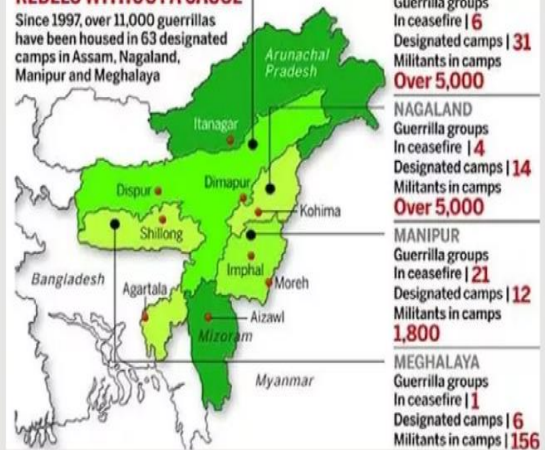
• Assam has seen insurgency by various tribal militant groups, particularly from the 1980s onwards.

○ This was even after Nagaland, Mizoram, Meghalaya, and Arunachal Pradesh were carved out of Assam.

• The core demand of most of these groups has been greater political autonomy, primarily through separate statehood demands.

### REBELS WITHOUT A CAUSE

Since 1997, over 11,000 guerrillas have been housed in 63 designated camps in Assam, Nagaland, Manipur and Meghalaya



## Insurgent Groups in Assam

- **United Liberation Front of Asom (ULFA)**
  - Formed in April 1979, ULFA was founded on the ideology of Assamese nationalism.
  - It pledged to liberate Assam and establish a Swadin Asom (Independent Assam) comprising the ethnic Assamese speaking people.
- **Bodo Movement in Assam**
  - The demand for the creation of a homeland for the Assam plains tribal communities in the shape of Udyachal was a significant plank of the Bodo political movement in the 1960s.
  - The **All-Bodo Students Union (ABSU)** was formed in 1967 to represent the Bodo cause.
    - The movement for separate Bodoland was revived through the ABSU after the signing of the **Assam Accord in 1985**.
    - It soon came to be backed by Bodo armed groups with the formation of **National Democratic Front of Bodoland (NDFB)**. This led to the emergence of an insurgency situation in the region.
- **Karbi**
  - There were five major militant groups of Karbi Anglong - Karbi People's Liberation Tiger, People's Democratic Council of Karbi-Longri (PDCK), Karbi-Longri NC Hills Liberation Front (KLNLF), Kuki Liberation Front (KLF), and United People's Liberation Army (UPLA).
  - The insurgency by these groups revolved around the demand for an autonomous state and had taken off in the 1980s.
  - In 2021, a settlement was arrived at with the above-mentioned five militant groups of Karbi Anglong.
- **Dimasa**
  - The DNLA, with which a tripartite agreement was reached recently, was the newest group to take up arms in DimaHasao district.
  - The settlement signed with the DNLA now has similar provisions along the lines of the settlement arrived at with the five KarbiAnglong groups two years ago.

## Way forward

- **Caution is the key**
  - While settlements with all active tribal militant groups have been arrived at in recent years, history has seen breakaway factions.
  - Hence, caution should be exercised as the possibility of other groups coming to the fore remains open
- **Establish North East Security Council:** New Delhi must set up a North East Security Council to both comprehend and administer the region holistically.
- **Challenge in the form of Paresh Baruah-led ULFA (I):** While talks with these tribal militant groups have been carried out, the biggest challenge for the government remains the PareshBaruah-led ULFA (I), which continues to hold fast to the demand for sovereignty.

## Common Uniforms For Officers Of Brigadier Rank And Above

- The Army has decided that brigadiers and above rank officers will have a common uniform from August 1 irrespective of their parent cadre and appointment.
  - The Indian Army made the decision during the **Army Commanders Conference**.
- There will be no change to the uniform worn by Colonels and below-rank officers.



- In the current practice, senior officers of different ranks wear insignia of their respective arms and regiments on their uniform.

#### What Is The Reason For Making The Change?

- **Common identity for all senior-rank officers**
  - Although, the distinct identity strengthen camaraderie, esprit de corps and regimental ethos&is vital for junior leadership.
    - The identity fosters a strong bond in the same regiment.
  - However, brigadiers and above officers are those who have already commanded units, battalions. They are mostly posted at headquarters or establishments.
  - Hence, a standard uniform will ensure a common identity for all senior-rank officers while reflecting the true ethos of the Indian Army.
- **To reinforce the Indian Army's character to be a fair and equitable organisation**
  - Regimental service in the Army ends at the rank of Colonel for most officers who rise further.
  - Therefore, affiliations with a particular regiment or corps must also end at that rank – in order to avoid regimental parochialism in the higher ranks.
  - Those at higher ranks often command troops from across regiments, thus it is only appropriate that these officers present themselves in a neutral uniform.

#### Is This The First Time That This Is Being Done?

- Army is now reverting to the practice that was followed almost 40 years ago, when the changes towards wearing regimental affiliations took hold in the service.
- Until about the mid-1980s, the regimental service was till the rank of Lt Colonel. Officers of the rank of Colonel and above had common uniform patterns and insignia.
  - Colonels and Brigadiers shed their regimental insignia and wore the Ashoka emblem on their cap badges. The colour of beret was khaki.

#### Govt. Issues Fresh Rules For SPG

- A new set of rules has been issued for the **Special Protection Group (SPG)** by the Ministry of Home Affairs under the Special Protection Group Act, 1988.
- The officers of **All India Services (AIS)** will be appointed to SPG on **deputation** by the central govt on the same terms and conditions as applicable to the *officers of the corresponding ranks* in central government.
- **Other members** of SPG (except AIS) will be appointed on deputation for an initial period of **6 years**.
  - **The appointment for the 2nd tenure** may be done with the prior approval of the central government for reasons to be recorded.
- The SPG will have its headquarters in **New Delhi** and **now be handled** by an officer not less than the rank of an **Additional Director-General** belonging to the Indian Police Service.
  - **The general superintendence**, direction, command and control, supervision, training, discipline, and administration of the SPG will be vested in the director.
  - The director of the SPG shall be the **functional head and responsible for the implementation of the duties assigned in the Act.**

#### Special Protection Group (SPG)

- It is an **elite force, specifically raised** for the protection of the country's Prime Minister, former PMs and their immediate family.
- The force is currently 3,000 strong personnels (from CRPF, BSF and other Central and State forces). It was

started in **1985** in the wake of the killing of PM Indira Gandhi in 1984.

- The SPG is **highly trained** in physical efficiency, marksmanship, combat and proximate protection tactics and is **assisted by all central and state agencies to ensure fool proof security.**

#### **SPG Act 1988**

- The Act provides for the **constitution and regulation** of the SPG to provide security to -
  - ✓ **The PM** (both in India and abroad), as well as the PM's immediate family members.
  - ✓ **Former PMs**, and their immediate family members residing with them at their official residence.
- It provides security to former PMs and their immediate family members **for a period of 1 year from the date on which they cease to hold the office.**
- **Beyond this period**, the SPG security is provided based on the level of threat (must emanate from a military or terrorist organisation and be of a grave and continuing nature) as decided by the central government.

#### **SPG (Amendment) Act 2019**

- The protection will be offered **only to the PM**, former PMs and their immediate family members residing with them at their official residence.
- The security to former PMs, and their immediate family members residing with them at their official residence **will be provided for a period of 5 years.**
- When the security is withdrawn from a former PM such security will also stand withdrawn from members of his immediate family.

#### **Chartered Accountants Now Under Ambit of Money Laundering Law**

- The Union Finance Ministry has notified changes to the Prevention of Money Laundering Act (PMLA) 2002, widening its ambit to include transactions facilitated by chartered accountants, company secretaries, etc.
- Now, setting up a company, buying property and financial transactions executed by these professionals on behalf of their clients will now be covered under the PMLA.
- They will be liable under the PMLA if they facilitate a transaction that violates the law.
- The Act also stipulates confidentiality on information sought from the reporting entity, thereby, requiring adherence to the strictest of professional standards.
- The amendments are expected to aid investigative agencies further in their probe against dubious transactions involving shell companies and money laundering.

[For detailed discussion on PMLA 2022 and recent changes, refer the topic **“Amendments to the Rules on Money Laundering”** from the Recitals – March 2023]

#### **ASEAN India Maritime Exercise (AIME-2023)**

- The opening ceremony of the **inaugural ASEAN India Maritime Exercise AIME-23** was held at Changi Naval Base, Singapore. The harbour phase of the exercise was held at Changi Naval Base and the Sea Phase in the South China Sea.
- The AIME-23 is aimed at promoting maritime cooperation and enhancing trust, friendship and confidence amongst ASEAN and Indian Navies.

#### **Country's First Air Force Heritage Centre**

Defence Minister Rajnath Singh inaugurated the nation's first Indian Air Force Heritage Centre in Chandigarh. The heritage centre highlights the IAF's role in various wars. It houses five vintage aircraft and will provide visitors with cockpit exposure and an experience with flight simulators.

## Blue Hole

Scientists have discovered a massive sinkhole off the coast of the Yucatan Peninsula in Mexico.

- It is around 900 feet deep, and scientists have dubbed it the 2<sup>nd</sup> deepest blue hole found on the planet.
- **World's deepest blue hole is Dragon Hole** in South China Sea.

### About Blue Hole

- It is a large marine cave or sinkhole, which is open to the surface and develops as a bank or island made of carbonate bedrock.
- These geological formations are characterized by their deep blue color, which is caused by the way the light is absorbed as it travels through the water.
- It extends below sea level for most of its depth and may provide access to submerged cave passages.
- Many contain a high diversity of plants and marine life including corals, sea turtles and sharks.
- Well-known examples are the *Dragon Hole, the Great Blue Hole and Dean's Blue Hole*.

## India's Own Heat Index

India is planning to launch a *composite index of its own* to measure the effect of heat on its population and produce impact-based heat wave alerts for specific locations.

### About Heat Index

- It is a measure of how hot it feels when humidity is factored in along with the air temperature. It is also known as the **apparent temperature**.
- It takes into account the body's ability to cool itself through perspiration and evaporation, which can be hindered by high humidity levels.
- It will incorporate additional variables like wind and exposure time in addition to temperature and humidity. It will also serve as a reliable indicator of heat stress in people.
- The figures were calculated using data from the **India Meteorological Department (IMD)**.

### Introducing the Heat Hazard Score

- IMD is developing a new multi-parameter product called **Heat Hazard Score**.
- The heat index is typically higher than the actual air temperature on hot and humid days. When the heat index is high, it means that the combination of heat and humidity can make it feel much hotter and more uncomfortable for humans.
- It will be operational in the next summer season and will be used to issue impact-based heat wave alerts for specific locations.

## Central Asian Flyway (CAF)

The Ministry of Environment, Forest and Climate Change had organized a meeting of **Range Countries** to strengthen conservation efforts for migratory birds and their habitats in the Central Asian Flyway (CAF).

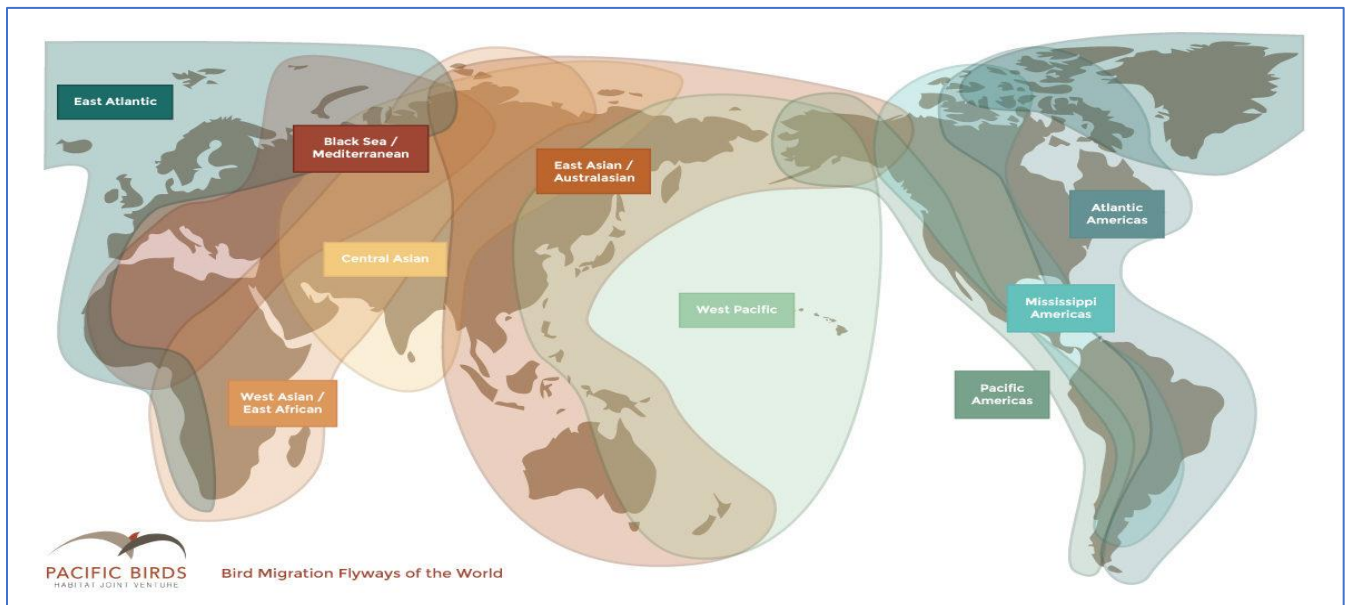
### About Central Asian Flyway (CAF)

- The CAF extends from the Arctic tundra in Russia and Siberia to the Indian Ocean and includes diverse habitats such as wetlands, grasslands, deserts, and high-altitude areas.

- Including India, it encompasses countries such as Russia, Kazakhstan, Mongolia, China, Kyrgyzstan, Tajikistan, Afghanistan, Pakistan, Nepal, Bangladesh, and Myanmar etc.
- Every year, millions of birds migrate along the CAF, traveling long distances to breed or find suitable feeding grounds.

### Flyway

- The flyway serves as a vital pathway for the seasonal movements of various bird species, particularly waterbirds. The flyway provides critical stopover sites where birds rest and refuel during their journey.
- These stopover sites are often wetlands, lakes, rivers, and coastal areas, which offer abundant food resources.
- Understanding and conserving the flyway not only benefits bird populations but also contributes to the overall health and functioning of ecosystems along its route.



## Wildlife Sanctuaries In The News

### Debrigarh Wildlife Sanctuary

<b>Geographic Location</b>	It is located in Odisha near the <b>Hirakud Dam (Mahandi River)</b> . It is bounded on the east and north by the huge Hirakund reservoir.
<b>Features</b>	<ul style="list-style-type: none"> <li>• It was declared as a wildlife sanctuary in February <b>1985</b>. National Tiger Conservation Authority (NTCA) approved Odisha's Proposal to declare Debrigarh a Tiger Reserve (Upgradation of Wildlife sanctuary to Tiger Reserve).</li> <li>• It will become the <i>third tiger reserve in Odisha after Similipal and Satkosia</i>.</li> <li>• It finds a special mention because of noted freedom fighter veer Surendra Sai. During his rebellion against the British Veer SurendraSaimade his base at 'Barapathara" located within the sanctuary.</li> </ul>
<b>Flora &amp; Fauna</b>	<ul style="list-style-type: none"> <li>• It is one of the few sanctuaries (having Dry deciduous forests) supporting both terrestrial and aquatic biodiversity; which further attracts a significant number of migratory waterfowl during winter (Hirakud Reservoir, which attracts a variety of migratory birds).</li> <li>• It is home to four-horned antelope, Indian leopard, Indian elephant, sambar, chital, gaur, etc.</li> </ul>

## Burachapori Wildlife Sanctuary

Assam Chief Minister shares pictures after successful eviction drive at Burachapori Wildlife Sanctuary. The anti-encroachment drive is being carried out to free nearly 1,892 hectares of land.

### About Burachapori Wildlife Sanctuary

<b>Geographic Location</b>	It is located on the southern bank of the river Brahmaputra in Assam. It is part of the larger <b>Kaziranga-Karbi Anglong</b> landscape.
<b>Features</b>	<ul style="list-style-type: none"><li>• It was declared a Reserved Forest in 1974 and became a sanctuary in <b>1995</b>.</li><li>• It serves as a notified <b>buffer zone</b> of the renowned <b>Kaziranga Tiger Reserve</b>.</li><li>• This crucial connection contributes to the conservation of the region's tiger population and the overall ecological balance.</li></ul>
<b>Flora &amp; Fauna</b>	<ul style="list-style-type: none"><li>• It consists of a mosaic of wet alluvial grasslands, riparian and semi-evergreen forests dotted by wetlands and river systems.</li><li>• The abundance of <b>freshwater mangrove trees</b> is a unique flora of the sanctuary.</li><li>• Its bird list includes the highly endangered Bengal Florican, Black-necked Stork, Mallard, Open billed Stork, Teal, and Whistling Duck among others.</li><li>• It is home to the Great Indian one-horned rhinoceros, tiger, leopard, wild buffalo, hog deer, wild pig, and elephants.</li></ul>

## Kambalakonda Wildlife Sanctuary

<b>Location</b>	<ul style="list-style-type: none"><li>• It is a vast forest reserve located near <b>Vishakhapatnam</b>, Andhra Pradesh.</li></ul>
<b>Features</b>	<ul style="list-style-type: none"><li>• The name of the place referred to the local hill, Kambalakonda. It is considerably hilly with steep slopes.</li><li>• This Wildlife Sanctuary serves as a vital green lung for Visakhapatnam city.</li></ul>
<b>Flora &amp; Fauna</b>	<ul style="list-style-type: none"><li>• One of the most amazing flowers found in the region include the <b>Indian screw tree</b>.</li><li>• Other flowers and fruits such as <i>bush plum tree</i>, <i>jungle berry bunches</i> can be found throughout the landscape.</li><li>• The animals included in this sanctuary are Indian leopard, Indian pangolin, Madras treeshrew.</li><li>• Russell's viper or <i>Daboia russelli</i> is also a rare breed of snakes found in this sanctuary.</li><li>• Some of the unusual birds include Indian Golden Oriole, Indian Peafowl, Banded Bay Cuckoo etc.</li></ul>

## Indian Sludge Finds High Potential For Use As Fertilizer

A study has found that the sludge found in Indian sewage treatment plants (STP), has "high potential" to be used as fertilizer.

### About Sludge

- It is the thick residue produced during the treatment of wastewater or sewage in sewage treatment plants.
- It is rich in organic chemicals and is also a repository of heavy metals, industrial effluents, and bacterial contaminants.
- The composition of sludge can vary depending on the source and treatment processes used.

### Classification of Treated Sludge

- As per standards of the *United States Environment Protection Agency*, treated sludge can be classified as:

- **Class A sludge** - It is safe to be disposed of in the open and useful as organic fertilizer.
- **Class B sludge** - It can be used in restricted agricultural applications, with the edible parts of the crop not exposed to the sludge-mixed soil, and animals and people not coming into extensive contact.

### Use of Sludge as Fertilizer

Sludge can be utilized as a fertilizer or soil amendment due to its nutrient content and organic matter. When properly treated and processed, sludge can provide beneficial nutrients and improve soil fertility.

- **Nutrient Content:** Sludge contains valuable nutrients such as nitrogen, phosphorus, and potassium (NPK), as well as micronutrients like iron, zinc, and copper. These nutrients are essential for plant growth and development.
- **Organic Matter:** Sludge is rich in organic matter, which improves soil structure, *water-holding capacity*, and *nutrient retention*. Organic matter also encourages the growth of beneficial soil microorganisms, enhancing overall soil health.
- **Fertilizer Value:** Sludge can replace or supplement commercial fertilizers, reducing the reliance on chemical fertilizers and promoting sustainable agriculture.
- **Soil Improvement:** Applying sludge to agricultural land can help improve soil fertility and productivity, particularly in degraded or nutrient-deficient soils.

### Government Initiative to Treat Sludge

- **Arth Ganga** aims to monetise, and reuse treated wastewater and sludge.
  - Arth Ganga is a sustainable viable economic model conceptualized under the Namami-Gange program to integrate people in the basin with Ganga Rejuvenation.
  - This means converting sludge into usable products such as manure and brick

### Challenges With the Sludge

- Contaminants in sludge require careful management to avoid negative impacts on water bodies and agricultural land.
- India doesn't yet have standards classifying sludge as class A or B.
- A study by IIT-Roorkee found that most of the sludge analysed after drying fell into the class B category.

### Way Forward

To improve the quality of sludge, it must be stored for at least three months to kill pathogens, and animal manure and husk or local soil must be added to reduce heavy metals.

## United Nations Forum on Forests

The 18<sup>th</sup> session of the **United Nations Forum on Forests (UNFF18)**, held in New York

### Major Highlights of UNFF18

- Since 2013, increasing use of **bioenergy**, driven by the global push for renewable energy sources has increased the pressure on forests.
- More than 5 billion people worldwide benefit from non-timber forest products, of which forest ecosystems provide 55% of renewable energy needs.
- Industrially harvested trees that become wood residues contribute an important source of bioenergy. Forests have the potential to reduce 5 gigatons of emissions.

### About United Nations Forum on Forests (UNFF)

- It is a high-level intergovernmental policy forum established in **2000** by the **UN Economic and Social Council (ECOSOC)**.

- It has universal membership and is composed of all Member States of the United Nations.
- Its primary objective is to promote sustainable forest management and facilitate international cooperation on forest-related issues.
- The UNFF collaborates closely with other international processes and conventions, such as the Convention on Biological Diversity (CBD), United Nations Framework Convention on Climate Change (UNFCCC), and the Sustainable Development Goals (SDGs).
- The UNFF operates through a **two-year cycle**, known as the **Multi-Year Programme of Work (MYPOW)**. During each MYPOW, member states, in collaboration with various stakeholders, develop and implement strategic goals and targets for sustainable forest management.
- These goals and targets are designed to address key thematic areas, including forest conservation, poverty eradication, climate change, biodiversity conservation, and the mobilization of financial resources.
- Hence, The UN Strategic Plan for Forest (2017 – 2030) has adopted a set of six Global Forest Goals and 26 associated targets to be reached by 2030.

#### **Global Forest Goals**

- The UN Strategic Plan for Forest (2017 – 2030) has adopted a set of six Global Forest Goals and 26 associated targets to be reached by 2030.
- **Goal 1** - Reverse the loss of forest cover worldwide through sustainable forest management, including protection, restoration, afforestation and reforestation
- **Goal 2** - Enhance forest-based economic, social and environmental benefits, including by improving the livelihoods of forest-dependent people
- **Goal 3** - Increase significantly the area of protected forests worldwide and other areas of sustainably managed forests
- **Goal 4** - Mobilize significantly increased, new and additional financial resources from all sources for the implementation of sustainable forest management and strengthen scientific and technical cooperation and partnerships
- **Goal 5** - Promote governance frameworks to implement sustainable forest management, including through the United Nations Forest instrument, and enhance the contribution of forests to the 2030 Agenda for Sustainable Development
- **Goal 6** - Enhance cooperation, coordination, coherence and synergies on forest-related issues at all levels, including within the United Nations system and across member organizations of the Collaborative Partnership on Forests

#### **Kalasa-Bhandura Project**

- Goa is concerned about Karnataka's plan to build the **Kalasa Bhandura canal** to divert water from the upper reaches of the Mhadei to the Malaprabha basin.
- The project involves the construction of dams and a canal system across Kalasa and Banduri (two tributaries of the Mahadayi river) to divert water from the Mahadayi River to the Malaprabha River (a tributary of Krishna River) basin in Karnataka.
- The main goal of the project is to meet the drinking water needs of the districts of Belagavi, Dharwad, Bagalkot, and Gadag in Karnataka.
- The project was proposed by the Karnataka Government in the 1980s, but faced opposition from the state of Goa. The Mahadayi Water Disputes Tribunal was set up in 2010. Goa, Karnataka and Maharashtra are parties to the tribunal.

- In January 2023, after obtaining approval from the Central government, Karnataka has been granted clearance for two Detailed Project Reports (DPRs) concerning the Kalasa-Banduri Nala on the Mahadayi River.
- Following the endorsement from the **Central Water Commission (CWC)**, the Karnataka state government has made the decision to proceed with the project.

## River Kolak

- Kolak fisherfolk living along the **banks of River Kolak** is in distress as chemicals from Vapi industries destroy river catch.
  - Kolak is a west flowing river originates in Kaprada taluka. It flows from Saputara to the Arabian sea near Udwada (holy place of Parsis in **Gujarat**).
  - It is connected to **Madhuban reservoir of Damanganga River**.



### About Mandovi River (Mhadei)

<b>Origin</b>	<ul style="list-style-type: none"> <li>• The Western Ghats (from the Bhimgad Wildlife Sanctuary) in the Belagavi district of Karnataka</li> </ul>
<b>Course</b>	<ul style="list-style-type: none"> <li>• The river travels 35 km in Karnataka; 82 km in Goa before joining the Arabian Sea at Panji (North-Goa).</li> <li>• It joins with the <b>Zuari</b> a common creek forming the <b>Mormugao harbour</b>.</li> <li>• The river enters Goa from the north and eventually falls into Arabian sea.</li> <li>• On its way the river makes the <b>Dudhsagar Falls and Varapoha Falls</b>.</li> </ul>
<b>Tributaries</b>	<ul style="list-style-type: none"> <li>• The tributaries are Nerul, Mapusa, Udnai, Dudhsagar River, Ragada River and KotrachiNadi.</li> </ul>
<b>Features</b>	<ul style="list-style-type: none"> <li>• It is considered the lifeline of Goa. It is one of the two main rivers in Goa, the other being the <b>Zuari River</b>.</li> <li>• The catchment area of the river is spread over Goa, Karnataka and Maharashtra.</li> <li>• The <b>Salim Ali Bird Sanctuary</b> is located on the island of Choraon in the Mandovi river.</li> </ul>

### Meri LiFE App

The Government launched the Meri LiFE mobile application to empower young people and encourage their participation in tackling climate change.

#### About Meri LiFE App (Inspired by Mission LiFE)

- It aims to promote *mindful utilisation instead of wasteful consumption*.
- It will foster a nationwide movement for LiFE, demonstrating the power of citizens in saving the environment.
- Through this app, the impacts of simple actions in daily life can be understood, which can have a larger climate impact.

#### About Mission LiFe (Lifestyle for Environment)

- It is a global initiative by India to help the world in its fight against climate change.



- It was introduced by India during the 26th United Nations Climate Change Conference of the Parties (**COP26**) in Glasgow in 2021.
- It aims at following a **three-pronged strategy** for changing our collective approach toward sustainable and healthy Lifestyle:

<b>Change in Demand</b> (Phase I)	Nudging individuals across the world to practice simple yet effective environment-friendly actions in their daily lives.
<b>Change in Supply</b> (Phase II)	Changes in large-scale individual demand are expected to gradually nudge industries and markets to respond and tailor supply and procurement as per the <b>revised demands</b> .
<b>Change in Policy</b> (Phase III)	By influencing the <u>demand and supply dynamics</u> , it aims to trigger shifts in large-scale <u>industrial and government policies</u> that can support both sustainable consumption and production.

- The Ministry of Environment, Forest and Climate Change is the nodal Ministry for national-level coordination and implementation of Mission LIFE.

## Permafrost

According to a new study, with rising global temperatures, melting permafrost is likely to destabilize thousands of industrial sites and associated contaminated areas in the Arctic.

### About Permafrost

<b>What is Permafrost?</b>	<ul style="list-style-type: none"> <li>• It is essentially any ground that stays <u>frozen 0 degree Celsius or lower for at least two years straight</u>.</li> <li>• These permanently frozen grounds are most common in regions with high mountains and in Earth's higher latitudes near the North and South Poles.</li> </ul>
<b>Composition</b>	<ul style="list-style-type: none"> <li>• A combination of soil, rocks, and sand that are held together by ice.</li> </ul>

### Some Key Features And Characteristics Of Permafrost

- **Ground Stability:** Permafrost acts as a *stabilizing agent* for the land. It can provide structural support to the landscape, preventing slope failures and landslides. When permafrost thaws, it can lead to ground subsidence and destabilization of infrastructure, buildings, and transportation systems.
- **Permafrost Layers:** Permafrost is composed of different layers, including an active layer that thaws and refreezes annually and a permanently frozen layer beneath it. The thickness of these layers varies depending on local climate conditions and geological factors.
- **Permafrost and Climate Change:** Permafrost is highly susceptible to climate change. Rising temperatures in the Arctic and sub-Arctic regions are causing permafrost to thaw at an accelerated rate. This thawing process can release significant amounts of greenhouse gases, such as methane and carbon dioxide, stored within the frozen ground, contributing to further global warming. A 2022 NASA report said, Arctic permafrost alone holds an estimated 1,700 billion metric tons of carbon, which includes methane and carbon dioxide.
- **Impact on Ecosystems:** Permafrost plays a crucial role in supporting unique ecosystems and habitats. It influences the distribution of vegetation, wildlife, and microorganisms adapted to the cold conditions. Thawing permafrost can disrupt these ecosystems, leading to changes in plant and animal communities and affecting biodiversity.
- **Human Impacts:** Permafrost is of great importance to local communities and indigenous peoples who rely on its stability for traditional activities such as hunting, transportation, and infrastructure construction.

### Initiative to Tackle Negative Effect Of Permafrost

- **Arctic Council:** The Arctic Council is an intergovernmental forum that addresses various issues in the region, including permafrost thaw. The Council facilitates research, data sharing, and the development of strategies to mitigate the impacts of permafrost melting.
- **International Permafrost Association (IPA):** The IPA is an international scientific organization dedicated to studying permafrost.
- **Global Research Observatories:** International collaborations, such as the *Global Terrestrial Network for Permafrost (GTN-P)* and the *Circumpolar Active Layer Monitoring (CALM) network*, establish research observatories to monitor permafrost conditions.
- **NASA's Soil Moisture Active Passive (SMAP) mission** orbits Earth collecting information about moisture in the soil. SMAP's measurements are helping scientists to understand where and how quickly the permafrost is thawing.

### World Meteorological Organization (WMO)& Recent Related Activities

WMO released two reports titled *Global Annual to Decadal Climate Update 2023-2027* and *State of Global Climate 2022*.

#### Global Annual to Decadal Climate Update

- It is issued annually in May, summarizing the predicted future of global climate for the next year and the next five years.
- The report highlights that Global temperatures are likely to surge to record levels in the next five years, fueled by heat-trapping greenhouse gases and a naturally occurring El Nino event.
- There is 66% likelihood that the annual average near-surface global temperature between 2023 and 2027 will be more than 1.5°C above pre-industrial levels for at least one year.

#### About 1.5-degree Celsius Target

- It is a global climate goal that aims to limit warming to the said level by 2100, to prevent the planet from slipping into further climate crises.
- For decades, 2 degrees was the acceptable level of warming. The idea of 1.5 degree was considered unrealistic and unattainable.
- In 2015, the parties to the Paris Agreement pledged to limit the average temperature rise to below 2 degrees, while actively aiming for 1.5 degree above pre-industrial levels.

The World Meteorological Congress has approved a new greenhouse gas (GHG) monitoring initiative *Global Greenhouse Gas Watch (G3W)*.

#### About Global Greenhouse Gas Watch (G3W)

- It aims to establish internationally coordinated monitoring of greenhouse gas fluxes (**top-down**) to support the provision of the UNFCCC parties and other stakeholders.
- It will bring all space-based and surface-based observing systems, as well as modelling and data assimilation capabilities, under one roof.
- The system will provide sustained delivery of **monthly global estimates of net GHG fluxes into and out of the atmosphere at a 100 by 100 km resolution**.

#### About WMO (Headquartered in Geneva, Switzerland & India is a member)

- It is an intergovernmental organization with a membership of 193 Member States and Territories.
- It originated from the International Meteorological Organization (IMO), which was established after the 1873 Vienna International Meteorological Congress.

## Palghat Gap

<b>Location</b>	<ul style="list-style-type: none"><li>• The Palghat Gap, also known as the Palakkad Gap, is a low mountain pass located in the Western Ghats Mountain range of southern India. It is situated in the state of Kerala, near the town of Palakkad (also spelled Palghat).</li><li>• It is a 40 km wide corridor in the Western Ghats, known for its steep hills and serving as a gateway to Kerala.</li></ul>
<b>About Gap</b>	<ul style="list-style-type: none"><li>• It is a geological <b>shear zone</b>, running from east to west, which represents a weak region in the earth's crust.<ul style="list-style-type: none"><li>➤ A shear zone is a region in which the <i>stress is markedly higher than in the wall rock</i>, and whose margin is defined by the change in stress.</li></ul></li></ul>
<b>Origin</b>	<ul style="list-style-type: none"><li>• It originated due to the drift of the continental shelf after the separation of Australia and Africa from the Gondwana landmass.</li><li>• The gap was also formed by the action of rivers flowing through the Western Ghats over millions of years, gradually eroding the mountains and creating a relatively low-lying passage.</li></ul>
<b>Importance</b>	<ul style="list-style-type: none"><li>• It has served as a crucial gateway into the state of Kerala, functioning as a corridor for both road and rail transportation that connects Coimbatore to Palakkad.</li></ul>
<b>Other Features</b>	<ul style="list-style-type: none"><li>• <b>Bharathappuzha River</b> flows through the Palghat Gap.</li><li>• The vegetation in the gap is classified as dry evergreen forest, different from the tropical rainforests of the Western Ghats.</li></ul>

### Other Gaps

- Thal Ghat Pass (Kasara Ghat) (connects Mumbai to Nashik), it connects the city of Mumbai with the Deccan Plateau.
- Bhor Ghat Pass (connects Mumbai to Pune via Khopoli)
- Amba Ghat Pass (connects Ratnagiri district to Kolhapur)
- Naneghat Pass (connects Pune district with Junnar city)
- Amboli Ghat Pass (connects Sawantwadi of Maharashtra to Belgaum of Karnataka)



## International Day for Biological Diversity

- On 22 May, International Day for Biological Diversity is observed annually across the world.
- When it was 1st established by the UN General Assembly in 1993, 29th December (the date of entry into force of the Convention on Biological Diversity) was designated as International Biodiversity Day. Later the UNGA designated 22 May as IDB in 2000 to commemorate the adoption of the Convention's text.

### India and Convention on Biological Diversity (CBD)

- The Convention on Biological Diversity (CBD) was negotiated and signed by nations at the *Earth Summit at Rio de Janeiro in Brazil in June, 1992*
- India is also a party to the Convention. India ratified it in **1994**.
- India enacted the **Biological Diversity Act in 2002** to give effect to the provisions of the CBD.
- To implement the provisions of the Act, the government established the **National Biodiversity Authority (NBA) in 2003**.

## People's Biodiversity Register (PBR)

The *National Campaign for Updation and Verification of People's Biodiversity Register (PBR)* was launched by the Union Ministry of Environment, Forest and Climate Change in **Goa**.

### About People's Biodiversity Register (PBR)

- It is designed as a tool for the formal maintenance of the local knowledge with proper validation.
- It serves as a comprehensive record of various aspects of biodiversity, including the conservation of habitats, preservation of land races, folk varieties and cultivars, domesticated stocks and breeds of animals and micro-organisms.
- The concept was defined in the **Biological Diversity Act, 2002**.
- So far, 2,67,608 PBRs have been prepared by Biodiversity Management Committees in different states.

### About Biodiversity Management Committees

- BMCs are local bodies under the Biological Diversity Act 2002.
- It is created to ensure the conservation, sustainable use and equitable sharing of benefits from biodiversity.
- Kolkata was the 1<sup>st</sup> major metropolitan city in country to make a detailed PBR.

## Debt For Climate Swaps

- They are a type of debt swap in which the debtor nation, instead of continuing to make external debt payments in a foreign currency, makes payments in local currency to finance climate projects domestically on agreed upon terms.
- DFC (Debt for Climate) swaps can reduce the level of indebtedness as well as free up fiscal resources to be spent on green investments.

## E-retrofitment

<b>What is it?</b>	<ul style="list-style-type: none"><li>• E-retrofitment, also known as electronic retrofitting, refers to the process of converting a conventional vehicle into an EV by replacing the internal combustion engine with the electric powertrain.</li></ul>
<b>Various Applications</b>	<ul style="list-style-type: none"><li>• <b>Housing Infrastructure:</b> E-retrofitting can be applied to buildings and facilities to improve energy efficiency. Upgrading older equipment with energy-efficient alternatives, such as LED lighting or high-efficiency motors, is also part of e-retrofitting.</li><li>• <b>In manufacturing and industrial settings:</b> e-retrofitting involves integrating automation technologies, such as programmable logic controllers (PLCs), sensors, and robotic systems, into existing machinery or production lines.</li><li>• <b>Transportation:</b> E-retrofitting is also applicable to vehicles and transportation systems. Converting traditional combustion engine vehicles into electric vehicles (EVs) through retrofitting involves replacing the internal combustion engine with an electric motor.</li><li>• <b>Internet of Things (IoT):</b> E-retrofitting can leverage IoT technologies to connect and control existing devices and systems.</li><li>• <b>Healthcare:</b> In the healthcare sector, e-retrofitting involves updating medical equipment and devices with electronic components for improved functionality, connectivity, and data integration.</li></ul>

## Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA Plan)

<b>Established by</b>	Adopted in 2016 by International Civil Aviation Organization (ICAO)
<b>Aim</b>	To stabilize net CO2 emissions at 2020 levels through a combination of measures including carbon offsetting, carbon credits and sustainable aviation fuels.
<b>Baseline and offsetting</b>	CORSIA establishes a baseline for CO2 emissions from international aviation, using the average emissions for the years 2019 and 2020 as the reference point.
<b>Scope</b>	Only applies to international flights (specifically those covered by the Chicago Convention).


## Land Degradation Neutrality (LDN)







<b>About</b>	<ul style="list-style-type: none"> <li>The concept of LDN emerged from the UN Conference on Sustainable Development (<b>Rio+20</b>) in 2012.</li> <li>The LDN concept was developed under the UN Convention to Combat Desertification (<b>UNCCD</b>) and is aligned with the Sustainable Development Goals (SDGs- Target 15.3).</li> </ul>
<b>World's Commitment</b>	<ul style="list-style-type: none"> <li><b>New York Declaration</b> on Forests (goal: 350 million hectares of forest to be restored by 2030, also incorporating the Bonn Challenge).</li> <li><b>The Bonn Challenge</b> is a global goal to bring 150 million hectares of degraded and deforested landscapes into restoration by 2020 and 350 million hectares by 2030.</li> </ul>
<b>India's Target</b>	<ul style="list-style-type: none"> <li>Restoration of 26 million hectares of degraded land aimed by 2030 to achieve an additional carbon sink of 2.5 to 3 billion tonnes of carbon dioxide equivalent.</li> </ul>
<b>Related Report &amp; Pledge</b>	<ul style="list-style-type: none"> <li><b>Global Land Outlook report</b> released by the UNCCD.</li> <li><b>The Delhi Declaration</b>, adopted at the 14th Conference of Parties to UNCCD in 2019, called for better access and stewardship of land.</li> </ul>




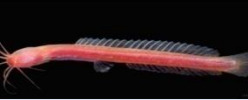

## Port of Haifa

- It is located in northern Israel, near the city of Haifa along the Mediterranean Sea.
- It is also located on the busy Suez Canal shipping route.
- It handles about half of the country's container cargo and is also the country's major port for passenger traffic and cruise ships.
- The Haifa port was built in 1933 by the British. Since 1948, it has been reconstructed and developed by the Israeli government.

## Species In News

<p><b>Hijol</b></p> 	<ul style="list-style-type: none"> <li>A new study notes that the suitable habitat for Hijol to grow may shrink by 50.5% due to rainfall and temperature changes.</li> <li>It is also known as Indian oak, is a medium-sized evergreen tree.</li> <li>It is native to coastal wetland in Southern Asia and northern Australia.</li> </ul>
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	<ul style="list-style-type: none"> <li>• It is commonly found in the Ganges-Brahmaputra-Meghna basin.</li> <li>• Its bark has tannin, which is useful for heart diseases.</li> </ul>
<p><b>Moroccan Locust</b></p> 	<ul style="list-style-type: none"> <li>• It is a grasshopper in the insect family Acrididae.</li> <li>• It is found in northern Africa, southern and eastern Europe and western Asia.</li> <li>• It lives a solitary existence but increases rapidly in numbers over a few years, and tends to form groups.</li> <li>• It poses a significant threat not only to wheat crops but also to more than 150 other plant species.</li> <li>• They have a robust body, short antennae, and powerful hind legs adapted for jumping. The coloration of their bodies can vary, ranging from <b>greenish brown to reddish-brown</b>.</li> </ul>
<p><b>Comb jellies</b></p> 	<ul style="list-style-type: none"> <li>• It is formally known as ctenophores</li> <li>• It is a beautiful, oval-shaped animal with eight rows of tiny comb like plates.</li> <li>• Most of the comb jellies are bioluminescent.</li> <li>• As it swims, the comb rows break up (diffract) light to produce a shimmering rainbow effect.</li> <li>• They live in almost all ocean regions, particularly in surface waters near shores.</li> </ul>
<p><b>Eretmopteramura phyi</b></p> 	<ul style="list-style-type: none"> <li>• It is an invasive species on Antarctic Signy Island</li> <li>• It is a tiny insect, feasts on dead organic matter.</li> <li>• It has led to faster plant decomposition, thus increasing the soil nitrate levels by three-five times.</li> <li>• It is a native of South Georgia and was accidentally introduced to Signy in the 1960s during a botany experiment.</li> </ul>
<p><b>Painted Stork</b></p> 	<ul style="list-style-type: none"> <li>• It is a large wading bird in the stork family.</li> <li>• It is usually seen in the freshwater wetlands and occasionally in the coastal regions.</li> <li>• It found in Pakistan, India, Sri Lanka, Myanmar, Malaysia and Thailand.</li> <li>• It is listed as Near Threatened in the IUCN Red list.</li> <li>• They are not migratory and only make short distance movements in some parts of their range in response to food and for breeding.</li> </ul>
<p><b>Scalloped Hammerhead Shark</b></p> 	<ul style="list-style-type: none"> <li>• It is a circum-global shark species that is found worldwide in coastal warm temperate and tropical seas of the Atlantic, Indian, and Pacific oceans.</li> <li>• It is listed as Endangered in the IUNC Red List.</li> <li>• Its population is declining because of overfishing, driven by the high economic value of its fins and the consumption of its meat.</li> <li>• The Hammerhead Shark uses sensors in its head to detect its prey</li> <li>• Hammerhead Sharks do not lay eggs like most other fish.</li> </ul>
<p><b>Milkweed butterflies</b></p> 	<ul style="list-style-type: none"> <li>• A team of researchers shed light on the migration patterns of Milkweed butterflies in southern India.</li> <li>• Milkweed Butterflies are a diverse group of butterflies belonging to the brush-footed butterfly family.</li> </ul>

	<ul style="list-style-type: none"> <li>• It fly slowly, and some migrate great distances.</li> <li>• It feed mainly on milkweed plants and sometimes on nightshade.</li> </ul>
<p><b>GekkoMizoramensis</b></p> 	<ul style="list-style-type: none"> <li>• New species of flying gecko is found near Myanmar border named after Mizoram.</li> <li>• It is a subgenus called Ptychozoon of the Gekko genus.</li> <li>• Its habitat spread into the parts of Bangladesh, Myanmar, Thailand and Cambodia along with Mizoram.</li> <li>• It is arboreal, nocturnal and glides from one tree to another.</li> <li>• They have <b>webbed limbs and flat tails</b> to help them glide (they do not fly).</li> <li>• The species is paraphyletic and comprises multiple cryptic species.</li> </ul>
<p><b>Sea Butterflies</b></p> 	<ul style="list-style-type: none"> <li>• It is a subgroup of sea snails known as shelled pteropods.</li> <li>• It has muscular legs that allow them to swim in water instead of gliding on solid surfaces.</li> <li>• It is holoplanktonic and spends its entire life cycle in the water column.</li> <li>• It is found in all oceans but is more diverse and abundant in colder waters.</li> <li>• Their shell is mostly transparent and very fragile and can be easily dissolved by ocean acidification.</li> </ul>
<p><b>Pygmy Hog</b></p> 	<ul style="list-style-type: none"> <li>• It is an indicator species.</li> <li>• It is the smallest and rarest species of wild pig in the world.</li> <li>• It is a native to alluvial grasslands in the foothills of the Himalayas.</li> <li>• It is one of the very few mammals that build its own home, or nest, complete with a roof.</li> <li>• The viable population of this pig in the wild is in the <b>Manas Tiger Reserve in Assam.</b></li> <li>• It is listed as Critically Endangered in the IUCN Red list and in the Schedule I of the Indian Wildlife (Protection) Act, 1972.</li> </ul>
<p><b>Horaglanis populi</b></p> 	<ul style="list-style-type: none"> <li>• It is a species of catfish endemic to India mainly in Kerala. It lacks pigmentation and eyes. It was genetically very different from all other known species.</li> <li>• It is highly vulnerable to extinction due to its small ranges.</li> <li>• It has blood-red body and transparent skin.</li> <li>• It has a highly reduced pectoral fin and a shortened spine while the dorsal and anal fins are long, extending to the tail.</li> </ul>
<p><b>Pliosaur</b></p> 	<ul style="list-style-type: none"> <li>• Pliosaurus were aquatic carnivorous reptiles that lived between 220 and 70 million years ago.</li> <li>• Pliosaurus have been found as fossils from the Jurassic and Cretaceous periods</li> <li>• They were the largest aquatic carnivorous reptiles that have ever lived and are often dubbed sea monsters.</li> <li>• Their limbs were in the form of fins. They used four large fins to swim through Mesozoic seas. They had powerful large skulls and large jaws with large sharp teeth.</li> </ul>

# SCIENCE AND TECHNOLOGY

## Arexvy

US Food and Drug Administration (FDA) has approved the world's first respiratory syncytial virus vaccine called Arexvy.

### About Arexvy

- It is an adjuvant respiratory syncytial virus vaccine, which means it contains an adjuvant, an ingredient that helps create a stronger immune response to the vaccination.
- The objective of the vaccine is to hinder respiratory syncytial virus-induced lower respiratory tract illness.
- It is manufactured by the British pharmaceutical company GSK. It is approved for individuals aged 60 years and above.
- Clinical trials have demonstrated that administering a sole dose of the Arexvy vaccine resulted in an 82.6% reduction in the likelihood of individuals aged 60 and above developing lower respiratory tract disease caused by the RSV virus.
- Furthermore, the vaccine reduced the risk of severe disease by 94.1% in this age group.

### About Respiratory syncytial virus (RSV)

- It is a highly contagious virus that causes infections of the lungs and breathing passages in individuals of all age groups.
- Older adults, including those with underlying medical conditions such as diabetes and chronic heart and lung disease, are at increased risk of severe RSV illness.
- In case of infection, treatments include over-the-counter pain relievers, staying hydrated, and in severe cases, hospitalisation and oxygen support.

## Bluebugging

Andhra Pradesh police asked the people to be wary of bluebugging.

### What is Bluebugging

- It is a hacking technique that allows individuals to access a device with a discoverable **Bluetooth connection**.
- Once the target device accesses a rigged link, the attacker can take full control of it.
- The hacker can read and send messages, access the victim's phonebook, and initiate or eavesdrop on phone calls.
- Initially, it focused on bugging a computer with Bluetooth capability. With the increasing use of smartphones, cybercriminals shifted to hacking mobile phones.

Limitations Of Bluebugging	How To Prevent Attack?
This attack is often limited due to the range of Bluetooth connections, which goes up to only 10 meters.	<ul style="list-style-type: none"><li>• To protect against Bluebugging attacks, it is important to keep Bluetooth turned off when not in use</li><li>• Ensure that Bluetooth devices are not discoverable by unauthorized users, and</li><li>• keep software and firmware updated with the latest security patches.</li></ul>

### Related Term- Bluejacking and Bluesnarfing

- Both are also a hacking technique that exploits vulnerabilities in Bluetooth-enabled devices.



- In bluejacking, the idea is to prank device owners by sending harmless messages to annoy or promote products.
- In bluesnarfing hackers access Bluetooth-connected devices without the device owners' permission to download sensitive data, such as phone books, messages, or images.

Juice jacking is a type of cyber-attack that involves accessing sensitive data or installing malware on a mobile device by exploiting its USB charging port.

## Antonov AN-32

India donated propellers of the Antonov AN-32 military transport aircraft to Sri Lanka.

### About Antonov AN-32

<b>What is It</b>	<ul style="list-style-type: none"> <li>• It is a <b>twin-engine turboprop military transport aircraft</b>.</li> <li>• A turboprop aircraft uses a turbo-prop engine instead of a piston-powered engine or jet engine.</li> </ul>
<b>By</b>	<ul style="list-style-type: none"> <li>• It is designed and built by Antonov Design Bureau of Ukraine.</li> <li>• It was bought by India in 1984 from the erstwhile Soviet Union.</li> </ul>
<b>Features</b>	<ul style="list-style-type: none"> <li>• The AN-32 can be operated at high-altitude airfields (up to 4500 m above sea level) and in a hot climate, making the aircraft suitable for tactical military transport or other evacuation operations.</li> <li>• It can carry a maximum weight of 27 tons at a maximum speed of 530 km/h.</li> <li>• Passenger Capacity: 42 paratroopers or 50 passengers or 24 Casualties on a stretcher with three medical personnel.</li> <li>• It also has a limited bombing role and is used for para-trooping operations.</li> </ul>

## CarbSar

British companies are teaming up to launch a low-cost **radar satellite** next year called **CarbSar**. It is an innovative deployable X-band **Synthetic aperture radar (SAR)** to provide high resolution imaging capabilities night and day, whatever the weather.

### About SAR

<b>Principle of Operation</b>	<ul style="list-style-type: none"> <li>• SAR works by emitting <u>microwave pulses towards the Earth's surface</u>. The radar antenna on the sensor receives the signals reflected back from the target area.</li> <li>• By measuring the time it takes for the signals to return and analyzing their properties, SAR can generate detailed images.</li> </ul>
<b>Aperture Synthesis</b>	<ul style="list-style-type: none"> <li>• SAR utilizes a technique called <u>aperture synthesis to simulate a large antenna</u> by combining the data received from multiple smaller radar antennas.</li> <li>• This allows for improved resolution and the creation of high-quality images.</li> </ul>
<b>Resolution and Image Quality</b>	<ul style="list-style-type: none"> <li>• SAR can produce images with high spatial resolution, meaning it can detect and distinguish fine details on the Earth's surface.</li> <li>• The resolution depends on factors such as the wavelength of the radar signal and the distance between</li> </ul>

the radar platform and the target area.

### Applications

- SAR has numerous applications across various fields. It is widely used in Earth observation and environmental monitoring to study changes in land cover, detect deforestation, monitor ice and snow, map urban areas, and assess natural disasters like floods or earthquakes.
- SAR is also utilized for maritime surveillance, oil spill detection, agriculture, and military applications.

### Satellites and Platforms

- SAR data can be collected from spaceborne satellites, airborne platforms (such as aircraft or unmanned aerial vehicles), or ground-based systems.
- Several countries and space agencies operate SAR satellites, providing global coverage and a wealth of data for various applications.

## Machines Can See 2023 Summit

The UAE government launched an international conference on Artificial Intelligence (AI) in the region called the **Machines Can See 2023 Summit**.

### About The Summit

- The main objective was to bring together experts from around the world to discuss the future of AI.
- The summit deliberated on the current progress in AI, its uses and its potential in the UAE and other countries globally.

### Artificial intelligence (AI)

- It is the basis for mimicking human intelligence processes through the creation and application of algorithms built into a dynamic computing environment.
- It enables computer system to carry out task on their own that otherwise requires human intelligence.

Importance of AI	Challenges to AI
<ul style="list-style-type: none"><li>• It is not susceptible to human error or inconsistencies from human interactions. AI is trained to avoid human errors, allowing it to detect and correct mistakes without human assistance.</li><li>• Rather than being limited by the human brain, AI can integrate itself with <i>scalable intelligent systems</i> ranging from cell phones to supercomputers.</li><li>• The scalable nature of AI also allows it to perform tasks of varying complexity.</li><li>• In the healthcare sector, it is used to provide accurate diagnosis before the disease reaches the acute stage.</li><li>• The use of AI in the education sector is expected to improve access to quality education and improve crowd management.</li><li>• The e-commerce industry is incorporating artificial intelligence to make purchasing and communication easier and more efficient.</li></ul>	<ul style="list-style-type: none"><li>• Although AI can virtually remove human error from processes, it can still be present in the code with bias and prejudice.</li><li>• Concerns about data privacy and security, as well as the lack of formal regulation regarding data anonymity.</li><li>• Most people have no idea what AI is or how it works, and what benefits it can provide for businesses, governments and individuals.</li><li>• Many countries generally lack the resources needed to implement AI systems and complex machines.</li><li>• Intelligence is considered a gift of nature. So an ethical argument ensues, whether or not human intelligence is to be replicated.</li></ul>

### Steps Taken for AI by the Indian Government

- In the Budget 2019-20, the government proposed to set up a **National Research Foundation** with the objective of catalysing and activating research and innovation in all academic disciplines, including AI.
- Centre of Excellence in Artificial Intelligence (CoE in AI) has been setup by **National Informatics Centre (NIC)** which is a platform for innovative new solutions in AI space.
- Government has begun the use of AI on pilot basis for crop cutting and yield estimation under scheme **Pradhan Mantri Fasal Bima Yojana**.
- NITI Aayog published a discussion paper that outlines India's National AI Strategy as a roadmap to adopt AI.
  - NITI Aayog has identified **five priority** sectors where AI investments should be focused: health, education, agriculture, smart cities, and smart mobility

### Way Forward

- The data infrastructure will need to become more robust before large scale AI deployment can be successful
- Across sectors, there is a need to grow capacity within the government for effective implementation of AI driven solutions.

### Space Science and Technology Awareness Training (START)

ISRO has announced a new **Space Science and Technology Awareness Training (START)**.

#### About START Programme

<b>Aim &amp; Objective</b>	To provide <b>introductory-level training</b> in Space Science and Technology to build human capacity for future Space Science and research.
<b>Target Group</b>	Post-graduate and final-year undergraduate students of physical sciences and technology
<b>Field Coverage</b>	Various domains of space science, including Astronomy & Astrophysics, Heliophysics & Sun-Earth interaction, Instrumentation, and Aeronomy.
<b>Delivery Mode</b>	Online training programme through the <b>Jigyasa portal</b> .
<b>Other Programmes</b>	<p>1) The ISRO's <b>National Remote Sensing Centre (NRSC)</b> has also announced two short courses- <u>Remote Sensing Data Acquisition and Remote Sensing Data Processing</u>.</p> <p>2) The courses are conducted through the <u>Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP)</u>.</p> <ul style="list-style-type: none"> <li>➤ The CSSTEAP is an educational institution affiliated with the United Nations.</li> </ul> <div data-bbox="394 1383 1438 1803" style="background-color: #4a7ebb; color: white; padding: 10px;">  <p><b>JIGYASA</b> PROMOTING SCIENTIFIC TEMPER THROUGH STUDENT - SCIENTIST CONNECT PROGRAM</p> <ul style="list-style-type: none"> <li>• It is a <b>liaison program</b> between students and scientists that aims to foster an academic temperament among students through a well-planned educational structure.</li> <li>• It is implemented by the <b>Council for Scientific and Industrial Research (CSIR)</b> in association with the Kendriya Vidyalaya Sangathan (KVS).</li> <li>• This program focuses on spreading awareness regarding the importance of science in society through a practical educational institution, especially among teachers and students.</li> </ul> </div>

## FluHorse

A new Android malware called FluHorse has been discovered, targeting users in Eastern Asia with malicious apps that imitate legitimate versions.

- It is being deployed using targeted phishing techniques through emails.
- It is designed to extract sensitive information, including user credentials and Two-Factor Authentication (2FA) codes.
- It can remain undetected for long periods of time, making it a persistent and dangerous threat

## Scary Barbie

- Astronomers have identified the *biggest cosmic explosion ever observed*, the giant ball of fire that has been affectionately nicknamed Scary Barbie.
- Comparisons indicate that the fireball is a staggering 100 times larger than our Solar System.
- While most supernovae last only a few months before disappearing, but it has lasted more than three years, defying conventional expectations.
- This remarkable longevity has piqued the curiosity of astronomers, prompting them to further investigate this unprecedented phenomenon.
- The researchers discovered it using an AI engine called **REFITT (Recommender Engine For Intelligent Transient Tracking)**.
- The AI engine looks through observations from many different telescopes around the World.

### Reason Behind this Biggest Cosmic Explosion

- Scientists think that a supermassive black hole pulled a star and ripped it apart.
- The force around a black hole, called tidal disruption, separates other objects in a process called **spaghettification**.

## Aeolus Satellite

After five years, the **Aeolus Satellite** shut down its science operations.

<b>Launched By</b>	Part of the <b>Copernicus project</b> , a joint initiative of the European Union (EU) and ESA to track environmental damage and aid disaster relief operations.
<b>About Aeolus Satellite</b>	
<ul style="list-style-type: none"><li>• The primary goal of Aeolus was to provide accurate and detailed <u>global wind measurements</u>, including both horizontal and vertical wind profiles.</li><li>• Aeolus carried a single instrument called ALADDIN (<b>Atmospheric Laser Doppler Instrument</b>), which is the first space-based lidar (light detection and ranging) system designed specifically to measure wind profiles from space.<ul style="list-style-type: none"><li>➤ ALADDIN emits ultraviolet laser pulses and measures the Doppler shift of the backscattered light to determine wind speed and direction at different altitudes.</li></ul></li><li>• It helped in understanding the workings of the dynamics of the atmosphere and contributed to climate change research.</li></ul>	

## Spitzer Telescope Resurrector Mission

SpaceWERX selected *Rhea Space Activity*, a Washington-based astrophysics startup, to develop the **Spitzer Resurrector Mission**.

### About Spitzer Resurrector Mission

- It is designed to restart the Spitzer telescope which has been orbiting the Sun in safe mode for three years following its retirement.
- The telerobotic Spitzer-Resurrector spacecraft would travel around 300 million kilometres to the telescope to restore its service to its full efficiency.

### About Spitzer Telescope

- It was launched by NASA in 2003 to study the universe in the infrared.
  - Unlike visible light, which our eyes can detect, infrared light is not visible to the human eye but can reveal important information about celestial objects and phenomena.
- It was the final mission of the NASA Great Observatory program, which launched four specialized telescopes (including the Hubble Space Telescope) between 1990 and 2003.
- It spent more than 16 years gathering information on the origin, evolution, and composition of planets and smaller bodies, stars, galaxies, and the universe as a whole.
- Its most iconic work was characterizing the seven exoplanets orbiting the star called **TRAPPIST-1**.

### 25<sup>th</sup> Anniversary of Pokhran-II

- It was the series of five nuclear bomb test explosions that were conducted by India in May 1998 at the Indian Army's **Pokhran Test Range (Rajasthan)**.
- The test was *initiated* under the designated code name **Operation Shakti** with the detonation of one fusion and two fission bombs.
- This was the 2<sup>nd</sup> attempt of India that turned out to be successful after the first test (**Pokhran-I**), code-named **Smiling Buddha**.
- After Pokhran-II, India declared itself a nuclear weapon state.

### Pokhran-I and its Aftermath

- In 1974, India conducted its 1st nuclear test at Pokhran, known as Pokhran-I or Operation Smiling Buddha.
- The primary objective of Pokhran-I was to develop nuclear technology for peaceful purposes, specifically for energy generation. India had been pursuing a nuclear energy program since the 1950s, and the successful detonation of a nuclear device during Pokhran-I marked a significant milestone in the country's nuclear program.
- The test was described as a peaceful nuclear explosion but faced international condemnation and sanctions. The US continued to support Pakistan despite concerns about its nuclear program.
- The **Nuclear Suppliers Group (NSG-Group of 48 Countries)** was created following the explosion in 1974 of a nuclear device by a non-nuclear-weapon State (India), which demonstrated that nuclear technology transferred for peaceful purposes could be misused.

### Pokhran-II and its Aftermath Significance

<b>Self-Reliance</b>	The tests allowed India to establish a credible nuclear deterrence and stand up to nuclear blackmail from the West.
<b>Geopolitics</b>	<ul style="list-style-type: none"><li>• This event raised the country's profile as a strategic player in South Asia and the world.</li></ul>
<b>World Reaction</b>	<ul style="list-style-type: none"><li>• Economic sanctions were imposed on India by several countries, including the United States and Japan. However, India maintained that the tests were necessary for national security and as a deterrent against potential threats.</li><li>• It also sparked a debate on non-proliferation and disarmament, highlighting the challenges faced by the international community in controlling the spread of nuclear weapons.</li></ul>
<b>Emergence of Doctrine</b>	<ul style="list-style-type: none"><li>• India's nuclear doctrine, which outlines the country's stance on the use of nuclear weapons and its nuclear posture.</li><li>• India has consistently followed a policy of <b>credible minimum deterrence</b>, emphasizing a</li></ul>

**no-first-use doctrine**, meaning it would not use nuclear weapons unless attacked by an adversary with nuclear weapons.

## NVS-01

The ISRO will launch the **NVS-01 navigation satellite** onboard its Geosynchronous Satellite Launch Vehicle (GSLV).

### About NVS-01

- It is the 1<sup>st</sup> of the 2<sup>nd</sup>-generation **satellites** envisaged for the NavIC (Navigation with Indian Constellation) services.
- NVS series of satellites will sustain and augment the NavIC with enhanced features.
- This series incorporates L1 band signals additionally to widen the services.
- For the 1<sup>st</sup> time, an indigenous atomic clock will be flown in NVS-01.

## Countries with own Navigation Satellite System

- **Global Positioning System (GPS) - United States**
- **GLONASS - Russia**
- **BeiDou Navigation Satellite System (BDS) - China: BDS, also known as COMPASS. It consists of a constellation of satellites providing navigation and positioning services in the Asia-Pacific region. China has been expanding BDS into a global system to rival GPS.**
- **Galileo - European Union**
- **Quasi-Zenith Satellite System (QZSS) - Japan**
- **South African National Space Agency (SANSA) Navigation Satellite System (SANSS) - South Africa: SANSS is a proposed navigation satellite system**
- **Satellite Navigation System (SatNav) - Iran: Iran is working on developing its own satellite navigation system**

### Navigation With Indian Constellation (NavIC) (Set up by ISRO)

- It was earlier known as Indian Regional Navigation Satellite System (IRNSS).
- It is a constellation of 7 satellites and a network of ground stations operating 24 x 7.
  - ✓ *There are a total of eight satellites however only seven remain active.*
- *Three satellites of the constellation are placed in geostationary orbit and four satellites are placed in inclined geosynchronous orbit.*
- Its coverage area includes India and a region up to 1500 km from the country's border.
- It offers two services: Standard Position Service (SPS) for civilian users and Restricted Service (RS) for strategic users.
- It is used in terrestrial, air, marine transportation, location-based services, personal mobility, resource monitoring, surveying and geodesy, scientific research, etc.

## XPoSat

- The **ISRO** is collaborating with the Raman Research Institute (RRI), Bengaluru to build the **X-Ray Polarimeter Satellite (XPoSat)**.
- It is scheduled to be launched later in the end of year 2023.

### About XPoSat

- It is India's 1<sup>st</sup> dedicated polarimetry mission to study various dynamics of bright astronomical X-ray sources in extreme conditions.
- The spacecraft will carry two scientific payloads in a low earth orbit.
- The primary payload POLIX (Polarimeter Instrument in X-rays) will measure the polarimetry parameters (degree and angle of polarization).
- The XSPECT (X-ray Spectroscopy and Timing) payload will give spectroscopic information.

- Polarization refers to the orientation of the electric field in an electromagnetic wave, and studying the polarization of X-rays can provide valuable information about the physical processes occurring in extreme environments, such as around black holes and neutron stars.
- It is only the world's 2<sup>nd</sup> polarimetry mission after NASA's **Imaging X-ray Polarimetry Explorer (IXPE)** that was launched in 2021.

### Significance of XPOSat

It will study the 50 brightest known sources in the universe, including pulsars, black hole X-ray binaries, active galactic nuclei, and non-thermal supernova remnants

- **Studying Black Holes:** By measuring the polarization of X-rays emitted by black holes, XPOSat aims to understand the geometry and nature of the material falling into these massive objects.
- **Exploring Neutron Stars:** Neutron stars are incredibly dense remnants of massive stars. XPOSat can study the polarization of X-rays emitted from neutron stars, providing insights into their magnetic fields and the properties of matter in their vicinity.
- **Probing Active Galactic Nuclei (AGN):** AGNs are supermassive black holes at the centers of galaxies, surrounded by an accretion disk of matter. XPOSat can investigate the polarization properties of X-rays from AGNs, contributing to our understanding of the mechanisms driving their immense energy output.

### About X-Ray & How X Rays are produced?

- X rays are a type of radiation that lies between **ultraviolet light and gamma rays** in the electromagnetic spectrum.
- It is a type of electromagnetic radiation that has higher energy and shorter wavelength than visible light.



X-rays are produced in various astrophysical processes, including:

- **Accretion onto Black Holes:** X-rays are emitted when matter falls into black holes. As material spirals into the intense gravitational field of a black hole, it heats up and emits X-rays before disappearing beyond the event horizon.
- **Neutron Stars and Pulsars:** Neutron stars, which are the dense remnants of massive stars, can emit X-rays due to their extremely strong magnetic fields. Pulsars, a type of rapidly rotating neutron star, also emit X-rays as their magnetic fields interact with surrounding material.
- **Supernova Remnants:** When a massive star explodes in a supernova, it leaves behind a rapidly expanding shell of gas and dust called a supernova remnant. These remnants can produce X-rays as the shock waves generated in the explosion heat the surrounding gas.
- **Hot Gas in Galaxy Clusters:** Galaxy clusters, which are large groups of galaxies bound together by gravity, contain vast amounts of hot, ionized gas. This gas emits X-rays as it interacts with the cluster's magnetic fields and cosmic rays.

### ExoMars Trace Gas Orbiter (TGO)

The European Space Agency's (ESA) ExoMars Trace Gas Orbiter (TGO) flashed an encoded message to Earth from its orbit around Mars.

### About ExoMars Trace Gas Orbiter (TGO)

- It is the 1<sup>st</sup> in a series of Mars missions to be undertaken jointly by the two space agencies, **ESA and Roscosmos**, the Russian space agency.
- It is designed to search for trace gases in the Martian atmosphere such as methane, water vapor, nitrogen oxides and acetylene.
  - Trace gases are gases present in very low concentrations but can be significant indicators of potential biological or geological activity on Mars.

### Key Features And Goals Of The ExoMars Trace Gas Orbiter

- **Orbiter:** The TGO is designed to orbit Mars and study its atmosphere from a close vantage point. It was launched in March 2016 and arrived at Mars in October 2016.

- **Trace Gas Investigation:** The TGO carries a suite of scientific instruments, including the Nadir and Occultation for Mars Discovery (NOMAD) instrument. NOMAD is capable of detecting and characterizing **trace gases** in the Martian atmosphere.
- **Methane Mapping:** Methane, in particular, is of great interest as it can be an indicator of potential biological or geological activity. TGO's instruments aim to map the distribution and variability of methane in the Martian atmosphere to gain insights into its sources and sinks.
- **Technology Demonstration:** The TGO also serves as a technology demonstration platform for the *Entry, Descent, and Landing Demonstrator Module (EDM)*, which carried the Schiaparelli lander. However, the landing attempt of the Schiaparelli lander was not successful.

## Pangenome Map

A new study published in the Nature journal describes a pangenome **reference map**, built using genomes from 47 anonymous individuals.

### About Pangenome Map

- The term "Pangenome Map" refers to a representation or visualization of the pangenome of a species. The pangenome is the complete set of genes present in all the individuals of a particular species, including both the core genome (genes shared by all individuals) and the dispensable genome (genes present in some individuals but not in others).
- A pangenome map provides a comprehensive view of the genetic diversity and variability within a species. It helps in understanding the variations in gene content, gene families, and genetic traits across individuals or populations.
- It is represented as a **graph**, in contrast to the previous **linear** reference genome.

### Significance of Pangenome Map

- By analyzing the pangenome, researchers can gain insights into the evolutionary history, adaptation, and functional characteristics of a species.
- Pangenome maps have applications in various fields, including evolutionary biology, population genetics, and agricultural research. They can provide valuable information for understanding the genetic basis of traits, disease susceptibility, and breeding strategies.
- It will enable us to represent tens of thousands of novel *genomic variants* in regions of the genome that were previously inaccessible
- It can help better understand these differences and explain the diversity among individuals.

- A genome refers to the complete set of genetic material, including all the genes, DNA sequences, and non-coding regions, within an organism. It represents the entire hereditary information that an organism inherits from its parents.
- Genome sequencing is the process of determining the *precise order of nucleotides (A, T, C, G)* that make up an organism's DNA. It involves reading and decoding the genetic information contained in the genome. The goal of genome sequencing is to obtain a complete and accurate representation of an organism's DNA sequence.

## AIRAWAT

India's AI (Artificial Intelligence) Supercomputer AIRAWAT has been ranked at No. 75 (Top500 lists) in the world at the International Supercomputing Conference (ISC 2023) in Germany.



## About Supercomputer AIRAWAT (AI Research, Analytics and knowledge Assimilation)

- AIRAWAT is an AI-based *cloud computing infrastructure* installed (under National Program on AI) at C-DAC, Pune.
- It is manufactured by Netweb Technologies, runs on the Ubuntu 20.04.2 LTS (Long Term Support) operating system.
- It is based on the recommendations of the National Strategy for Artificial Intelligence (NSAI), which has identified areas that are hampering the growth potential of AI in India.

## Benefits of AIRAWAT

- It has the potential to revolutionize various sectors, including weather forecasting, drug discovery, climate modelling, and artificial intelligence research.

### Extra Mile

#### What is Top 500 list?

- The Top500 lists the 500 fastest computer systems being used today. In 1993 the collection was started and has been updated every 6 months since then.
- The best *Linpack benchmark performance* achieved is used as a performance measure in ranking the computers. The Linpack Benchmark is a measure of a computer's floating-point rate of execution.

#### Other Indian Supercomputers In The Top 500 List

There are three other supercomputers into 500 list. These include:

- PARAM Siddhi-AI supercomputer ranked at No. 131: This supercomputer too is installed at Center for Development of Advanced Computing (C-DAC), Pune.
- Pratyush supercomputer ranked at No. 169: It is installed at the Indian Institute of Tropical Meteorology.
- Mihir supercomputer at No. 316: It is installed at the National Centre for Medium Range Weather Forecasting.

## Small Modular Reactors (SMRs)

Science and Technology Minister said that India is working on new technologies such as the small modular reactors.

### About Small Modular Reactors (SMRs)

- It is advanced nuclear reactors that have a power capacity of up to 300 MW(e) per unit, which is about one-third of the generating capacity of traditional nuclear power reactors.
- SMRs, which can produce a large amount of low-carbon electricity, are:
  - Small – physically a fraction of the size of a conventional nuclear power reactor.
  - Modular – making it possible for systems and components to be **factory-assembled** and transported as a unit to a location for installation.
  - Reactors – harnessing nuclear **fission** to generate heat to produce energy.
- The term SMR just refers to the size, capabilities, and modular construction of the reactor, not to the type of reactor or the nuclear process used.

### Advantages of SMRs

- **Size and Modularity**
- **Enhanced Safety Features:** SMRs often incorporate advanced safety features, such as passive cooling systems, which utilize natural processes like convection and gravity to remove heat during emergency situations. The smaller size of SMRs also reduces the potential impact of accidents and improves the

ability to contain and mitigate any issues that may arise.

- **Flexibility and Scalability:** The modular design of SMRs enables greater flexibility in power generation. Multiple SMRs can be deployed together to form larger power plants or used individually to meet the specific energy needs of remote or small-scale applications. This flexibility makes SMRs suitable for a wide range of scenarios, including remote communities, industrial sites, and as a complement to renewable energy sources.
- **Energy Security and Grid Resilience:** SMRs can contribute to energy security by providing a reliable and continuous source of low-carbon electricity. They can help stabilize the grid, especially in regions with limited transmission infrastructure or susceptible to disruptions from extreme weather events or natural disasters.
- **Reduced Environmental Impact:** SMRs have the potential to reduce greenhouse gas emissions by generating electricity with lower carbon intensity compared to fossil fuel-based power plants. Their smaller size and modular construction also result in a smaller environmental footprint during construction and operation.
- **Technological Innovation and Research:** The development and deployment of SMRs drive innovation in nuclear technology and contribute to the advancement of nuclear science. Research and development efforts focus on improving safety, fuel efficiency, waste management, and incorporating new materials and designs.

## Foucault Pendulum

The Foucault pendulum device has been installed in the new Parliament building in New Delhi. It was designed and installed by the National Council of Science Museums (NCSM), Kolkata.

### About Foucault Pendulum

- It is a deceptively simple device used to illustrate the earth's rotation.
- The original Foucault's pendulum, named after 19th century French scientist Leon Foucault.
- When Foucault carried out this experiment for the public in 1851, it was the 1<sup>st</sup> direct visual evidence of the fact that the earth rotates on its axis.
- The experimental set-up involves a heavy object hung from a height with a string, free to swing in any direction.
- Once set in to-and-fro motion, the pendulum is seen to change its orientation slowly over time.
  - For example, if the initial motion imparted to it was in the north-south direction, after a few hours it could be seen moving in the east-west direction.

### About National Council of Science Museums (NCSM)

- It is an autonomous organization under the Ministry of Culture. It is responsible for the development and promotion of science centers and museums throughout the country.
- It has 24 science centres or museums of its own and one R&D laboratory and training centre.
- Innovation Hubs set up by NCSM, provide expert guidance and professional lab equipment facilities to young students to nurture creativity, innovation and engagement in science.



- The Foucault pendulum serves as a visual and tangible proof of the Earth's rotation. The time taken for the plane of oscillation to complete one full rotation depends on the latitude of the pendulum's location.
  - For Example, At the North or South Pole, the pendulum will complete a full rotation in approximately 24 hours. Closer to the equator, the rotation will take longer.

**The Key Principles Behind Foucault Pendulum Are:**

- **Coriolis Effect:** As the pendulum swings back and forth, the Earth rotates beneath it. The Coriolis effect causes the apparent deflection of the pendulum's plane of oscillation, making it appear to rotate in a clockwise or counterclockwise direction, depending on the latitude where it is located.
- **Conservation of Angular Momentum:** The pendulum's angular momentum remains constant during its motion. As the Earth rotates, the plane of oscillation of the pendulum rotates to *conserve this angular momentum*.

**4th Dimension (Time) in 4D Printing**

- 4D printing is conventional 3D printing combined with the additional element of time as the 4th dimension. (4D Printing = 3D Printing + Time)
- The 4<sup>th</sup> dimension in 4D printing refers to materials that are capable of changing and changing over time when exposed to water, temperature changes and/or air to self-assemble.
- The 4D printed objects can re-shape or self-assemble themselves over time with external stimuli, such as mechanical force, temperature, or a magnetic field.

**Optical Tweezers (Laser Tweezers)**

<b>What are Optical Tweezers?</b>	<ul style="list-style-type: none"> <li>• They are scientific instruments that use the forces exerted by laser beams to manipulate and trap microscopic objects.</li> <li>• They use light to manipulate microscopic objects as small as a single atom.</li> </ul>
<b>Basic Principle of Momentum Transfer</b>	<ul style="list-style-type: none"> <li>• Light carries momentum that is proportional to its energy and in the direction of propagation.</li> <li>• Any change in the direction of light, by reflection or refraction, will result in a change of the momentum of the light.</li> </ul>
<b>Applications</b>	They have been used to trap dielectric regions, viruses, bacteria, living cells, organelles, small metal particles, and even strands of DNA without damaging them.

**Advanced Driver Assistance Systems (ADAS) Technology**

<b>What is ADAS Technology?</b>
<ul style="list-style-type: none"> <li>• ADAS is an electronic system of automated vehicle safety features.</li> <li>• ADAS technologies use sensors, cameras, radar, and other components to gather information about the vehicle's surroundings and provide real-time feedback and warnings to the driver.</li> <li>• The role is to prevent deaths and injuries by reducing the number of car accidents and the serious impact of those that cannot be avoided.</li> </ul>

### Features and Components of ADAS Technology

- Lane Departure Warning (LDW) and Lane Keeping Assist (LKA)
- Forward Collision Warning (FCW) and Autonomous Emergency Braking (AEB)
- Blind Spot Detection (BSD), Parking Assistance Systems and Driver Monitoring Systems (DMS)

### Solar Photovoltaic Modules (Solar Panels)

<b>How is it made?</b>	By connecting together photovoltaic (PV) cells or solar cells from semiconductor materials like crystalline silicon.
<b>Principle of Photovoltaic Effect</b>	<ul style="list-style-type: none"><li>● Solar modules convert the light energy captured from the sun into electric energy (Direct Current).</li><li>● This direct current (DC) is then converted into alternating current (AC) through an inverter for different use applications.</li></ul>
<b>Application</b>	The electric energy produced is used for lighting residential and commercial establishments.

### Yellow Fever

<b>Infection &amp; Transmission</b>	<ul style="list-style-type: none"><li>● Yellow fever is a viral disease caused by the yellow fever virus, which belongs to the Flaviviridae family.</li><li>● It is primarily transmitted through the bite of infected mosquitoes, particularly the <i>Aedes aegypti</i> species.</li></ul>
<b>Symptoms</b>	<ul style="list-style-type: none"><li>● Headache, jaundice (yellowing of the skin and eyes), muscle pain, nausea, vomiting and fatigue</li></ul>
<b>Global Programme</b>	<ul style="list-style-type: none"><li>● Eliminate yellow fever epidemics (EYE) 2017-2026 has been developed by a coalition of partners Gavi, UNICEF and WHO that aims at ending yellow fever epidemics by 2026.</li></ul>

### Artificial Sweeteners

- These are sugar substitutes that are used as a substitute for natural sugars. They are typically many times sweeter than sugar, so only small amounts are needed to achieve the desired level of sweetness.
- These sweeteners are chemically synthesized and provide a sweet taste without the high calorie content of regular sugar.
- Some examples of artificial sweeteners are saccharin, aspartame, acesulfame potassium, sucralose, Neotame and Advantame.

### Perovskite Crystals

- It is a material that has the same crystal structure as the mineral calcium titanium oxide (CaTiO<sub>3</sub>).
- A large number of different elements can be combined together to form perovskite

- They have applications in various fields of optoelectronics, including photovoltaic solar cells, photodetectors, light-emitting devices, etc.

### Vector Borne Diseases

<b>What are Vector Borne Diseases?</b>	<ul style="list-style-type: none"> <li>• Vector-borne diseases are illnesses caused by pathogens (such as viruses, bacteria, or parasites) that are transmitted to humans or animals through the bites of infected arthropod vectors.</li> <li>• Arthropods, including mosquitoes, ticks, flies, and fleas, are the most common vectors responsible for transmitting these diseases.</li> </ul>
<b>Types of Vector-Borne Diseases</b>	<p><b>a. Mosquito-borne diseases:</b> Examples include malaria, dengue fever, Zika virus, West Nile virus, and yellow fever.</p> <p><b>b. Tick-borne diseases:</b> Examples include Lyme disease, tick-borne encephalitis, and Rocky Mountain spotted fever.</p> <p><b>c. Flea-borne diseases:</b> Examples include plague (transmitted by fleas that infest rodents) and murine typhus.</p> <p><b>d. Fly-borne diseases:</b> Examples include African trypanosomiasis (sleeping sickness) transmitted by tsetse flies and leishmaniasis transmitted by sandflies.</p>

### Neurotoxins

<b>What are Neurotoxins?</b>	There are poisonous substances which can directly affect the nervous system (including the brain, spinal cord, and peripheral nerves).
<b>Effect of Neurotoxins</b>	They can disrupt normal neurological processes by interfering with the transmission of signals between nerve cells or by damaging nerve cells themselves.
<b>Examples</b>	<p>There are numerous neurotoxins found in nature, as well as synthetic ones created by humans.</p> <ul style="list-style-type: none"> <li>• Botulinum toxin: Produced by the bacterium Clostridium botulinum, It is one of the most potent neurotoxins known.</li> <li>• Lead &amp; Mercury are heavy metals that can have neurotoxic effects, especially in children. It can lead to cognitive impairments, learning disabilities, and behavioral problems.</li> <li>• Methane, hydrogen sulphide, carbon monoxide and carbon dioxide are common neurotoxic gases.</li> </ul>

### Methanol

Methanol, also known as methyl alcohol or wood alcohol, is a colorless, volatile liquid that boils at 64.96 °C and solidifies at -93.9 °C.

<b>Production</b>	Methanol can be produced through several methods, including the catalytic reaction of carbon monoxide and hydrogen (known as the "syngas" process- largest source of industrial methanol), the fermentation of biomass, and the distillation of wood.
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<b>Environmental Impact</b>	<ul style="list-style-type: none"> <li>● Methanol is considered to have a lower impact on air pollution compared to conventional fuels.</li> <li>● Blending of 15% methanol in gasoline can result in at least 15% reduction in the import of gasoline/crude oil.</li> </ul>
<b>Methanol as a fuel</b>	Methanol has been used as a fuel for internal combustion engines, particularly in racing and marine applications.
<b>Noteworthy Points</b>	<ul style="list-style-type: none"> <li>● NITI Aayog's 'Methanol Economy' programme is aimed at reducing India's oil import bill, greenhouse gas (GHG) emissions, and converting coal reserves and municipal solid waste into methanol.</li> <li>● Additionally, Rs 6000 crore can be saved annually by blending 20% DME (Di-methyl Ether, a derivative of methanol) in LPG.</li> </ul>

# CULTURE

## Sengol

- At the inauguration of the new Parliament building a historic sceptre called **Sengol** was installed next to the Lok Sabha Speaker's seat.
- Sengol is derived from the Tamil word *semmai*, meaning righteousness. The sceptre is a significant historical symbol of Independence that signifies the transfer of power from the British to Indians.
- Pandit Jawaharlal Nehru accepted Sengol on August 14, 1947, through the **Adhinam of Tamil Nadu**, it was a sign of the shift of power from Britishers to the people of the country.
- Before Independence, Lord Mountbatten, the last Viceroy, asked Nehru if there was a ceremony that should be followed to symbolise the transfer of power.
- Nehru consulted C Rajagopalachari, the last Governor-General, who suggested that the newly formed nation should follow a tradition of the **Chola dynasty**, where the transfer of power from one king to the other was sanctified and blessed by high priests.
- The symbol (for the transfer of power) used was the handover of the 'Sengol' from one King to his successor.

## Making of The Sengol

- Rajagopalachari reached out to various mutts in Tamil Nadu and it was Thiruvaduthurai Atheenam (a well-known mutt in Tanjore district) that provided it.
- The leader of the mutt commissioned the manufacturing of the Sengol to Chennai-based Vummidi Bangaru Chetty jewellers, and it was built by Vummidi Ethirajulu and Vummidi Sudhakar.
- The sceptre is five feet in length and has a Nandi, Lord Shiva's sacred bull, on the top, symbolising justice.

## Democratic Roots in Vinaya Pitaka

- India's new Parliament building was inaugurated recently, as part of the larger Central Vista project for the redevelopment of key government buildings in central Delhi that were constructed nearly a century ago.
- Back then, under colonial rule, buildings like the Parliament were constructed to plan a city suited to the ruling class. It followed the coronation of George V as Emperor of India on December 12, 1911
- In this context, the Chairman of the Drafting Committee, Dr BR Ambedkar, in a speech at the Law College of the University of Delhi in 1948 had said how aspects of democracy were not imports of British rule, but located in Indian history itself.
- In the speech, he said that the reference for democratic setups in India can be found in **Vinay-Pitaka**.
- Vinay-pitaka is a scripture of **Theravada Buddhism** that listed the behaviours and rules mandated for Buddhist monks.
- Ambedkar said that Vinay-pitaka regulated meetings of the Bhikkhus Sangh (the monks) and there was the well-known rule that no debate could take place except on 'Neti' motion.
- He drew a parallel to the parliament procedure that said there could be no debate held unless there was a motion and no vote could be taken unless a motion was put.
- That the Vinay-pitaka contained a definite provision for voting, where Salpatraka (the bark of tree) was used as ballot paper, was another proof he gave of existing democratic procedures in India.
- There was also a system of 'secret ballot', where the Bhikkhu himself could drop his 'Salpatraka' in the ballot box.

## Vinaya Pitaka

- The Vinaya Pitaka is the first of the three divisions of the **Tripitaka (Triple Basket)**, the definitive canonical collection of scripture of Theravada Buddhism.
- The other two parts of the Tripiṭaka are the **Sutta Piṭaka** and the **Abhidhamma Piṭaka**.
- The primary subject matter in Vinaya Pitaka is the monastic rules of conduct for monks and nuns of the Sangha.
- The Pāli Vinaya consists of:
  - Suttavibhaṅga: Pāṭimokkha and commentary
    - Mahāvibhaṅga: rules for monks
    - Bhikkhunīvibhaṅga: rules for nuns
  - Khandhaka: 22 chapters on various topics
  - Parivāra: analyses of rules from various points of view

## Gopal Krishna Gokhale

- The Prime Minister recently paid homage to Gopal Krishna Gokhale on his birth anniversary.
- Gokhale was an Indian political leader and a social reformer during the Indian independence movement. He was also the political guru of Mahatma Gandhi.
- Gokhale was a senior leader of the Indian National Congress and the founder of the **Servants of India Society**.
- Through the Society as well as the Congress and other legislative bodies he served in, Gokhale campaigned for Indian self-rule and for social reforms.
- He was the leader of the moderate faction of the Congress party that advocated reforms by working with existing government institutions, and a major member of the Poona Association or the Poona Sarvajanik Sabha.
- Gokhale is best remembered for his extensive work in colonial legislatures. Between 1899 and 1902, he was a member of the Bombay Legislative Council followed by a stint at the Imperial Legislative Council from 1902 till his death.
- At Bombay, Gokhale opposed the British government's onerous land revenue policies, advocated free and compulsory primary education, and asked for the creation of equal opportunities to fight against untouchability.
- At the Imperial legislature, Gokhale played a key role in framing the Morley-Minto reforms of 1909 and advocated for the expansion of legislative councils at both the Centre and the provinces.
- A critic of British imperial bureaucracy, Gokhale favoured decentralisation and the promotion of panchayat and taluka bodies.
- He also spoke for the Indian diaspora living in other parts of the British Empire and opposed tooth and nail the indentured labour system, raising their problems in the Imperial legislature as well as at Congress sessions.

## Dancing Girl Figurine

- The Dancing Girl figurine in Mohenjodaro was recently at the centre of a controversy.
- The Dancing Girl is a prehistoric bronze sculpture made in lost-wax casting about 2300-1750 BC in Mohenjodaro, which was one of the earliest cities.



- The statue is 10.5 centimetres tall, and depicts a nude young woman or girl with stylized ornaments, standing in a confident, naturalistic pose. It is highly regarded as a work of art.
- The statue was excavated by British archaeologist Ernest Mackay in 1926. It is now placed in the National Museum, New Delhi.
- The statue led to two important discoveries about the civilization:
  - First that they knew metal blending, casting and other sophisticated methods. The bronze girl was made using the lost-wax casting technique and shows the expertise of the people in making bronze works during that time.
  - Entertainment, especially dance, was part of the culture.

### **Lost wax casting technique**

- Lost wax casting, also known as “investment casting,” is the process by which a single metal object is cast from a wax model. It is a highly versatile process that achieves exceptionally detailed results.
- Lost wax casting builds a mould around a sacrificial wax model. After the mould investment is set, the wax is melted out and forms a cavity where the metal or glass flows in.
- This method of casting captures fine details in both metal and glass.
- This ancient method has been used since 3000 B.C. to visually capture the stories of ancient cultures and religions throughout history.